



**CORPORATION OF THE CITY OF  
CLARENCE-ROCKLAND  
COMMITTEE OF THE WHOLE**

August 9, 2017, 8:00 pm

Council Chambers

415 rue Lemay Street, Clarence Creek, Ont.

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Pages

1. Opening of the meeting
2. Adoption of the agenda
3. Disclosure of pecuniary interests
4. Delegations / Presentations
  - 4.1 Presentation of a petition by Mr. Sylvain Lavigne in regards to roadwork on Marcil Road 5
5. Petitions / Correspondence
  - 5.1 Letter dated June 28, 2017 from the Prescott Russell United Way in regards to their annual campaign 7
  - 5.2 Letter dated July 13, 2017 from the UCPR in regards to the protection of woodlands 9
6. Notice of Motion
7. Comment/Question Period

Note: Members of the public may come forward to the podium and after seeking permission from the Presiding Officer, shall state their name and direct their question/comment on any matter which is related to any item included in this agenda to the Presiding Officer.

The maximum time allowed in all circumstances for a question/comment shall be three (3) minutes per person per meeting. There shall be a maximum of 30 minutes dedicated to the question/comment period. Any unasked questions/comments due to the time restriction may be submitted in writing to the Clerk.

At no time shall this question period be taken by members of the audience to make speeches or accusations.
8. Report from the United Counties of Prescott and Russell

**9. Committee/Staff Reports**

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9.12	East-West Collector - Morris Village Stage 5 (Full report on the Planning Committee Agenda of August 2, 2017) Report to follow further to the Planning Committee of August 2, 2017	

**10. Other items**

10.1	Traffic light at the Est intersection of Laporte street - Left turning light	
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**11. Adjournment**



**CORPORATION DE LA CITÉ DE  
CLARENCE-ROCKLAND  
COMITÉ PLÉNIER**

le 9 août 2017, 20 h 00

Salle du Conseil

415 rue Lemay Street, Clarence Creek, Ont.

Pages

1. Ouverture de la réunion
2. Adoption de l'ordre du jour
3. Déclarations d'intérêts pécuniaires
4. Délégations / Présentations
  - 4.1 Présentation d'une pétition par M. Sylvain Lavigne au sujet des travaux sur le chemin Marciil 5
5. Pétitions / Correspondance
  - 5.1 Lettre datée du 29 juin, 2017 de Centraide Prescott Russell au sujet de leur campagne annuelle 7
  - 5.2 Lettre datée du 13 juillet, 2017 des CUPR au sujet de la protection des boisés 9
6. Avis de motion
7. Période de Questions/Commentaires

Note: Les membres du public sont invités à se rendre au podium et après avoir reçu la permission du président de l'assemblée, doivent se nommer et adresser leur question et/ou commentaire sur tout sujet qui est relié à n'importe quel item qui figure à l'ordre du jour au président de réunion.

Le temps maximal accordé pour une question/commentaire dans toutes circonstances est de trois (3) minutes par personne par réunion. Il y aura un maximum de 30 minutes consacrés à la période de questions/ commentaires. Toutes questions et/ou commentaires qui n'ont pas été adressés par faute de temps peuvent être soumis par écrit à la greffière.

En aucun cas, cette période de questions/ commentaires ne peut être utilisée par les membres du public pour faire des discours ou porter des accusations.
8. Rapport des Comtés unis de Prescott et Russell

## **9. Rapports des Comités/Services**

9.1	Demande de TVC22 pour l'utilisation de locaux au Centre des arts	11
9.2	Entente de location pour le Chalet de service de Bourget	23
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9.8	Projection de croissance résidentielle et non-résidentielle	123
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9.11	Entente pour l'Arena Clarence-Rockland et le CIH	161
9.12	East-West Collector - Morris Village Stage 5 - Full report on the Planning Committee Agenda of August 2, 2017 Rapport à suivre suite à la reunion du Comité d'aménagement du 2 août, 2017.	

## **10. Autres items**

- 10.1 Lumiere verte clignotante en direction Est de la rue Laurier a l'intersection Ouest de la rue Laporte pour virage a gauche

## **11. Ajournement**



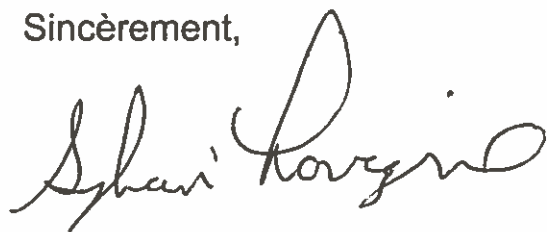
Le 31 Juillet, 2017

A: Monique Ouellet  
Greffière de la Cité Clarence-Rockland

CC : Guy Desjardins, Maire  
Diane Choinière. Conseillère

Nous somme une délégation des résidents du chemin Marcil. Nous aimerions faire une présentation à la réunion du 9 aout, 2017 afin de discuter de la possibilité de paver la portion du chemin Marcil entre le chemin Lavigne au bout du cul-de sac.

Sincèrement,



Sylvain Lavigne

3357 Marcil

613-487-3629

*Prattem@magma.ca*

As tax payers, we ask that council find the funds to resurface this portion of roadway in this years fiscal budget. Seeing that Lavigne road from Bouvier to Marcil up to Lemery road are being resurfaced, it makes no fiscal sense that the portion of roadway between Lavigne road and the cul de sac ending at 3357 Marcil road are excluded from this years road improvement budget. What will cost more to all taxpayers, doing the work this year while the contractors are on site or go thru the process of retendering next fiscal year not taking into consideration the cost of maintaining this portion of roadway for the next twelve months.

Signed this 28th day of July 2017

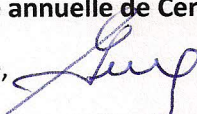
<u>Charles Gagne</u>	<u>C. Gagne</u> 3365
<u>Denise Mass</u>	<u>D. Mass</u> 3403.
<u>Sharon Doolan</u>	<u>SD</u> 3399
<u>Libena Polivka</u>	<u>Polivka</u> 3395
<u>Laura Barker</u>	<u>L. Barker</u> 3383
<u>Julie Wathier</u>	<u>Julie Wathier</u> 3373
<u>Sylvain Pargin</u>	<u>SYLVAIN LAVIGNE</u> 3357
<u>Nartine Pratte</u>	<u>N. Pratte</u> R 9622 part 1

Mercredi 28 juin 2017

M. Guy Desjardins, maire et membres du Conseil,  
Cité de Clarence-Rockland,  
1560, rue Laurier,  
Rockland, Ontario  
K4K 1P7

**Objet : Campagne annuelle de Centraide Prescott-Russell/United Way, 2017-2018**

Monsieur le maire,

  
Vous vous souviendrez, je l'espère, de notre rencontre en février dernier alors que nous avons discuté de la campagne annuelle de Centraide/United Way Prescott-Russell. J'étais accompagné à ce moment-là de l'agente de développement de Centraide, Mme Suzanne Hocquard. Bien que trop de temps soit passé depuis notre rencontre, je vous écris aujourd'hui pour relancer l'idée du « déjeuner du maire » dans votre communauté, mais cette fois en fonction de la campagne annuelle de Centraide/United Way de 2017-2018. Si je n'ai pas communiqué avec vous plus rapidement, c'est que depuis notre rencontre il y a eu des changements au niveau du personnel au bureau de Centraide qui a fait que nous n'étions pas en mesure de faire un suivi au printemps dernier. Je suis heureux de vous dire que cette situation est corrigée et que nous avons de nouvelles personnes en place pour assurer les activités de Centraide/United Way incluant la campagne annuelle de 2017-2018.

Dans un premier temps, permettez-moi de réitérer mes remerciements et ceux de Centraide/United Way Prescott-Russell pour le temps que vous m'avez accordé pour discuter de quelques projets entourant la campagne annuelle. Vous vous rappellerez que nous avons discuté de trois initiatives que vous pourriez parrainer à titre de maire dans votre municipalité.

Une première initiative est celle d'organiser un « déjeuner du maire pour Centraide/United Way PR » dans votre communauté en collaboration avec un restaurant ou un traiteur dans une salle communautaire ou même une école de votre milieu où vous invitez vos collègues conseillers, vos citoyens à venir prendre le petit déjeuner et contribuer à la campagne annuelle de Centraide. Il s'agit pour vous de choisir une date en collaboration avec un partenaire de votre communauté (restaurateur, traiteur, salle communautaire) ensuite lancer l'invitation. Le personnel de Centraide pourra vous conseiller dans l'organisation de l'activité et comment la faire connaître. Vous comprendrez que nous souhaitons maintenant que ce petit déjeuner ait lieu en septembre prochain pour coïncider avec le début de la campagne annuelle de 2017-18.

***Je vous invite à communiquer avec Sonja Suter, agente de développement, au bureau de Centraide/United Way Prescott-Russell au (613) 632-4699 ou par courriel [ssuter@centraide-pr.ca](mailto:ssuter@centraide-pr.ca) pour établir et coordonner une date en septembre prochain.***



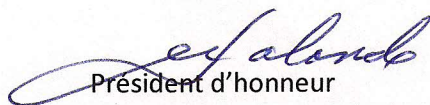
Une deuxième initiative que nous avons discutée est celle d'un « grand encan » d'équipement ou autre matériel surplus ou désuet au profit de Centraide : du matériel ou de l'équipement dont la municipalité ou des individus veulent se défaire. Évidemment pour se faire, il faudrait l'assentiment de vos collègues maires et la volonté de créer un comité de coordination de votre personnel et déterminer un endroit central pour collecter et remiser le matériel en préparation de l'encan. Est-ce que ça pourrait être une collaboration des municipalités par l'entremise des Comtés-Unis ? Nous serions heureux d'organiser une première rencontre avec vous et vos collègues à L'Original à la suite de l'une de vos rencontres régulières des comtés unis pour discuter de l'organisation et de la planification d'un tel événement. ***Je vous invite à communiquer avec mon collègue, Denis Vaillancourt, nouveau président de Centraide/United Way Prescott-Russell au (613)-295-2879 ou par courriel [denisbv48@gmail.com](mailto:denisbv48@gmail.com) afin d'initier une première rencontre d'organisation de cette activité.***

Finalement, je rappelle que Centraide/United Way Prescott-Russell souhaite que la municipalité, à titre d'employeur et chef de file dans la communauté encourage la participation du personnel à la campagne annuelle de Centraide en organisant une campagne en milieu de travail pour la campagne annuelle de l'automne. Les campagnes de déduction à la source, si petit soit le montant, sont les meilleures.

N'oublions pas que Centraide/United Way vise à cueillir des fonds pour que ***ses agences partenaires*** puissent améliorer la santé des gens et des collectivités, l'accès à des services de soutien sociaux et liés à la santé, les conditions de vie et répondre aux besoins élémentaires et sortir les gens de la pauvreté dans les comtés de Prescott et Russell. ***N'hésitez pas à communiquer avec moi ou avec Denis Vaillancourt, bénévole et président de Centraide/United Way Prescott-Russell pour toutes questions concernant ces projets.***

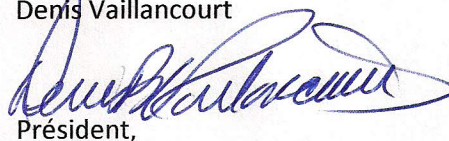
Acceptez, M. Desjardins et membres du Conseil, l'expression de nos sentiments distingués!

Jean-Marc Lalonde,



Président d'honneur  
Campagne annuelle 2017-2018  
Centraide/United Way Prescott-Russell  
Cellulaire : (613) 720-1874  
Résidence : (613) 446-5243  
Courriel : [j.m.lalonde@videotron.ca](mailto:j.m.lalonde@videotron.ca)

Denis Vaillancourt



Président,  
Centraide/United Way Prescott-Russell  
Cellulaire : (613) 295-2879  
Courriel : [denisbv48@gmail.com](mailto:denisbv48@gmail.com)

c. c. Direction générale de la municipalité



Le 13 juillet 2017

Cité de Clarence-Rockland  
Madame Monique Ouellet, Greffière  
1560, rue Laurier  
Rockland ON

**OBJET : Règlement pour la protection des boisés**

Madame Ouellet,

Le Conseil des Comtés unis a statué l'année dernière qu'il n'avait pas l'intention de régler la coupe de bois sur son territoire préférant plutôt favoriser l'achat de terrain boisé afin d'agrandir entre autres le territoire de la Forêt Larose. Certains maires des municipalités locales ont cependant manifesté un intérêt d'entretenir la possibilité d'assurer une certaine protection des boisés sur leurs territoires par l'entremise d'un Règlement sous la *Loi sur les municipalités de l'Ontario*.

L'article 135 de la loi permet aux municipalités locales d'adopter un règlement pour l'abatage d'arbres, mais ne permet pas de contrôler la protection des boisés, car ceci est une responsabilité qui revient aux municipalités de palier supérieur. L'article 135(8) donne cependant l'option aux municipalités de palier supérieur de déléguer cette responsabilité aux municipalités locales qui souhaiteraient adopter un tel règlement.

Le conseil des Comtés unis est d'accord à déléguer ce pouvoir de réglementation, cependant l'accord des municipalités locales est requis. Vous trouverez ci-joint une ébauche du règlement qui souligne clairement sous l'article 135(8) que l'accord des municipalités est essentiel pour effectuer ce transfert de pouvoir. Il est important de préciser que ce transfert de pouvoir n'oblige en rien les municipalités locales d'adopter un règlement pour contrôler la protection des boisés. Le but principal est d'offrir l'outil pour le faire.

Auriez-vous l'obligeance de soumettre cette requête à votre conseil municipal afin que celui-ci adopte une résolution supportant la présente requête. Je demeure disposé à rencontrer votre conseil afin d'expliquer plus en détail la présente démarche si vous le jugez nécessaire.

Veuillez agréer, Madame Ouellet, mes sentiments les meilleurs.

Le directeur d'Urbanisme et de Foresterie



Louis Prévost

p. j. Ébauche règlement

**THE CORPORATION OF THE UNITED COUNTIES  
OF PRESCOTT AND RUSSELL  
BY-LAW NUMBER 2017-XX**

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**BEING A BY-LAW TO DELEGATE POWER TO PASS A BY-LAW RESPECTING THE  
DESTRUCTION OR INJURING OF TREES IN WOODLANDS TO ITS LOWER-TIER  
MUNICIPALITIES**

**WHEREAS** subsection 135(2) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that the Corporation of the United Counties of Prescott and Russell may prohibit or regulate the destruction or injuring of trees in woodlands designated in a by-law;

**AND WHEREAS** the Corporation of the United Counties of Prescott and Russell has determined that it is not desirable to enact such a by-law on a County wide basis;

**AND WHEREAS** subsection 135(8) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, provides that The Corporation of the United Counties of Prescott and Russell may delegate all or part of its power to pass a by-law respecting the destruction or injuring of trees in woodlands to one or more of its lower-tier municipalities with the agreement of the lower-tier municipality or municipalities, as the case may be. 2001, c. 25, s. 135 (8);

**NOW THEREFORE BE IT ENACTED by the Corporation of the United Counties of Prescott and Russell that:**

1. That by virtue of subsection 135(8) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, the Corporation of the United Counties of Prescott and Russell hereby delegates its power to pass a by-law respecting the destruction or injuring of trees in woodlands to all of its lower-tier municipalities.
2. This By-law shall come into force and take effect on the day of the final passing thereof.

**DONE AND PASSED** in open Council this day of 2017.

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Gary Barton, Warden

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Andrée Latreille, Clerk



## RAPPORT N° LOI2017-08-02

<b>Date</b>	Le 19 juillet 2017
<b>Soumis par</b>	Pierre Boucher
<b>Objet</b>	Demande TVC22 Local Centre des arts
<b># du dossier</b>	A00 TVC

### 1) **NATURE / OBJECTIF :**

L'objectif du présent rapport est de procéder à la signature d'entente entre TVC 22 et la Cité de Clarence-Rockland afin d'autoriser TVC 22 à utiliser les locaux du centre des arts et de la culture situé au 1500 avenue du Parc.

### 2) **DIRECTIVE/POLITIQUE ANTÉCÉDENTE :**

Lors du processus budgétaire 2014, le conseil municipal a autorisé les Services communautaires de facturer des frais de location à TVC 22 pour la location de locaux au centre Chamberland.

En décembre 2014, les Services communautaires ont reçu une demande de TVC 22 afin d'annuler les frais de location pour l'année 2014. Les Services communautaires ont apporté un rapport au conseil afin de refuser la demande de TVC 22 par contre, le conseil municipal a différé le rapport et aucun frais de location ne leur a été demandé depuis ce temps.

### 3) **RECOMMANDATION DU SERVICE:**

**QU'IL SOIT RÉSOLU** que le comité plénier recommande au Conseil municipal d'adopter un règlement afin d'autoriser le Directeur des Services communautaires à signer l'entente de location du centre des arts et de la culture avec TVC 22 pour la période du 1<sup>er</sup> janvier 2018 au 31 décembre 2027; et

**QU'IL SOIT RÉSOLU** que le comité plénier recommande au Conseil municipal que TVC 22 soit responsable de payer la totalité de la facture des services publics pour l'édifice pour la durée de l'entente; et

**QU'IL SOIT RÉSOLU** que le comité plénier recommande au Conseil municipal de prendre en considération l'ajout d'un projet capital lors du processus budgétaire 2018 afin de procéder à l'installation d'une fournaise au gaz naturel à l'intérieur du centre des arts, tel que recommandé.

**BE IT RESOLVED** that the Committee of the Whole hereby recommends to Municipal Council to adopt a by-law to authorize the Director of Community Services to sign the lease agreement for the Art and Cultural Center with TVC 22, for the period of January 1<sup>st</sup> 2018 to December 31<sup>st</sup> 2027; and

**BE IT RESOLVED** that the Committee of the Whole hereby recommends to Municipal Council that TVC 22 be responsible to pay the utility bills for the duration of the agreement; and

**BE IT RESOLVED** that the Committee of the Whole hereby recommends to Municipal Council to consider by adding a capital project during the 2018 budget process in order to install a natural gas furnace in the Art and Cultural Center, as recommended.

4) **HISTORIQUE :**

Depuis plusieurs années, TVC 22 a l'opportunité d'utiliser le local au 1517 Laurier (Centre Chamberland) sans aucun frais de location. En retour, il était entendu que TVC 22 serait responsable de l'entretien du Centre Chamberland (p.ex., nettoyage, location, etc.) Puisqu'il y a eu des divergences d'opinions au sujet de l'entretien à quelques occasions et que le Service a reçu quelques plaintes des locataires à l'époque, l'administration du Service a décidé de reprendre la responsabilité de l'entretien du centre et a donc dû embaucher un employé à temps partiel afin de procéder au nettoyage. L'entente n'a jamais été renégociée par la suite et TVC 22 n'a donc jamais eu à déboursier de frais de location sans non plus avoir à offrir le service de nettoyage. C'est donc dire que la municipalité assume la majorité des coûts d'entretien des locaux de TVC 22 tel que les frais de chauffage, d'électricité, d'assurance de l'édifice, etc.

Suite aux discussions budgétaires de 2014, il fut demandé aux Services communautaires de réduire les déficits opérationnels des édifices. Afin de rencontrer les exigences demandées, les Services communautaires ont proposé au conseil de demander un frais de location à TVC 22 afin de combler pour les dépenses d'opération encourues dû à leur présence au centre Chamberland. Le conseil municipal avait accepté la proposition des Services communautaires lors du processus budgétaire.

En décembre 2014, les Services communautaires ont reçu une demande de TVC 22 afin d'annuler les frais de location pour l'année 2014. Les Services communautaires ont apporté un rapport au conseil afin de refuser la demande de TVC 22 par contre, le conseil municipal a différé le rapport et aucun frais de location ne leur a été demandé depuis ce temps.



Au printemps 2017, TVC 22 a fait une demande officielle au Service afin de déménager du centre Chamberland et d'occuper le premier étage du centre des arts et de la culture. TVC 22 désire avoir de plus grands locaux afin de diversifier et augmenter leur niveau de service à la population.

5) **DISCUSSION :**

**Location de locaux - Groupes communautaires :**

Le Service demande des frais de location de locaux à divers groupes communautaires tel que le Club Optimiste de St-Pascal, le Club Optimiste de Rockland, les chevaliers de Colomb de Hammond, le club de Soccer Unifié de Rockland etc. Le Service est d'avis qu'afin d'être équitable envers tous les organismes communautaires qu'un frais de location proportionnel à l'utilisation de l'édifice soit demandé à TVC 22.

**Frais de location demandé à TVC 22 :**

La plus grosse dépense de gestion de l'édifice du centre des arts et de la culture est la facture d'électricité. Il faut également mentionner que TVC 22 est un utilisateur intensif d'électricité dû à leur nombreux système électronique qui doivent fonctionner 24 heures par jour / 7 jours semaine. La facture actuelle d'électricité du centre s'élève à environ 6 000\$ et ce malgré une utilisation très minime.

**Locaux actuels de TVC 22:**

Advenant que TVC 22 déménage ses opérations au centre des arts et de la culture, le local qu'il utilise présentement pourra être utilisé pour les besoins municipaux. Ce local ne pourra pas être loué à la population dû à sa disposition actuelle. La seule utilisation potentielle sans investissement majeur sera de convertir les locaux en lieu d'entreposage pour les Services communautaires. Les Services communautaires ont un besoin grandissant pour l'entreposage de diverses pièces d'équipements pour le service des garderies (p.ex., meubles, jouets, etc.)

**Perte de revenu de location – Centre des arts :**

Malgré que les revenus de location actuels du centre des arts soient minimes, le changement demandé par TVC 22 entrainera une perte de revenu potentiel à long terme.

**Étendue de l'utilisation du centre des arts :**

Selon l'entente en pièce jointe, TVC 22 aurait accès au premier étage seulement. L'entente avec le Club Optimiste de Rockland pour l'utilisation des locaux dans le sous-sol de l'édifice resterait la même.

### **Vocation du centre des arts et de la culture :**

Le département est d'avis que les activités de TVC 22 sont de natures artistiques et culturelles. Ainsi, la vocation du centre serait respectée si jamais le déménagement était effectué.

### **État de l'édifice :**

L'édifice est en excellent état. Aucun travail majeur n'est prévu à court ou moyen terme à l'exception de l'ajout d'une rampe d'accessibilité à l'entrée principale et l'installation d'une fournaise au gaz naturel.

### **Points importants de l'entente :**

Voici certains points importants de l'entente en pièce jointe :

- TVC 22 est responsable de toutes modifications au centre
- TVC 22 est responsable de l'entretien ménager de l'édifice
- TVC 22 doit assumer tous les frais encourus par leurs opérations régulières
- TVC 22 doit se procurer et encourir les frais pour une assurance feux/vol pour tout leur équipement et une assurance responsabilité civile
- La Cité se garde le droit de mettre fin à l'entente en tout temps et selon un préavis de 60 jours
- Les frais d'assurance de l'édifice seront assumés par la municipalité
- La Cité s'engage à effectuer toutes réparations structurales et extérieures de l'édifice (p.ex., fondation, enveloppe extérieur, toiture, entretien paysager, etc.)
- La Cité s'engage à effectuer toutes réparations et maintien du système de chauffage

## **6) CONSULTATION :**

### **Comité culturel :**

Le comité consultatif et culturel a été consulté afin de recueillir leur opinion. Le comité ne voit aucun problème avec la présence de TVC 22 au centre des arts et de la culture. Ils sont d'avis que la venue de TVC 22 augmentera l'achalandage du centre.

### **TVC 22 :**

Les représentants de TVC 22 ont soumis une lettre indiquant leurs préoccupations par rapport à la présente entente et au présent rapport. Cette liste a été mise en annexe.

7) **RECOMMANDATION OU COMMENTAIRES DU COMITÉ :**

N/A

8) **IMPACT FINANCIER (monétaire/matériaux/etc.):**

Les chiffres mentionnés dans les tableaux ci-dessous sont une estimation des budgets d'opération du centre des arts et de la culture. Plusieurs facteurs peuvent influencer ces montants :

**Scénario actuel :**

Revenu de location	1 500 \$
Budget d'opération	8 000\$
Coût annuel à la cité	6 500\$

**Scénario selon l'entente proposée :**

Revenu de location	800 \$
Budget d'opération pour travaux extérieurs	2 000 \$
Coût annuel à la cité	1 200 \$

Il est à noter qu'aucun projet capital n'est considéré dans ces montants. Si jamais des travaux majeurs sur la structure de l'édifice doivent être effectués, ils seront considérés lors des processus budgétaires ou à l'intérieur d'un rapport conseil séparé.

9) **IMPLICATIONS LÉGALES :**

N/A

10) **GESTION DU RISQUE (RISK MANAGEMENT) :**

N/A

11) **IMPLICATIONS STRATÉGIQUES :**

N/A

12) **DOCUMENTS D'APPUI:**

- Lettre - Demande de TVC 22
- Entente de location
- Lettre - Préoccupation de TVC 22



Le 19 juin 2017

### **Demande d'accès pour une salle dans la cité de Clarence-Rockland**

Chères conseillers-ères et membres de l'administration de la Cité de Clarence-Rockland,


Tvc22 sollicite votre appui afin de déménager dans un local qui répondrais davantage au besoin grandissant de notre communauté. Nous avons identifié un local qui rencontre plusieurs critères essentiels: 1- l'emplacement de l'édifice est facilement accessible aux étudiants du secondaire qui veulent bénéficier de formations que nous offrons ou pour quiconque aimerait accéder à notre local. 2- Un espace qui est plus grand et invitant avec un accès direct, à tous moments, à des éléments essentiels comme une cuisine et une salle de toilette. Un espace qui puisse être suffisant pour un studio de tournage. 4- L'emplacement choisi est idéal pour limité les frais encourus ( assumer par la TVC) pour la relocalisation de la fibre optique. 5- La salle qui est demandée détient le même mandat que celui de TVC22, et de plus, cet emplacement n'est pas ou très peu utilisé présentement par la population.

Donc, le site convoité par TVC22 est le centre d'Art et Culture situé au 1470 Ave du parc à Rockland. Nous désirons avoir seulement le premier étage et sommes au courant de nos voisins d'en bas, le club optimiste. Nous désirons garder de liens étroits avec eux, et même leur offrir notre espace s'ils en ont besoin ou à n'importe quel autre organisme de confiance qui le désire.

Ceci dit, nous espérons que l'entente qui est en place présentement entre la ville et la TVC22 soit maintenue pour ce local. En raison des demandes de subventions visées, une exigence primordiale est que nous ayons une entente de 10 ans minimum signée par les propriétaires des lieux ,donc la Cité de Clarence-Rockland. Nous sommes également prêt aux discussions, et aux questions de la part du conseil afin que vous puissiez prendre une décision.

Nous espérons que cette demande soit reçue par le conseil dès le 9 août prochain lors de la réunion plénière, car nous aimerions pouvoir procéder au déménagement avant l'hiver.

Merci beaucoup pour votre collaboration et au plaisir de continuer ensemble notre partenariat



**Stéphanie Simard**  
Directeur de TVC22  
info@tvc22.ca  
613-446-6037





Télévision Communautaire Canal 22  
Rockland, Clarence, Hammond, Wendover  
Community Television Channel 22  
Rockland, Clarence, Hammond, Wendover

### Réponse au rapport émis le 9 août au conseil de ville de Clarence-Rockland

Au mois de juillet dernier, TVC22 a soumis une demande officielle afin de déménager ses locaux dans un endroit plus propice à notre mandat. Tel que mentionner dans notre lettre, nos locaux sont trop petits, peu adaptés à notre mandat, non sécuritaires et surtout peu attirants. À titre de télévision communautaire, un service offert, nos locaux devraient refléter un certain professionnalisme, une ambiance sécuritaire et avenante et surtout une première impression positive sur les invités, pour qui nous sommes la première impression de la Ville de Clarence-Rockland. C'est ainsi que nous nous sommes entretenus avec le personnel du département des services communautaires. Nous tenons à les remercier, car leur réponse a été très rapide et efficace, leur attitude professionnelle et positive et surtout un rapport bien structuré et clair. Après avoir survolé avec eux le rapport des recommandations, car nous ne pouvions pas le rapporter pour en étudier en profondeur le contenu, nous avons quelques préoccupations :

- 1- Dans le point 4, intitulé historique, il est mention d'une entente préalablement adoptée que TVC22 aurait délibérément enfreinte. Nous tenons à réitérer que les décisions et les agissements des administrations passées n'ont aucun lien avec l'administration présente. Soyez rassuré que nos ententes soient respectées en raison de nos responsabilités éthiques et déontologiques auxquelles employés, bénévoles et membre du C.A. doivent adhérer.
- 2- De plus, dans le segment 4 nommé historique. Il est mention que la ville affiche un déficit opérationnel en raison de notre présence dans leurs locaux. Bien que nous sommes conscients qu'en terme budgétaire cela s'avère tout à fait juste. Toutefois, le prix d'avoir une télévision communautaire bilingue indépendante devrait être considéré inestimable. Nous sommes en effet les seuls en Ontario avec ce mandat qui nous permet d'offrir librement une programmation réellement à l'image de sa population. Nous espérons que la Cité de Clarence-Rockland reconnaisse la chance qu'une telle station de télévision existe encore chez nous et qui soit toujours aussi dynamique et impliquée dans sa communauté
- 3- durant notre entretien, il a été mention que le département des loisirs et la population en générale considèrent TVC22 comme un organisme sans but lucratif (OSBL) au même titre que certains organismes tels que le club optimiste, lion, richelieu etc. Nous voulons simplement rappeler à tous, que bien que nous avons le titre d'OSBL, nos opérations, notre mandat, nos obligations financières et notre organisation, ne sont pas les mêmes qu'un OSBL standard. Il ne faut donc pas juger notre valeur sur le montant d'argent que nous redistribuons à la société, mais plutôt l'enrichissement que votre TV communautaire apporte à ces citoyens. Si vous [cliquez sur ce lien](#), vous serez dirigé à notre mémoire soumis le 30 juin passé, envoyé au CRTC pour revendiquer notre situation et nos besoins à titre de TVC. Si cela peut vous permettre une perspective différente sur nos défis et notre situation actuelle.

- 4- Dans le point 5 intitulé -Location du local, il est mentionné que la ville peut mettre fin à l'entente avec un préavis de 60 jours. Bien que, nous sommes d'accord que la ville doit accéder à leur local en cas de situation urgente. Nous voulons insérer dans cette entente, que si c'est le cas, tout déménagement avant la fin du contrat se fera au frais de la ville. Prenez en compte que les changements que nous opérons à la salle sont assez importants et que nous ne pourrions nous permettre un déménagement aussi rapidement. SVP notez que nous avons toujours des budgets, nous aussi, et que notre déménagement n'inclut pas seulement des meubles, mais bien une électricité, un système de fibre optique, un système informatique, de l'équipement spécialisé et bien plus encore. Nous estimons que notre déménagement peut coûter environ 40 000\$. Bref, vous pouvez comprendre pourquoi nous désirons insister sur ce point.
- 5- Dans ce même segment, il est mentionné que la ville s'engage à changer le système de chauffage, en ce moment électrique, pour un chauffage au gaz naturel. Ceci est une bonne nouvelle, et nous en sommes très reconnaissants. Il faut demander que le système ne soit pas seulement inséré dans la demande de budget 2018, mais installé dès le début janvier, en même temps que nos rénovations prévues pour le début janvier. De plus, en faisant le tour des lieux ces derniers jours nous tenons à mentionner ceci. Nous assumons bien évidemment de faire des changements esthétiques pour le bien de la station, mais nous espérons que la ville va réparer le segment cuisine et salle de bain qui ont été totalement défaits ([cliquez sur ce lien pour voir la photo1](#) et [photo 2](#)). Nous demandons également que la ville puisse trouver le problème d'odeur nauséabonde qui règne dans la salle à ce jour. Aussi nous avons remarqué que l'air conditionné n'est pas allumé, nous désirons aussi être rassurés que cet aspect soit en effet opérationnel.
- 6- Dans la discussion avec le département la proposition suivante a été soulevée: « Que TVC22 assume les coûts d'opération de la salle d'Art et Culture. »

Voici ce que nous suggérons en réponse :

En somme, ce déménagement, très nécessaire, entraînera un certain coût qui comprend : le déménagement de la fibre optique, le système de réseau d'électricité à refaire, le déménagement du système de diffusion, l'équipement spécialisé et les changements qui devront être faits dans la salle. Tous ces travaux sont estimés à un montant s'approchant des 40 000\$. Ce déménagement nécessitera donc un emprunt bancaire. Donc, il est important que nous travaillions ensemble pour nous aider à réaliser ce projet ambitieux. Et donc, voici quelques différents scénarios que vous pouvez considérer dans votre prise de décision.

#### **Scénario 1**

L'entente qui existe en ce moment entre la ville et TVC22 demeure exactement la même. Donc, la ville assume les coûts d'opération de la salle. Toutefois, cette fois-ci, nous désirons offrir l'opportunité de créer un partenariat concret avec la ville, où nous serons le diffuseur et producteur officiel de tout matériel promotionnel pour la Cité.

#### **Scénario 2**

L'entente qui existe en ce moment entre la ville et TVC22 demeure exactement la même. Donc, la ville assume les coûts d'opération de la salle. Toutefois, cette fois-ci, TVC22 croit en la possibilité d'un partenariat avec le TPRT où ceux-ci partageront nos locaux durant la période estivale. La ville aurait, par la suite, le droit de charger un montant au TPRT pour leur



installation dans la salle. Avec l'appui de la ville, ce partenariat pourrait constituer un revenu supplémentaire pour la Cité de Clarence-Rockland.

### **Scénario 3**

La ville décide de ne pas accepter aucune offre existante ou future et donc TVC22 doit se résigner à demeurer dans les lieux actuels. Il a été mentionné que le département demande à exiger un loyer pour notre local actuel en 2018. Ceci dit, si TVC22 doit assumer des frais nous demandons donc que les normes de santé et sécurité normale d'une entreprise soient donc respectées. Donc, si nous restons dans ce local, nous demandons une salle de bain et de l'eau courante accessible en TOUT temps. Un système de chauffage efficace, le changement de murs humides potentiellement moisissés et la solidification du plancher devenu mou avec le temps et la température.

### **Scénario 4**

La ville décide d'accepter le changement de TVC22 dans la mesure où ce dernier doit assumer tout de suite les frais d'exploitation. Si cela est le cas, nous pouvons garantir que le montant de nos contrats de productions montrera en conséquence. – Nous espérons qu'un sursis pourrait être considéré en raison de l'investissement que nous allons insérer dans la salle. De plus, un délai serait quasi essentiel pour considérer l'impact financier d'absorber les coûts opérationnels en entier de la salle.

### **Scénario 5**

La ville veut accepter une entente, mais désire négocier davantage les modalités du contrat.





## RAPPORT N° LOI2017-08-04

<b>Date</b>	Le 17 juillet 2017
<b>Soumis par</b>	Pierre Boucher
<b>Objet</b>	Chalet de service de Bourget
<b># du dossier</b>	R05 CHA

### 1) **NATURE / OBJECTIF :**

Demande d'utilisation des locaux du chalet de service de Bourget.

### 2) **DIRECTIVE/POLITIQUE ANTÉCÉDENTE :**

N/A

### 3) **RECOMMANDATION DU SERVICE:**

**ATTENDU QUE** l'écho de la Nation utilise le local au 17 rue Lavigne à Bourget depuis les cinq dernières années; et

**ATTENDU QUE** l'écho de la Nation est un organisme à but non lucratif qui travaille étroitement avec les groupes communautaires; et

**ATTENDU QUE** le local convoité n'a aucune utilité pour les Services communautaires; et

**QU'IL SOIT RÉSOLU** que le comité plénier recommande au conseil municipal d'adopter un règlement afin d'autoriser le directeur des Services communautaires de signer une entente avec L'Écho de la Nation pour la location du local, tel que recommandé.

**WHEREAS** l'Écho de la Nation occupies the building at 17 Lavigne Street in Bourget since the last five years; and

**WHEREAS** l'Écho de la Nation is a non-profit organisation that works directly with community groups; and

**WHEREAS** the building is no use to the Community Services; and

**BE IT RESOLVED** that the Committee of the Whole recommends to Municipal Council to adopt a by-law in order to authorize the Director of the Community Services to sign an agreement with l'Écho de la Nation for the rental of the building, as recommended.

#### 4) **HISTORIQUE :**

L'Écho de la Nation utilise depuis les cinq dernières années un petit édifice situé au 17 rue Lavigne à Bourget pour entreposer les costumes et quelques petits décors de leur organisme.

L'entente par écrite est terminée depuis le 31 mars 2017. Vous trouverez en attachement une copie de l'entente modifiée.

Puisque nous n'avions aucun intérêt de la communauté local à l'époque de l'entente, la Cité avait accepté une entente de 5 années avec une possibilité de considération des besoins futurs de L'Écho de la Nation suite à la date de terminaison.

#### 5) **DISCUSSION :**

Nous avons reçu les deux demandes suivantes pour l'utilisation du local.

##### 1 : Optimistes de Bourget

Nous avons reçu une demande des Optimiste de Bourget, un organisme à but non lucratif local, très actif et œuvrant dans la communauté pour l'utilisation du local.

La Cité avait offert l'opportunité aux Optimistes de Bourget il y a plusieurs années passées de prendre en charge les locaux qui étaient libres à l'époque. Par contre les Optimistes avaient décliné l'offre.

Suite à leur demande par écrite, le Service a rencontré les représentants du Club afin de leur expliquer les conditions de l'entente existante et les frais reliés aux opérations du local.

Les Optimistes ont retiré leur demande de location locale.

##### 2 : L'Écho de la Nation

Une lettre d'intention de l'écho de la Nation fut reçue au début avril 2017 demandant officiellement de pouvoir continuer à occuper le local situé au 17 rue Lavigne à Bourget.

#### 6) **CONSULTATION :**

N/A

7) **RECOMMANDATION OU COMMENTAIRES DU COMITÉ :**

N/A

8) **IMPACT FINANCIER (monétaire/matériaux/etc.):**

Les utilisateurs des locaux sont responsables de tous les frais liés à l'hydro ainsi que l'entretien intérieur de l'édifice. De plus une assurance responsabilité pour leur contenu est demandée.

9) **IMPLICATIONS LÉGALES :**

N/A

10) **GESTION DU RISQUE (RISK MANAGEMENT) :**

N/A

11) **IMPLICATIONS STRATÉGIQUES :**

N/A

12) **DOCUMENTS D'APPUI:**

- Lettre de l'écho de la Nation
- Lettre des Optimistes de Bourget
- Entente Chalet de service Bourget



Messieurs,

J'aimerais débiter par un court historique du local appelé la maison blanche derrière le Centre Communautaire de Bourget. En 2009, Pierre Boucher avait offert au Club Optimiste de Bourget d'utiliser ce local. Malheureusement, à ce moment-là, notre Club n'avait pas les moyens financiers pour assumer les coûts d'entretiens et d'électricité. De plus, au même moment, le Club faisait face à une baisse importante du nombre de ses membres. Pour ces raisons, le Club se devait de refuser cette bonne offre.

Aujourd'hui, le Club Optimiste de Bourget est en excellente santé financière. Nous sommes donc maintenant en mesure d'assumer les coûts reliés à l'utilisation de ce local. Nous comprenons que l'Écho d'un Peuple loue présentement ce local pour entreposer leurs costumes mais leur contrat arrive à échéance à la fin du mois d'Avril ou Mai 2017. Étant donné que notre Club est un organisme à but non lucratif local, oeuvrant dans la communauté de Bourget, nous aimerions avoir priorité sur l'utilisation du local pour les réunions des membres et l'entreposage de leur équipement au lieu d'utiliser le grand Centre communautaire.

En espérant une réponse favorable, nous vous remercions de l'attention que vous porterez à notre demande.

Marc Roy  
Lieutenant-Gouverneur Zone 4  
pour le Club Optimiste de Bourget.







Le 5 avril 2017

Monsieur Pierre Boucher  
Directeur des services communautaires  
Cité Clarence-Rockland

**Objet : demande de renouvellement de l'entente pour le petit édifice occupé par L'écho de la Nation**

Monsieur Boucher,

Suite à votre courriel du 28 mars 2017, L'écho de la Nation demande officiellement de pouvoir continuer à occuper le petit édifice situé au 19 rue Lavigne à Bourget.

L'écho de la Nation aimerait renouveler son entente avec la Cité Clarence-Rockland pour un autre cinq ans. L'écho de la Nation continuera d'assumer les coûts d'opération pour le local durant la période de l'entente.

L'écho de la Nation est un groupe à but non-lucratif qui travaille étroitement avec les groupes communautaires, les conseils scolaires, les écoles et les municipalités afin de produire et présenter des spectacles culturels et historiques de L'écho d'un peuple afin de faire rayonner le patrimoine et la fierté de la francophonie, du Canada ainsi que des communautés régionales. L'ampleur de ses activités n'est réalisable qu'avec de précieuses collaborations telle la vôtre.

Ce local est essentiel pour la planification et la préparation des spectacles scolaires et communautaires. L'écho de la Nation a contribué à plusieurs événements à Clarence-Rockland, tels le Festival de la rivière ainsi que plusieurs spectacles scolaires dans la région. L'écho de la Nation s'est même dépassée côté ressources pour créer et monter un spectacle sur mesure dans la programmation du 125<sup>e</sup> anniversaire de Bourget. L'écho de la Nation se prépare à présenter un spectacle grandiose pour le 150<sup>e</sup> de la Confédération qui sera présenté dans la Salle de spectacle Optimiste à Rockland à la fin novembre prochain. Tous ces spectacles suscitent une grande participation des jeunes et des gens de la municipalité et c'est toute la communauté qui en ressort gagnante. Qu'il s'agisse des comédiens autant que les spectateurs de toutes les générations, les spectacles de L'écho d'un peuple stimulent le développement et la mise en valeur des talents locaux, l'intérêt envers la culture et le patrimoine local, le bénévolat et l'importance de contribuer à sa communauté. Au fil des ans, des centaines de bénévoles et d'artisans de Clarence-Rockland en ont vécu les bénéfices et des éléments d'un service de loisirs.

.../2

L'écho de la Nation collabore régulièrement aux initiatives de gens de la municipalité. Par exemple, justement avec les costumes et accessoires qui sont entreposés dans le local, nous appuyons le projet *La Grande Course* qui aura lieu à Bourget en juin prochain. Le comité du patrimoine de la Cité Clarence-Rockland a approché L'écho de la Nation afin de créer un partenariat pour costumer des gens qui feront l'animation lors du nouveau *Circuit du patrimoine de la Cité Clarence-Rockland* en septembre prochain. Ce type de collaboration et d'entraide revient souvent pour des gens et des groupes de la municipalité.

Investissant ressources humaines et financières, L'écho de la Nation a rendu le local vivable. Voilà cinq ans, aucun organisme ne voulait entrer dans le local. Le local était libre depuis longtemps et avait une odeur assez puissante. L'écho de la Nation aimerait faire quelques modifications à l'intérieur afin de le rendre encore plus vivable. Les plans étaient d'enlever le vieux tapis en haut, remplacer les tuiles au plafond dans le sous-sol et repeindre le plancher au sous-sol.

En somme, nous croyons sincèrement que notre collaboration nous profite mutuellement. Nous vous remercions de considérer notre demande.

Bien à vous,



Chantal Nadeau  
Présidente

c.c. Jocelyne Leroux, régisseuse et responsable des costumes et des loges pour L'écho d'un peuple



**CORPORATION  
de la Cité de / of the City of  
CLARENCE-ROCKLAND**

**ENTENTE**

Entente faite ce \_\_\_\_\_ jour de \_\_\_\_\_ 2017

Entre **LA CORPORATION DE LA CITÉ DE CLARENCE-ROCKLAND**  
(Reconnue sous la Cité)

Et **L'ÉCHO DE LA NATION INC.**  
(Reconnue sous l'Écho)

**QU'IL SOIT RÉSOLU** que le Conseil municipal accepte que l'Écho de la Nation Inc. occupe le chalet de service à Bourget pour la période du 1<sup>er</sup> septembre 2017 au 31 août 2022 selon les termes établis ci-dessous.

**TERMES DE RÉFÉRENCES:**

Conseil municipal

Membre élu par la population de la Cité de Clarence-Rockland siégeant au sein du Conseil municipal de la Corporation de la Cité de Clarence-Rockland.

l'Écho de la Nation Inc.

L'écho de la Nation, créé en mai 2009, a comme objectif de produire un méga spectacle (*L'écho d'un peuple*) dans les Comtés unis de Prescott et Russell avec des activités connexes en province et au niveau national.

Chalet de service à Bourget

Édifice érigé sur la propriété située au 17, rue Lavigne, appartenant à la Corporation de la Cité de Clarence-Rockland.



**CORPORATION  
de la Cité de / of the City of  
CLARENCE-ROCKLAND**

**IL EST ENTENDU QUE** les termes suivants seront respectés:

RESPONSABILITÉ DE L'ÉCHO DE LA NATION INC.:

- 1- QUE** L'ÉCHO occupe le Chalet de service à Bourget du 1<sup>er</sup> septembre 2017 au 31 août 2022 inclusivement.
  - a. Ce contrat non contraignant est valide pour cinq (5) ans avec la possibilité de renouvellement.
- 2- QUE** L'ÉCHO assume tous les coûts suivants :
  - a. L'électricité,
  - b. L'eau,
  - c. Les contrats d'entretien,
  - d. Le téléphone, le câble et l'internet,
  - e. Les travaux de maintenance sur la plomberie, le système électrique, le système d'alarme, l'éclairage, etc.
  - f. L'achat des articles de nettoyage
- 3- QUE** L'ÉCHO soit responsable de tout frais associé à la rénovation ou à la modification du Chalet de service à Bourget.
- 4- QUE** L'ÉCHO soit responsable de la propreté et de la sécurité du Chalet de service à Bourget.
- 5- QUE** L'ÉCHO s'assure de respecter les règles de santé-sécurité en milieu de travail.
- 6- QUE** L'ÉCHO fournit une preuve d'assurance responsabilité civile d'une valeur de 5 millions de dollars. La preuve doit clairement démontrer que la Cité de Clarence-Rockland soit assurée additionnelle et qu'elle convient aux exigences du courtier d'assurance de la municipalité.
- 7- QUE** L'ÉCHO fournit une preuve d'assurance feu/vol pour leurs propres équipements et qu'elle convient aux exigences du courtier d'assurance de la municipalité.



**CORPORATION  
de la Cité de / of the City of  
CLARENCE-ROCKLAND**

- 8- **QUE** L'ÉCHO soit responsable du déneigement de la porte principal et du trottoir devant le Chalet de service à Bourget.
- 9- **QUE** L'ÉCHO assume toute responsabilité en cas de bris ou de vol de leur équipement.
- 10- **QUE** L'ÉCHO s'engage à adhérer aux exigences reliées à l'entretien et à la sécurité de l'édifice tel que soumis lors des inspections faites avec un représentant municipal.

**RESPONSABILITÉ DE LA CITÉ**

- 11- **QUE** la Cité se garde le droit d'accéder les lieux en tout temps afin d'y faire une inspection.
- 12- **QUE** la Cité transfère directement au nom de L'ÉCHO toutes factures reliées aux frais indiqués à la clause 2 de la présente entente.
- 13- **QUE** la Cité s'engage à défrayer les frais d'opérations reliés à la structure du bâtiment ou à l'entretien extérieur.
- 14- **QUE** la Cité se garde le droit de mettre fin à la présente entente selon un préavis de 60 jours.

\_\_\_\_\_  
l'Écho de la Nation Inc.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Titre

\_\_\_\_\_  
Pierre Boucher

\_\_\_\_\_  
Date



**Clarence-Rockland**

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**CORPORATION  
de la Cité de / of the City of  
CLARENCE-ROCKLAND**

Directeur des Services communautaires



## **REPORT N°INF2017-043** Budget Control Procedures

<b>Date</b>	30/05/2017
<b>Submitted by</b>	Dave Darch
<b>Subject</b>	Budget Control Procedures
<b>File N°</b>	

### 1) **NATURE/GOAL :**

The purpose of this report is to recommend budget control procedures once a contract has been awarded.

### 2) **DIRECTIVE/PREVIOUS POLICY**

In March, 2017, Committee and Council considered separate staff reports recommending increased funding for two (2) different contracts on Laurier Street. Arising out of the discussions on these items, the Department committed to bring back a report for Committee/Council's consideration in respect of monitoring capital budgets as work progresses in the field. The intent of this procedure is to provide timely status updates on the progress of capital works and compliance with approved budget allocations.

### 3) **DEPARTMENT'S RECOMMENDATION :**

**BE IT RESOLVED THAT** Committee of the Whole recommends that Council adopt the budget control procedures outlined in report INF2017-43.

**QU'IL SOIT SOIT RÉSOLU QUE** le Comité plénier recommande au Conseil d'adopter les procédures de contrôle budgétaire tel que décrites dans le rapport no. INF2017-43.

### 4) **BACKGROUND :**

It is critical to ensure that there is a transparent and comprehensive assessment of compliance with approved capital budgets throughout the construction phase of a project. The recent discussions surrounding additional funding requests for the Laurier Street projects emphasized the need to develop a formal procedure to track project expenditures against approved funding allocations. Accordingly, the Discussion section of this report will summarize a process from contract award through to contract completion to keep members of Council abreast of budget related matters

for approved capital programs.

## 5) **DISCUSSION :**

The following provides a summary of the steps recommended by staff to monitor the progress and expenditures against approved budgets for capital projects.

### *1.0 Consultant Agreements:*

Consultant design agreements will contain a clause that mandatory budget updates are provided at the 50%, 75% and 90% completion of project value. This information will be used by staff to populate project summary reports for Council's review.

### *2.0 Project Summary Reports:*

A staff report seeking Council's authorization to award a contract will clearly identify the components of the capital project under consideration. This summary will include, but not limited to, such expenditure items as:

- approved budget
- contract cost as per recommended bidder
- engineering (design, supervision and contract administration)
- geotechnical expenditures
- other expenditures (e.g. utilities, legal, communications, etc.)
- contingency allocations

It should be noted that the above components can vary from project to project.

As well, the project summary will form the basis of a template for future project updates as deemed appropriate. An example of a typical project summary is depicted in Attachment 1. This itemizes a project summary cost at the award stage in addition to a summary of project costs for the first update (50% level) to Council.

### *3.0 Contingency Allocations:*

Traditionally, a project cost summary should contain an allocation for contingencies. This contingency will vary depending on the complexity of the project and the accuracy of as-built information. With respect to the latter, staff has indicated to members of Council on several occasions that much of the City's infrastructure was installed in the 70s and 80s or older without the requirement to provide accurate as-built information. This, as Council is aware, has led to unanticipated expenditures on several of our capital programs and subsequently the need for staff to request Council approval for



additional capital funding.

The Department recommends that the following contingency allocations should be incorporated as a general guideline:

- Complex Projects & Uncertain as-builts 20%
- Normal Projects 15%
- Smaller Non-Complex Projects 10%

Staff will endeavor to use its best judgment in terms of assigning contingency allocations. If, at the time of award, projected project expenditures exceed approved funding authority, the Department will seek Council's approval to increase the budget limit for the project.

6) **CONSULTATION:**

N/A

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

8) **FINANCIAL IMPACT (expenses/material/etc.):**

The above budget tracking procedure will ensure that Council is apprised of total project expenditures as the construction proceeds.

Additional funding requirements can be addressed in a timely matter prior to project completion. The process also enables staff to modify the scope of a project at the award phase or at any stage in the project expenditure update process.

9) **LEGAL IMPLICATIONS :**

N/A

10) **RISK MANAGEMENT :**

Budget monitoring process during the construction phase will enable staff to closely monitor project expenditures at predetermined percentages of completion. If needed, this will allow staff to prepare supplementary funding reports for Council's consideration prior to completion of a project. Timely decisions can also be made to address projected budget overages by modifying project scope etc. and seeking Council's approval of scope and

budget amendments prior to completion of a project.

11) **STRATEGIC IMPLICATIONS :**

The proposed budget monitoring process during construction supports the financial stability objectives outlined in the City's draft strategic plan.

12) **SUPPORTING DOCUMENTS:**

Attachment 1- sample project summary sheet

## PROJECT SUMMARY

## Attachment #1

## SAMPLE

Authorized Budget(s) \$500,000				
Work Item	Award Project Cost	Project Cost update #1	Project Cost Update #2	Project Cost Update #3
CONSTRUCTION	\$ 285,000.00	300,000.00 \$		
ENGINEERING	\$ 35,000.00	35,000.00 \$		
GEOTECHNICAL	\$ 20,000.00	25,000.00 \$		
OTHERS	\$ 80,000.00	85,000.00 \$		
HST (13%)	\$ 72,000.00	55,000.00 \$		
TOTALS	\$ 492,000.00	500,000.00 \$		
COMMENTS ON PROJECT				





## **REPORT N°INF2017-043** Approval of Street Lighting Policy

<b>Date</b>	09/08/2017
<b>Submitted by</b>	Richard Campeau
<b>Subject</b>	Tabling of Street Lighting Policy
<b>File N°</b>	INF2017-043

1) **NATURE/GOAL :**

The purpose of this report is to table the draft Clarence-Rockland Street Lighting policy to Council.

2) **DIRECTIVE/PREVIOUS POLICY :**

N/A

3) **DEPARTMENT'S RECOMMENDATION :**

**THAT** Report No. INF2017-043, be received.

**QUE** le Rapport No. INF2017-043, soit reçu.

4) **BACKGROUND :**

The municipality has embarked on a project to phase-out inefficient lighting by converting all existing standard roadway luminaires to LED technology, thus, generating the need for comprehensive guidelines, to aid and regulate lighting for future demands and projects.

The Clarence-Rockland Roadway Lighting Policy (C-RSLP) has been created to standardize the design requirements for roadways and roadway adjacent pathway lighting systems. This Lighting Policy identifies lighting related issues to be addressed in construction and reconstruction projects and future planning discussions with the public, developers and City officials.

5) **DISCUSSION :**

The purpose of this policy is to assist in ensuring that the following street lighting objectives are met:

1. Provide policy direction with respect to street light service levels and overall street light administration;
2. Provide direction on developer installation standards, repairing and replacing street lights;

3. To improve the night-time safety of road users and members of the community.
4. To provide public lighting that is cost effective, taking into account energy conservation and sustainability.

Attached as Annex A is the proposed street lighting policy. The policy is rather extensive document and for that reason, the Department is proposing that the policy be tabled for a period of one month for review and comment by members of Council. Staff will bring back a final report for approval at the September 6<sup>th</sup> Council Meeting.

Annex B chose the light colours for various types of LED lights. Staff will give a brief overview of this Annex as part of Council's consideration of this report.

As well, the Department will circulate the draft policy to the developers for review and comment during the tabling period.

Members of Council are encouraged to review the draft policy and ask questions of staff prior to the September 6<sup>th</sup> final report to Council.

6) **CONSULTATION:**

N/A

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

8) **FINANCIAL IMPACT (expenses/material/etc.):**

N/A

9) **LEGAL IMPLICATIONS :**

If the municipality's streets are not properly lit, the City could encounter law actions against them from vehicular and pedestrian traffic.

10) **RISK MANAGEMENT :**

This policy will ensure a more consistent lighting throughout the streets of Clarence-Rockland.

11) **STRATEGIC IMPLICATIONS :**

N/A

12) **SUPPORTING DOCUMENTS:**

Annex A: Clarence-Rockland Roadway Lighting Policy

Annex B: LED Lighting Color Chart



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## GLOSSARY

### ABBREVIATIONS

**ANSI** – American National Standards Institute,

**BUG** – Backlight, Uplight & Glare,

**CSA** – Canadian Standard Association,

**ESA** – Electrical Safety Authority,

**IEEE** – Institute of Electrical and Electronics Engineers,

**IESNA** – Illuminating Engineering Society of North America,

**ROW** – Right-of-Way

**TAC** – Transportation Association of Canada,

**MTO** – Ministry of Transportation Ontario

### A.2 DEFINITIONS

**Average Illuminance:** Average Illuminance, generally referred to as ‘ $E_{avg}$ .’ and measured in ‘Lux’, is the arithmetical average of individual illuminance values calculated at predetermined points within an area. For example, Average Illuminance on a section of roadway can be determined by overlaying an imaginary grid on that section of the roadway, calculating illuminance values at each grid point and then taking an average of all the values.

**Average Luminance:** Average Luminance or Average Pavement Luminance for a surface, generally referred to as ‘ $LP_{avg}$ .’ and measured in ‘Candelas per square metre ( $cd/m^2$ )’, is the arithmetical average of individual Luminance values calculated at predetermined points on the surface. Similar to calculating Average Illuminance, Average Pavement Luminance for a section of roadway can be determined by overlaying an imaginary grid on that section of the roadway, calculating Luminance values at each grid point and then taking an average of all the values.

**Candela (cd):** The unit of luminous intensity formerly termed “candle”. One candela equals one lumen per steradian.

**Coefficient of Utilization (CU):** A design factor that represents the percentage of bare lamp lumens that are utilized to light the pavement surface. This factor is based on the luminaire position relative to the lit area.

**Footcandle (fc):** The English unit of Illuminance; illuminance on a surface one square foot in area on which there is uniformly distributed a light flux of one lumen. One foot-candle equals 10.76 lux.

**Glare:** The sensation produced by the luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort or loss in visibility or visual performance.

**Illuminance (E):** Illuminance is a measure of the “amount” of light a light source projects on to a surface. More precisely, it is the density of luminous flux (Lumens) falling on a surface and decreases with distance of the surface from the source (Inverse Square Law). The metric units for measurement of illuminance are “Lux”, which is equal to 1 Lumen/m<sup>2</sup> area.

**Initial Lamp Lumens (LL):** Initial bare bulb lumen output of a light source.

**Light:** Radiant energy that is capable of being perceived by the eye and producing a visual sensation. The visible portion of the electromagnetic spectrum extends from approximately 380 to 770 nanometres.

**Light Emitting Diodes (LED):** A semiconductor diode that converts applied voltage to light and is used in lamps, luminaires and digital displays.

**Lumen (lm):** defined as:

A unit of measure of the quantity of light. One lumen is the amount of light which falls on an area of one square foot, every point of which is one foot from the source of one candela. A light source of one candela emits a total of 12.57 lumens; or

A measure of luminous flux emitted by a source. The output of a lamp is expressed by the manufacturers in Lumens (e.g. 400 watt high pressure sodium lamp produces 50000 initial lumens).

**Luminaire:** A complete unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps and to connect the lamps to the power supply.

**Luminance:** Luminance of a roadway surface, simply explained, is the intensity of reflected light per unit area of the surface in the direction of the viewer. Luminance indicates the “brightness” of the roadway surface ahead of the observer when viewed from a given location in a given direction. Luminance at any location (point) on the roadway surface varies with the incident angles of light from various light sources on to the surface, the reflectance properties of the pavement, and the viewing angle of the stationary observer at the point.

**Lux (lx):** The SI unit of illuminance; defined as the amount of light on a surface of one square metre, all points of which are one metre from a uniform source of one candela. One lux equals 0.0929 foot-candle.

**Maintained Average Illuminance/Luminance:** Light output of a roadway lighting system deteriorates over time due to many factors. Though many of these factors are complex in nature to quantify, two major factors are depreciation of lamp lumen output due to its age (referred to as Lamp Lumen Depreciation or ‘LLD’), and accumulation of dirt inside the luminaire as well as on the outside of the glassware (referred to as Luminaire Dirt Depreciation or ‘LDD’). The product of these two factors is referred to as Light Loss Factor or ‘LLF’.

**Nuisance Light:** Nuisance light can be defined as the presence of a bright source within the observer’s field of view, which the observer finds objectionable and/or intrusive. This adverse effect includes the

increase in brightness of the night sky (Sky Glow) and glare experienced by people in the vicinity of luminaires.

**Q Factor:** A measure to overall “lightness” of the surface

**Sky Glow:** The term used to describe the added sky brightness caused by the scattering of extraneous light reflecting from the dust particles in the atmosphere.

**Spill Light:** Spill light can be defined as illumination of an area beyond the primary area that the light source is intended to illuminate.

**Steradian:** A solid angle subtending an area on the surface of a sphere equal to the square of the sphere radius.

**Uniformity:** Uniformity of lighting refers to “Quality” of lighting. The lighting must be uniformly spread over an area for good visibility since the human eye requires a finite amount of time to adapt to changes in light levels. The uniformity of lighting for an area, for both Illuminance and Luminance method, is determined by calculating the ratio of Average Illuminance/Luminance to Minimum Illuminance/Luminance within the area.

**Veiling Luminance:** Also known as Disability Glare, it is the direct luminance superimposed on the retina by external light sources, which causes a “veil” of light and reduces the contrast of an image. The veiling luminance can be produced by a roadway luminaire, headlights of an oncoming vehicle, advertising signs along the roadway, and stray commercial/residential lighting adjacent to the roadway. Veiling luminance produced by only roadway luminaires is considered in the lighting calculations.

**Visibility:** The quality or state of being perceivable by the eye. In roadway lighting it is usually defined in terms of the distance at which an object can just be perceived.

**Warrant:** The justification for the installation of roadway lighting based on several factors as defined in the Transportation Association of Canada “Guide for the Design of Roadway Lighting”

## A.3 REFERENCES

The following published documents have been used as the basis for establishing lighting design criteria:

### Canadian Standard Association:

CSA C22.2 No. 211.2-06 (R2011) - Rigid PVC, Unplasticized Conduit

CSA C22.2 No. 227.1-97 (R2002) - Electrical Non-metallic Tubing (Bi-national standard, with UL 1653)

### Illuminating Engineering Society of North America:

IESNA DG-5-94 - Recommended Lighting for Walkways and Class 1 Bikeways

IESNA LM-67- 94 - Calculation Procedures and Specifications of Criteria for Lighting Calculations

IESNA RP-8-14 - Roadway Lighting ANSI Approved

IESNA RP-22-05 - Recommended Practice for Tunnel Lighting

IESNA TM-3-95 - A Discussion of Appendix E – “Classification of Luminaire Light Distributions”

IESNA TM-10-00 - Addressing Obtrusive Light (Urban Sky Glow and Light Trespass) in Conjunction with Roadway Lighting

IESNA TM-11-00 - Light Trespass; Research, Results and Recommendations

**Transportation Association of Canada (TAC):**

Guide for the Design of Roadway Lighting

Ministry of Transportation, Ontario (MTO):

Roadside Safety Manual

## 1.0 INTRODUCTION AND OBJECTIVES

The Clarence-Rockland Roadway Lighting Policy (C-RRLP) has been created to standardize the design requirements for roadway and sidewalk lighting systems. This Lighting Policy identifies lighting related issues to be addressed in construction and reconstruction projects and future planning discussions with the public, developers and City officials.

This Policy adopts an approach for roadway lighting where all areas of the municipality are placed into one of three categories; “Urban”, “Rural” and “Special Areas”. “Urban Areas” of the municipality includes land use areas as identified in the *City of Clarence-Rockland Official Plan (and ZONING BY-LAW NO. 2006-3) Plan Schedules A* (e.g. Mixed-Use Centres, Traditional Main streets and Central Areas). “Rural Areas” applies to parts of the city outside of the designated “Urban Areas”. The “Special Areas” which is defined in Section 3.0, will receive decorative style lighting equipment to highlight the distinctiveness of the area. “Urban and Rural” will receive standard lighting equipment.

In this regard, this policy has been prepared in order to provide qualified practitioners with the required information to successfully design roadway lighting systems to the municipalities’ satisfaction. As this policy does not cover every situation that may be encountered in the field, it is the responsibility of the practitioner to exercise professional engineering judgment during every stage of the design process and obtain City approval before proceeding.

This Policy will be reviewed and updated as needed every 3 years appropriately to incorporate changes in lighting technologies, lighting hardware, and economics.

The fundamental goal of the Policy is to provide a uniform structure for the ongoing provision of roadway lighting across the municipality carried out by the City and developers. The following shall be considered the objectives of a roadway lighting system design:

- The provision of adequate and uniform lighting levels for roadways, adjacent bikeways and pedestrian ways on Clarence-Rockland Roads;
- The requirements of recognized lighting standards shall be achieved wherever economically and physically possible;
- Roadway lighting systems (pole and luminaire) options shall be high quality, energy efficient, cost effective and maintainable;
- Reduce operational and maintenance budgets for right-of-way lighting;
- Reduce energy consumption by using energy efficient luminaires; and
- Establish guidelines for assessing the need and prioritization of new and existing roadway lighting.

## 1.2 Reference Standards

The following policy will be referred to by this document:

**ANSI/IES RP-8-14 (Reaffirmed 2014), American National Standard Practice for Roadway Lighting as published by the Illuminating Engineering Society of North America.**

**TAC 2006, Guide for the Design of Roadway Lighting as published by the Transportation Association of Canada.**

**Ontario Electrical Safety Code (latest edition).**

The requirements of the above noted standards will be used to set the performance and installation criteria for the lighting systems. Clarence-Rockland recognizes that there may be physical conditions or economic constraints in certain projects in which the requirements of the standards will be difficult to achieve. The consultant or developer, during the execution of a project design, may identify specific instances where the requirements of the above noted standards cannot be met. The consultant or developer shall contact the Municipality Project Manager in writing and list the areas with explanation in which the standard is not met. The Consultant shall provide suggestions on how to proceed. The Municipality will then review the situation and give directions how to proceed.

## 2.0 LIGHTING LEVELS AND DESIGN REQUIREMENTS

### 2.1 LIGHTING DESIGN CALCULATIONS

Lighting design calculations shall be carried out as described in *Annex A Calculation and Measurement Parameters* and *Example* of the ANSI / IESNA RP-8-14 *Roadway Lighting*. When performing lighting calculations, the travelled pavement width on which the calculation is being undertaken, shall include from face of curb to face of curb (or from the painted line / edge of asphalt to the painted line / edge of asphalt where no curb is present). Similarly for sidewalks, the lighting calculations shall be carried out to include the full width of the sidewalk.

Based on the performance of LEDs at the time this policy was updated, a luminaire lifecycle of a minimum of 100,000 hours was selected for the basis of light calculations. As LED technology and light output evolves rapidly, the light loss factor for all LED roadway and sidewalk/multi-use pathway lighting calculations shall be based on the manufacturer's recommended light loss factor at 100,000 hours less an additional 10% for environmental effects.

In performing lighting computations, the designer should always attempt to minimize the amount of 'over lighting', inherent in some lighting designs by manipulating one or more lighting parameters including luminaire mounting height, pole spacing, or luminaire lumen output. The designer shall also Design with the lighting curve of luminaire (loss of output overtime) Lighting design output to be the average for the fifth (5<sup>th</sup>) years of the Luminaire's life cycle.

The minimum lighting average must be achieved while satisfying the lighting uniformity and glare requirements outlined in Table 2.1 *Recommended Average Roadway Lighting Levels*.

### 2.2 RECOMMENDED AVERAGE ROADWAY LIGHTING LEVELS

There are three distinct areas for rights-of-way lighting within the City of Clarence-Rockland "Special Areas", "Urban" and "Rural". For both areas the recommended average roadway lighting levels are the same (for similar road classifications) as shown in **Table 2.1 Recommended Average Roadway Lighting Levels**. The Table also shows the minimum average Luminance levels, minimum average maintained illuminance levels, the maximum uniformity ratios and the maximum glare ratio by roadway and area classification.

#### 2.2.1 Illuminance Criteria

The illuminance method will complement the luminance lighting criteria for designing roadway lighting of all tangent sections of roadway. Illuminance will be used as a secondary lighting design tool for field measurements and verification of the lighting design. It will only be used on its own to design roadway lighting for curvilinear road sections, sidewalks / walkways, and intersections.



### 2.2.2 Luminance Criteria

The luminance method will now be utilized to design roadway lighting for all tangent sections of roadway throughout the city of Clarence-Rockland. Right-of-way lighting designs will not be required to satisfy both luminance and illuminance criteria. Luminance will only be complemented by the illuminance for field verification of lighting designs with the luminance criteria taking precedence except as mentioned in **Section 2.2.1 Illuminance Criteria**. Refer to **Appendix D Luminance Versus Illuminance** for a sample calculation illustrating the impacts of attempting to utilize both criteria for roadway lighting designs.

### 2.2.3 Small Target Visibility (STV) Criteria

At the time of creating the Policy, the Roadway Lighting Committee of IESNA had yet to decide on the reliability of the STV method for lighting design. Although all of the Committee members concur that a contrast metric was desirable for lighting design, this method is still undergoing evaluation. STV might be a valuable tool when comparing the results of designs of approximately the same luminance and illuminance performance. The STV criteria and any new lighting criteria should be investigated further at the time of any future update to the C-RRLP.

**Table 2.1 Recommended Average Roadway Lighting Levels**

<u>Roadway Classification</u>		Area Classifications	Luminance		Glare	Illuminance	
			Avg. Luminance L avg (Cd/m <sup>2</sup> )	Uniformity Ratio Lavg/Lmin	Veiling Luminance Ratio Lvmax/Lavg	Minimum Maintained Avg. Eavg(Lux)	Uniformity Ratio Eavg/Emin
<u>Urban Area</u>	<u>Major Collector &amp; Collector</u>	Employment/Enterprise Area	0.6	4.0	0.4	9.0	4.0
		General Urban Area / Other	0.4	4.0	0.4	6.0	4.0
	<u>Local</u>	Employment/Enterprise Area	0.5	6.0	0.4	7.0	6.0
		General Urban Area / Other	0.3	6.0	0.4	4.0	6.0
<u>Rural Area</u>	<u>Collector</u>	Village Main Streets	0.6	4.0	0.4	9.0	4.0
		All other Roadways	Marker Lighting Only				
	<u>Local</u>	Village Main Streets	0.4	6.0	0.4	6.0	4.0
		All other Roadways	Marker Lighting Only				

**Urban Collector Roads (ex:) Rural Collector Roads**

(\*within village boundaries)

Laurier st.  
Carron st.  
St-Josph st.  
Dr. Corbeil  
Landry  
Champlain

(\*outside village boundaries)

## 2.3 INTERSECTIONS

### 2.3.1 Intersections of Public Rights-of-Way

Urban area intersections will be fully lit if one of the intersecting roadways has full continuous lighting. Urban and rural area intersections will be fully lit in accordance with Table 2.2 *Recommended Average Lighting Levels for Intersections* if they have traffic signals. This is to promote visibility and safety at night for the intersection as it is a location where pedestrians, cyclists, and motorists all meet and negotiate for right-of-passage with each other at the controlled intersection. For urban intersections, the intersection lighting shall be the sum of the intersecting roadway lighting levels as per Table 2.2. For rural intersections with traffic signals only, the intersection lighting shall also be as per Table 2.2 regardless of whether or not the approaches are illuminated. If the approaches to the rural intersection are not illuminated, the intersection lighting shall be transitioned as described in **Section 2.7 Transition Illumination**.

Based on Table 2.1 *Recommended Average Roadway Lighting Levels*, the Road and Area Classes intersect to form six types of intersections. The recommended lighting levels for each of these intersections are shown in Table 2.2 *Recommended Average Lighting Levels for Intersections* that sets out the sum of the lighting values of the two intersecting roadways. To determine the class of the roadway, refer to Schedules "A" to "E" of the City of Clarence-Rockland Official Plan. In cases where the sum cannot be achieved (i.e. lower than the recommended levels in Table 2.2) due to the geometric design or other physical limitations of the intersection, such as the location of Hydro utilities, then the intersection levels, as a minimum, shall be 50% greater than the highest lighting level of the intersecting roads. Table 2.2 will always take precedence for intersection lighting and not until all other alternatives have been exhausted will the 50% exception to Table 2.2 apply. For intersections with only one of the intersecting roads having full continuous lighting, the intersection light levels shall be 50% greater than the levels of the fully lit approaching roadway. The non-illuminated intersecting roadway shall have transition lighting as described in **Section 2.7 Transition Illumination**.

Where the design lighting levels of the intersecting roads exceed the criteria in Table 2.1 *Recommended Average Roadway Lighting Levels*, the design levels shall then be used to determine the intersection requirements. This is to maintain visibility and safety of everyone using the intersection by 'highlighting' the area with increased lighting levels compared to the levels on the approaching roadway of the intersection.

**Table 2.2 Recommended Average Lighting Levels for Intersections**

Intersecting Roadway Classification	Minimum Maintained Avg. (Lux) by Area Classification / Uniformity Ratio $E_{avg} / E_{min}$	
	Employment / Enterprise Area	General Urban Area / Other & Rural
Major Collector / Collector & Major Collector / Collector	18.0/(4.0)	12.0/(4.0)
Major Collector / Collector & Local	16.0/(6.0)	10.0/(6.0)
Local & Local	14.0/(6.0)	8.0/(6.0)

## 2.4 SIDEWALKS / MULTI-USE PATHWAY

A sidewalk or multi-use pathway are a dedicated pedestrian facility located within a public road right-of-way. The minimum illumination levels for sidewalks and multi-use pathways shall be as indicated in Table 2.3 *Recommended Average Lighting Levels for Sidewalks / Multi-Use Pathway* is applicable to all "Urban", "Rural" and "Special Areas". For the purpose of achieving the recommended average lighting levels shown in Table 2.3 *Recommended Average Lighting Levels for Sidewalks/ Multi-Use Pathway*, these areas are assumed to be located adjacent to or within 2.5 m from the light pole. The roadway lighting levels will take precedence over sidewalk / Multi-Use Pathway lighting located more than 2.5 m away from the light pole; therefore, roadways will not be over lit in order to achieve average lighting levels in Table 2.3 for sidewalks in distant locations or on the side of the road opposite a single sided lighting installation.

Sidewalks / Multi-Use Pathway will be illuminated at the same time as the adjacent roadway is illuminated based on available capital funding and in accordance with the priority ranking of the abutting roadway. Sidewalk / Multi-Use Pathway lighting will be provided through 'back lighting' of the roadway lighting system and only on streets where there is a full continuous roadway lighting system. Separate dedicated sidewalk / Multi-Use Pathway lighting systems will not routinely be installed in the City.

**Table 2.3 Recommended Average Lighting Levels for Sidewalks/ Multi-Use Pathway**

Roadway Classification Adjacent to Sidewalks	Maintained Illuminance Levels	
	Average Horizontal $E_{avg}(Lux)$	Uniformity Ratio $E_{avg} / E_{min}$
Major Collector/ Collector	3.0	4.0
Local	2.0	6.0

## 2.5 LIGHTING POLE LOCATION AND OFFSET REQUIREMENT

Poles can be located in protected areas, unprotected areas, or be mounted on structures. Poles in protected areas include poles that are located behind a physical barricade such as a guide rail or concrete barrier wall. Poles in unprotected areas include poles that are not located behind any physical barricade and are typically located behind barrier type curb or the shoulder 'rounding.' These poles are susceptible to impact by a vehicle accidentally leaving the roadway.

### 2.5.1 Pole Offsets

#### 2.5.1.1 Poles in Protected Areas

Poles in protected areas shall be located on a project-by-project basis in accordance with the barrier deflection characteristics and the proposed field conditions such as finished grades and right-of-way width.

### 2.5.1.2 Poles in Unprotected Areas

The offset for poles in unprotected areas is defined as the distance from the front face of the barrier type curb (or edge of traveled asphalt (solid white painted line) if no barrier type curb is present) to the nearest face of the pole. Poles in unprotected areas shall have a minimum offset from the barrier type curb or edge of traveled asphalt as indicated in Table 2.4 *Pole Offsets for Poles Located in Unprotected Areas*. When using Table 2.4 the following shall be noted:

- Deviations from the minimum pole offsets may only be approved at the discretion of a municipality official.
- The pole offsets are for tangent road sections only.
- For curvilinear road sections, the pole offset shall be dealt with on a project-by-project basis. Refer to the *Roadside Safety Manual* for guidelines and recommendations for pole locations and offsets on curvilinear roadway sections

**Table 2.4 Pole Offsets for Poles Located in Unprotected Areas**

Road Class 7	Curbs	Minimum Permissible Pole Offset (Meters m) (note 1)	
		Concrete Pole Direct Buried	Aluminum Pole Direct Buried
Collector	Y	1.5 (note 5)	0.6
	N	3.0	1.5
Local	Y	1.5 (note 5)	0.6
	N	1.5	1.5

Note:

1. Minimum permissible pole offsets can be increased as per the City official's approval. The minimum permissible pole offsets may be reduced if all other design options have been exhausted and the reduced offset must be approved by the City official. These minimum permissible pole offsets in Table 2.4 may be revised by approved City without amendment to this Policy.
2. Concrete poles direct buried are not allowed to be installed within a median.
3. Median width shall be a minimum of 1.5 m for pole installation.
4. Base-mounted aluminum poles should be given first consideration
5. For locations where there is a permanent dedicated 'on-street' parking bay abutting the traveled portion of the roadway, the minimum permissible pole offset may be reduced to 600 mm.

## 2.6 BICYCLE LANES

Bicycle lanes are dedicated travel lanes for bicycles located on the roadway adjacent to the curb or edge of pavement. The lanes are delineated with pavement markings and are considered part of the roadway. As such, they will be illuminated based on the recommended roadway lighting levels stipulated in Table 2.1 *Recommended Average Roadway Lighting Levels*, and any illumination requirements will be governed by the strategy for roadway lighting as set out in this Policy.

## 2.7 TRANSITION ILLUMINATION

Where sections of roadways that are fully illuminated are located adjacent to sections that are not, the street lighting shall be transitioned as recommended by the *Guide for the Design of Roadway Lighting*<sup>2</sup> Transitioning of the roadway illumination will allow for easier adaptation of the driver's eye from a lit to

a dark section of roadway. A consistent style of lighting equipment will be used in the transition area selected from in **Appendix A Street Lighting Selection Criteria and Equipment Inventory**.

### 2.7.2 Transition Illumination at Intersections

For intersections where only one of the intersecting roads has full continuous lighting and the light levels at the intersection are 50% greater than the light levels of the approaching illuminated roadway (as recommended by **Section 2.2 Intersections**), the non-illuminated intersecting road shall have transition lighting designed to extend the lighting beyond the intersection with a maximum of two pole cycles for each approach.

## 2.8 MARKER TYPE LIGHTING

Marker type lighting shall consist of one of the following:

- a) A single pole and luminaire located on the far right hand side of a 'T' intersection;
- b) A single pole and luminaire located at 'super mailbox' locations;
- c) Two poles and luminaires located at 'four-way' intersections in rural areas;
- d) A single pole and luminaire located on the crest of the cul de sac (i.e. the light standard will be placed at the intersection of the circumference of the cul de sac and the centerline of the road with the appropriate offset from the curb); or
- e) A single pole and luminaire located at a 90 degree bend of a roadway.

The luminaire shall be from the marker light classification of this policy complete with a maximum lumen output of 5,000 lumens except at 'super mailbox' locations where the luminaire shall be a standard classification. Marker type lighting will only be installed for the intersection of two public rights-of-way, at the crest of cul-de-sacs and at a 90 degree bend of a roadway where the rights-of-way are travelled and maintained all year round. Right-of-Way lighting for roadways with bends other than 90 degrees will be dealt with on a case-by-case basis at the discretion of the Manager of Engineering and Operations. The installation of the marker type lighting shall be subject to the availability of both existing electric power and capital funding.

## 2.9 HYDRO UTILITY WITHIN THE RIGHTS-OF-WAY

### 2.9.1 Conditions of Service

Roadway lighting systems shall meet the *Conditions of Service* set out by the local Electrical Supply Authorities and the Electrical Safety Authority (ESA).

### 2.9.2 Joint Use Hydro Light Pole

Where Hydro utility poles are located within public rights-of-way, it is desirable to utilize these poles where possible for the installation of luminaires in order to minimize the number of poles within rights-of-way. These joint use Hydro / street light poles must be coordinated with the local Electrical Supply Authority and shall satisfy the requirements of *Ontario Regulation 22/04 Electrical Distribution Safety* for third party equipment mounted on Hydro utility poles. In situations where hydro utility poles could be utilized to install decorative or pedestrian scale lighting the detailing of such a lighting plan should be made in consultation with the City officials.

## 2.10 OTHER JURISDICTIONS

Within the city of Clarence-Rockland, there are rights-of-way that are owned by, under the control of, and/or that are subject to design input by other public authorities such as the United Counties of

Prescott Russell (UCPR). The UCPR have lighting policies and procedures which takes precedence over the City of Clarence-Rockland's Lighting Policy.

## ROADWAYS

UCPR roads and intersections

## HIGHWAYS

Highway 17

### 2.11 CYCLING TRACKS

Cycle tracks will be illuminated at the same time as the adjacent roadway and only on streets where there is a full continuous roadway lighting system. As part of the City's street lighting design process, and within the terms of this lighting policy, all feasible efforts will be made by lighting designers to adjust street light locations and spacing to light cycle tracks. Roadway lighting levels will take precedence over cycle track lighting, and therefore roadways will not be over lit in order to achieve lighting of cycle tracks in distant locations or on the side of the road opposite a single sided lighting installation. Supplemental cycle track lighting systems will only be considered subject to capital and operating funding.

### 2.12 CITY APPROVAL OF LIGHTING DESIGNS BY THIRD PARTIES

The Clarence-Rockland Roadway Lighting Policy shall be performed or supervised by a Professional Electrical Engineer, registered in the Province of Ontario. The lighting design together with the lighting calculation summary shall be submitted to the Manager of Engineering and Operations for review and final approval.

### 2.13 ROUNDABOUTS

Roundabouts shall be treated as an intersection and illuminated according to IES publication DG-19-08. Refer to **Section 2.2 Intersections** for more information.

## 3.0 "SPECIAL AREAS"

"Special Areas" are to receive decorative style lighting equipment in accordance with this subsection. The following locations are subject to the Special Area lighting strategy:

- A. Laurier st, (from St-Jean st. to 1540 Laurier)
- B. Morris Village,
- C. Clarence Crossing
- D. Urban Subdivisions
- E. Urban Private Roads (subject to site plan)

Schedule (A) through (E) are designated and identified in the *City of Clarence-Rockland Official Plan – Schedule A to E* are identified in the C-RRLP and discussed in **Section 3.2 Urban Area Village Main streets** consist of existing or future high density, mixed-use residential and commercial locations that have been identified through a Council approved Community Improvement Plan (CIP). These areas are

not identified in the map schedules to the *City of Clarence-Rockland Official Plan*. Active mixed-use frontage streets are subject to the Special Area lighting strategy as part of this Roadway Lighting Policy. CIP active frontage streets may be located both in urban and in rural locations. Further information, on CIP Active mixed-use frontage streets can be obtained through the Planning and Growth Management's Department. Village main streets identified through a future public process approved by Council are subject to Special Area lighting without amendment to this Policy.

The decorative lighting equipment selection process for any "Special Area" may be initiated when one or more of the following public consultation processes occurs:

- Commencement of an Environmental Assessment and / or design for major roadway reconstruction,
- Part of major lifecycle re-lighting project without roadway reconstruction,
- Part of preparation of a Community Design Plan or planning study for all or applicable parts of the Special Area and,
- Part of private improvements to the public right-of-way associated major redevelopment.
- Roadways within any Special Area that are the subject of an Environmental Assessment (EA) or detailed road design to provide for upgrading or new construction, including sections of connecting streets, may be identified for installation of decorative lighting. When these rights-of-way have been approved through a future public process approved by Council they are subject to Special Area lighting without amendment to this Policy.

### 3.1 LIGHTING STRATEGY FOR "SPECIAL AREAS"

Decorative lighting shall be used on all roadways in "Special Areas" except as otherwise provided for in this Policy (i.e. Urban Area Villages and identified main streets are to be lit with standard lighting equipment). Except for the section of Laurier St. identified in section 3.0.

Decorative lighting should be applied consistently to with a goal to unify distinct character areas within the broader designation or areas; however the addition of pedestrian lighting in combination with tall mount lighting should generally be limited to areas of continuous active mixed-use frontage and designated main streets.

There are three options for lighting "Special Areas", as follows:

'Mid-height' pole complete with a decorative luminaire attached to the pole by either a bracket arm. This lighting option is applicable to all roadway classifications except arterial main streets.

'Tall-height' pole complete with a decorative luminaire complete with bracket arm. This lighting option is available to all Special Areas.

'The 'short-height' pole is complete with a decorative post top luminaire. This lighting option is only available to designated main streets, village *main streets* and continuous mixed use active frontage streets identified in a council approved plan.

All poles and luminaires for "Special Area" lighting shall be selected using **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. All new and existing full height decorative lighting poles used in "Special Areas" may accommodate banners of standard dimension (maximum width 1.0 m, maximum height 1.5 m) at the request of the proponent. All requests for non-standard banners, planters and attachments must be accompanied by an engineering report certified by a licensed Professional Engineer in the province of Ontario. The engineering report must confirm that the integrity of the light pole will not be compromised and that it can safely accommodate the additional load of the banner and/or planter arms and/or attachments. The report shall also illustrate mounting bracket detail,



proposed mounting height on the pole, minimum vertical clearance from the ground and dimensions of the banner and/or planter and/or attachment.

For existing decorative lighting installations, the request to add banners and/or planters is subject to approval by the Manager of Engineering and Operations or Planning Division.

In addition to providing a certified engineering report, any banners placed on decorative poles are subject to the City's Signs By-law. Both banners and any planters placed on decorative poles shall meet minimum vertical clearances as approved by the Manager of the Public Works Departments in consultation with the Planning and Growth Management Department.

Within the boundary of clearly defined Special Areas, all rights-of-way under the control of the City that are subject to special lighting will use the same style of decorative luminaire and pole to provide both for continuity in design and to simplify lighting maintenance.

### 3.2 URBAN AREA VILLAGE MAIN STREETS

Urban Area Village Main streets are identified in the *City of Clarence-Rockland Official Plan – Schedule A to E*. Village main streets may have decorative lighting equipment while all other roadways within the Village shall have standard street lighting equipment.

## 4.0 CONTEXT-BASED POLICY APPLICATION

### 4.1 AREAS UNDER DEVELOPMENT – LIGHTING LEVELS AND STYLE

The following requirements will ensure consistency in roadway lighting for areas under development at the time the Policy is approved.

#### 4.1.1 “Urban” and “Rural” Areas Under Development

To ensure roadway illumination consistency in the completion of neighbourhoods that are partially constructed or are approved for development (i.e. *Composite Utility Plan* has been approved) when this policy comes into effect, future development phases shall have roadway lighting designed and installed to match the existing street lighting levels and equipment style up to the nearest adjacent existing or planned collector roadway. However, where a substantive portion of vacant development land within the adjacent collector roadway boundaries has not been approved for development (i.e. prior to *Draft Plan of Subdivision* approval), the Manager of Engineering and Operations or Planning Division has the authority to select an alternate road or land use boundary (i.e. change from residential to commercial) up to which the existing street light level of illumination and equipment style will apply.

For example, if a specific style of lighting equipment (e.g. a lantern style luminaire), was chosen for the abutting development then that same style luminaire is to be used in the new adjoining development up to the nearest existing or planned arterial or collector road designation, or other approved boundary, regardless of change in land ownership / developer.

#### 4.1.2 Infill of Existing Developments

For infill developments, the existing roadway lighting levels of the abutting developed land shall apply. Compatible style of roadway lighting poles and luminaires shall be utilized for the street lighting design. The lighting equipment shall be selected in adherence to **Appendix A Street Lighting Selection Criteria and Equipment Inventory**.

## 4.2 RURAL LOCAL ROADS

New and existing rural local roads shall receive marker type lighting installations as outlined in **Section 2.8 Marker Type Lighting**. Rural intersections with traffic signals will be fully illuminated in accordance with **Table 2.2 Recommended Average Lighting Levels for Intersections** regardless of whether or not the approaches are illuminated (refer to **Section 2.2 Intersections**). If it is not illuminated then transition lighting shall be provided as described in **Section 2.7 Transition Illumination**.

## 4.3 EXISTING URBAN LOCAL ROADS WITH MARKER LIGHTING

Existing urban local roads with marker lighting at the intersection shall remain as is. At the time of any major roadway reconstruction new lighting shall be designed as per Urban Local road criteria, lighting equipment shall be selected to conform to **Appendix A Street Lighting Selection Criteria and Equipment Inventory**.

## 4.4 EXISTING URBAN LOCAL ROADS WITH PARTIAL LIGHTING

Existing urban local roads with partial mid-block illumination shall remain as is. At the time of any major roadway reconstruction the partial mid-block illumination will be reinstated as per existing conditions except that the lighting equipment will conform to **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. Unlit intersections in the vicinity of the partial mid-block lighting shall be upgraded to marker type lighting as outlined in **Section 2.8 Marker Type Lighting**.

## 4.5 URBAN / RURAL AREA BOUNDARY RIGHTS-OF-WAY

For roadways that form the boundary between urban and rural areas, the urban classification shall always take precedence over the rural policy for lighting that specific roadway. However, if the rural area falls under a Special Area designation the Special Area lighting policy shall take precedence only within the limits of the Special Area.

## 4.6 URBAN LOCAL ROADS IN NEW RESIDENTIAL, EMPLOYMENT & MIXED-USE CENTRE AREAS

Urban local roads in new Residential, Employment, and Mixed Use Centre Areas constructed after approval of this Policy will be illuminated to ANSI/IESNA<sub>1</sub> recommended lighting levels where practicable as shown in **Table 2.1 Recommended Average Roadway Lighting Levels**. The lighting equipment shall conform to that as listed in **Appendix A Street Lighting Selection Criteria and Equipment Inventory** and the luminaires will be of Full Cut-Off style with a maximum lumen output of 5000 lumens.

## 4.7 LIGHTING OF PRIVATELY OWNED ROADS AND LANES

Lighting of privately-owned roadways and lanes shall be installed and maintained at the expense of the owner(s) of the private road or laneway. The lighting style and location is subject to the approval of the Manager of Engineering and Operations or Planning Division and cannot be located in the public right-of-way.

If the private road intersection with the public right-of-way may warrant the installation of intersection lighting as per **Table 2.2**, then it will be lit to City standards at the expense of the owner(s). The equipment selected shall conform to **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. When the lawn lamps are replaced with street lighting equipment, the lighting levels will be upgraded to meet the requirements of **Table 2.1 Recommended Average Roadway Lighting Levels**.

#### 4.8 THROUGH-BLOCK PEDESTRIAN WALKWAYS

Through-block pedestrian walkways are short, mid-block connections between two public rights-of-way. The installation of lighting for existing unlit and new through-block pedestrian walkways shall only be installed on an as-requested basis and only if the through-block pedestrian walkway connects two lit public rights-of-way where both the rights-of-way and the through-block pedestrian walkway are open and maintained by the City throughout the year. The lighting of the existing through-block pedestrian walkways shall be subject to a lighting warrant review and the availability of both electric power, and operating and capital funding. For new through-block pedestrian walkways, lighting requirements shall be provided during the development of the through-block pedestrian walkway.

Typically through-block pedestrian walkways shall be lit to 2.0 Lux with a Uniformity of 6.0:1. If the through-block pedestrian walkway lighting is approved, only full cut off, 'shoe box' style luminaires.

#### 4.9 MAJOR RE-LIGHTING PROJECT

A major re-lighting project occurs when the existing street lighting equipment (including poles, luminaires and underground ducts and cables) has reached the end of its life expectancy and based on available funds, it is scheduled for replacement with new lighting equipment in adherence to **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. When the re-lighting project occurs without any major roadway reconstruction, then the extent of the re-lighting project will be the replacement of the old equipment with new and maintaining the existing lighting levels. If the major re-lighting project occurs in conjunction with a major roadway reconstruction involving a change in roadway geometry, then the re-lighting project must include a lighting design to ensure the appropriate lighting levels are achieved on the new roadway geometry as shown in Table 2.1 *Recommended Average Roadway Lighting Levels*. Major roadway reconstruction involves one or more of the following; underground utilities work, sidewalk and/or curb reconstruction and/or roadway geometry changes.

### 5.0 LIGHTING EQUIPMENT

#### 5.1 BACKGROUND

The City of Clarence-Rockland has developed performance criteria for street lighting poles and luminaires which must meet or exceed those identified in **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. These requirements are in place to ensure lighting systems provide quality lighting that are efficient in terms of energy consumption, operation and maintenance.

The City of Clarence-Rockland has adopted LED technology for its street lighting luminaires. LED lighting is changing the landscape of street and area lighting at a rapid pace. The rapid evolution of the technology will bring new street lighting luminaire offerings which will be more cost effective and energy efficient, require less maintenance and provide longer life.

All lighting equipment in this Policy, including but not limited to poles, luminaires, bracket arms, banner arms and lamps, meets or exceeds the City of Clarence-Rockland Material Specifications.

#### 5.2 LUMINAIRE CORRELATED COLOUR TEMPERATURE

All new street lighting LED luminaires shall have a correlated colour temperature of 3000K for all roadways.

### 5.3 LUMINAIRE CLASSIFICATION SYSTEM

The IESNA utilizes a BUG (Backlight, Uplight & Glare) classification system, which categorizes luminaires based on their lumen output in the following, various zones:

- High Angle Light Zone
- Forward Light Zone
- Back Light Zone and,
- Up Light Zone

All decorative and standard LED luminaires described in **Appendix A Street Lighting Selection Criteria and Equipment Inventory** have a BUG classification.

### 5.4 POLE COLOURS

The approved colours for all the lighting poles are included in **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. Pole colour finishes shall be in conformance with the City of Clarence-Rockland Material Specifications which supplements this Policy.

### 5.5 DECORATIVE LIGHTING EQUIPMENT

“Special Area” lighting equipment is included in **Appendix A Street Lighting Selection Criteria and Equipment Inventory**. “Special Areas” are to be lit using uniform lighting installations with the decorative style poles and luminaires. Figure 5.2 sets out the street lighting equipment and assemblies for ‘tall-height’, ‘mid-height’ and ‘short-height’ poles with luminaires and bracket arms. The assemblies are also summarized in Table 5.2 *Roadway Lighting Equipment for “Special Areas”*.

#### 5.5.1 ‘Short-Height’ Lighting Equipment

‘Short-height’ lighting equipment is typically comprised of a 4.3 metre high decorative pole and a top mounted (post top) decorative luminaire. The ‘short-height’ pole is a pedestrian-scale pole mainly providing sidewalk lighting with a slight contribution to the roadway lighting. The maximum allowable lumen output for luminaires on this type of pole is 4000 lumens. Because of the short height of the pole, higher lumen output may produce glare that can be distracting to both the motorists and the pedestrians. Due to the low lumen output, ‘Short-height’ poles should be used in conjunction with ‘Tall-height’ poles in order to achieve the recommended average levels shown in Table 2.1 *Recommended Average Roadway Lighting Levels* for the roadway. Short height poles should generally only be used along Traditional Main streets, BIA main streets, Village main streets and other “special area” roadways that consist of continuous and active mixed-use frontages e.g. identified portions of Main streets and Mixed-use Centres.

‘Short-height’ lighting equipment is illustrated in Figures 5.2 L-A1 *Decorative Lighting Assemblies For ‘Short-Height’ Poles*. All decorative and standard LED luminaires described in **Appendix A Street Lighting Selection Criteria and Equipment Inventory**.

#### 5.5.2 ‘Mid-Height’ Lighting Equipment

‘Mid-height’ lighting equipment is typically comprised of a 5.5 metre or a 7.6 metre high pole and a decorative luminaire side-mounted with a bracket arm. Mid-height equipment is available for use in “Special Areas” that have narrow rights-of-way.

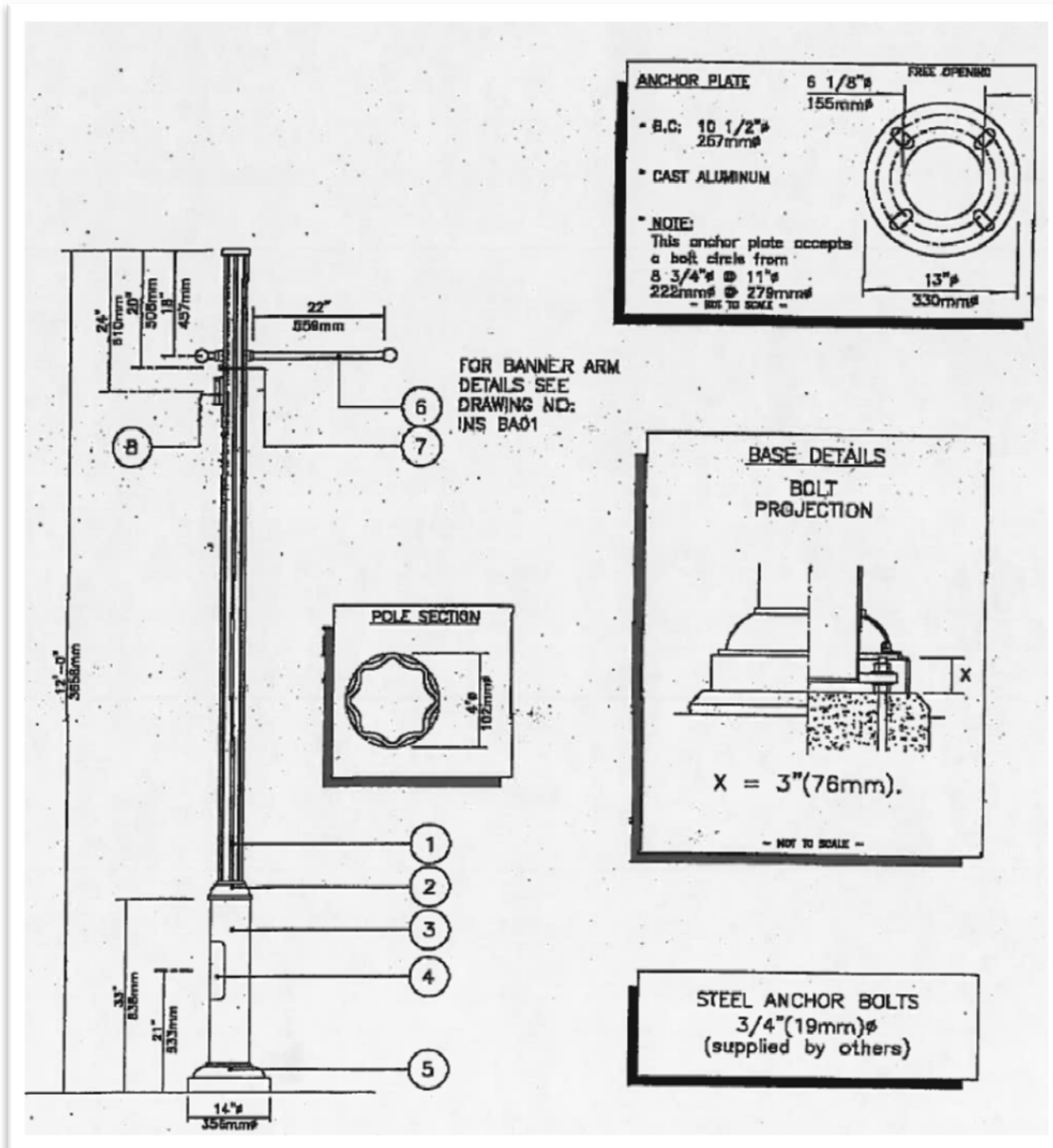
‘Mid-height’ lighting equipment is shown in Figures 5.2 L-B1. For ‘mid-height’ lighting installations, the ‘mid-height’ poles and luminaires can be interchanged to create different lighting assemblies.

**FIGURE 5.1 L-C1 / L-C2 COBRA-HEAD STYLE LUMINAIRES AND ASSEMBLIES**

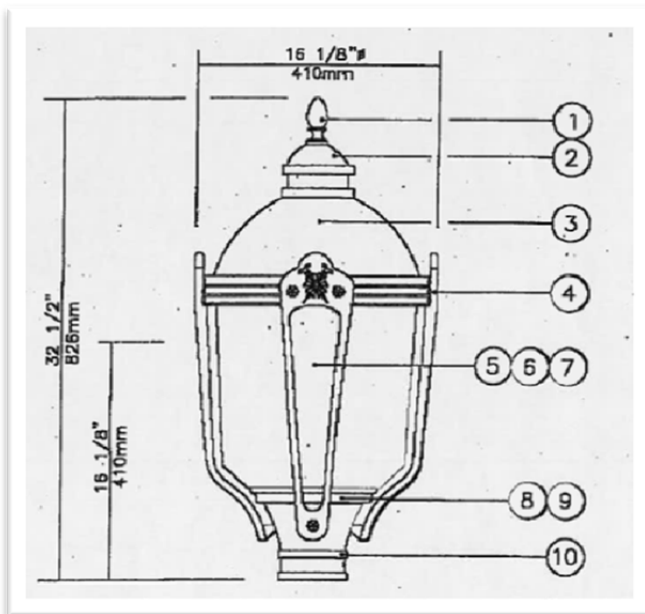
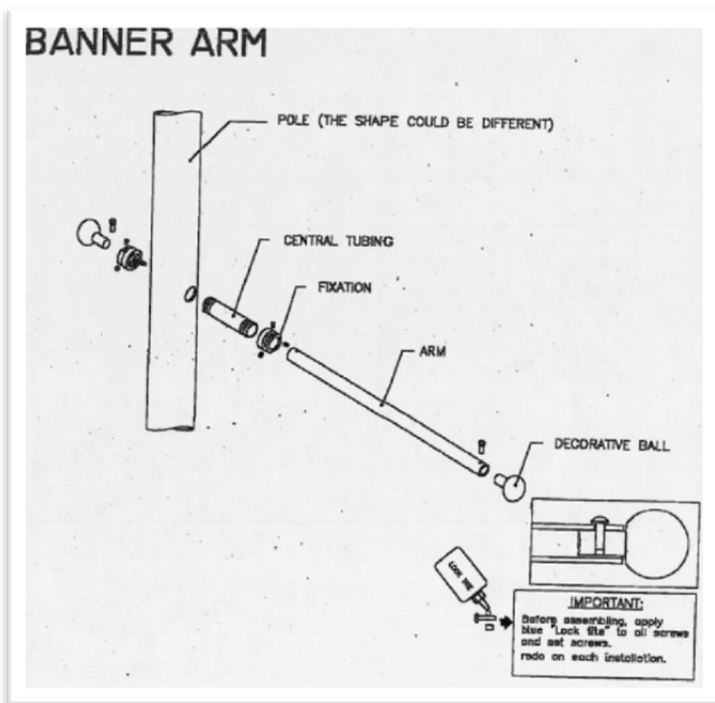
*TBD(Photo metric analysis)*

**FIGURE 5.2 L-A1 / L-B1 DECORATIVE "SPECIAL AREAS" STYLE LUMINAIRES AND ASSEMBLIES**

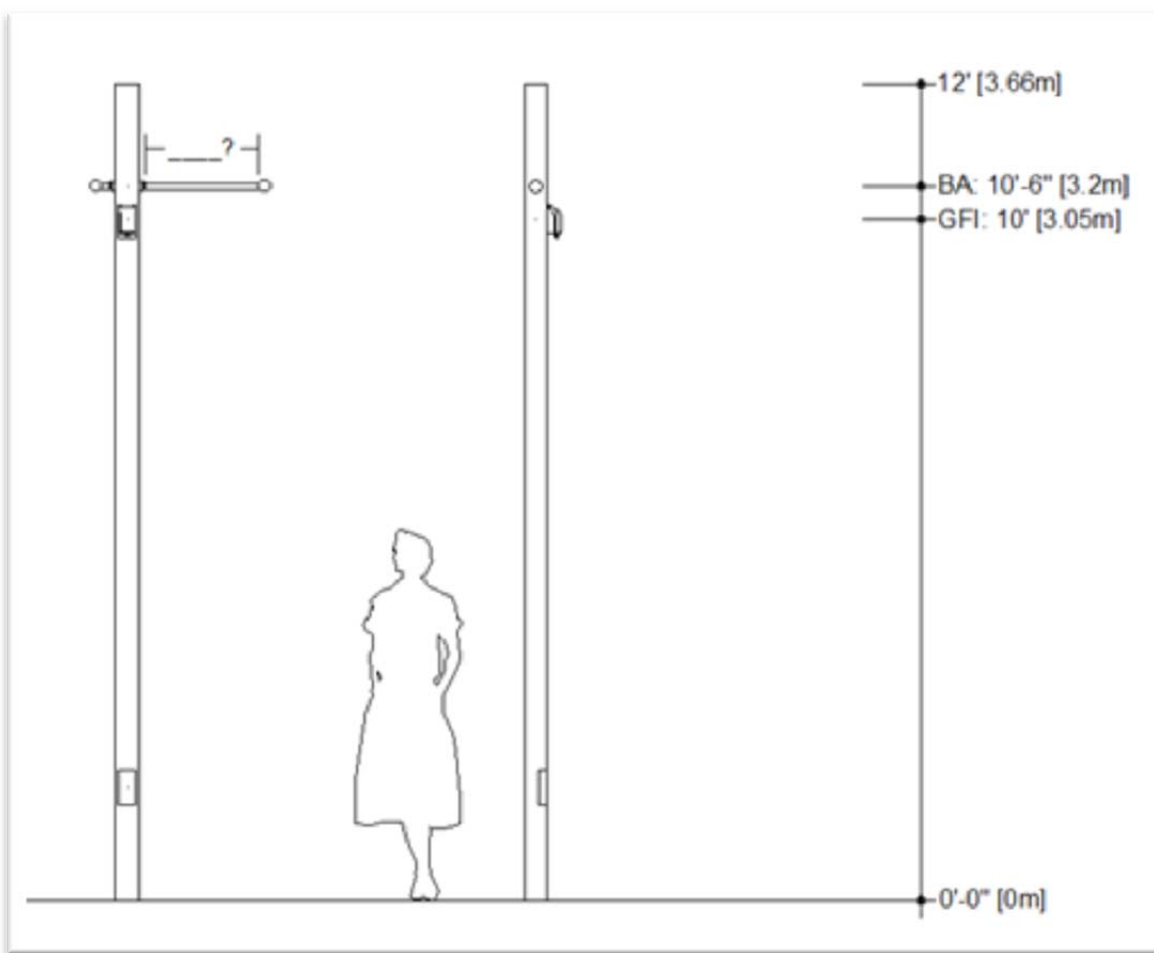
**L-A1 – Post Mounted Square Lantern**



1. Pole Shaft: Shall be made from 4"(102mm) 8 fluted round extruded 6061-T6 aluminum tubing, having a 0.167"(4.2mm) wall thickness, welded to the pole base.
2. Joint Cover: Two-piece round joint cover made from cast 356 aluminum mechanical fastened with stainless screws.
3. Pole Base: Shall be made from 6-5/8"(168mm) round extruded 6061-T6 aluminum tubing base having a 0.135"(3.4mm) wall thickness, welded to both the bottom and top of the anchor plate, complete with fuse and in-line fuse-holder.
4. Maintenance Opening: The pole shall have a 4"x9"(102mmx229mm) maintenance opening centered 21"(533mm) from the bottom of the anchor plate, complete with a weatherproof cast 356 aluminum cover and a factory assembled copper ground lug.
5. Base Cover: Two-piece round joint cover made from cast 356 aluminum mechanical fastened with stainless screws.
6. Banner Arm: Made of aluminum tubing, 1-1/16"(27mm) outside diameter, mechanically secured.
7. Photocell: PH7 button type photocell, 120 volts, GFI type complete with a weatherproof cover.
8. Receptacle: Duplex receptacle, 15A, 120 volts, GFI type complete with a waterproof cover.

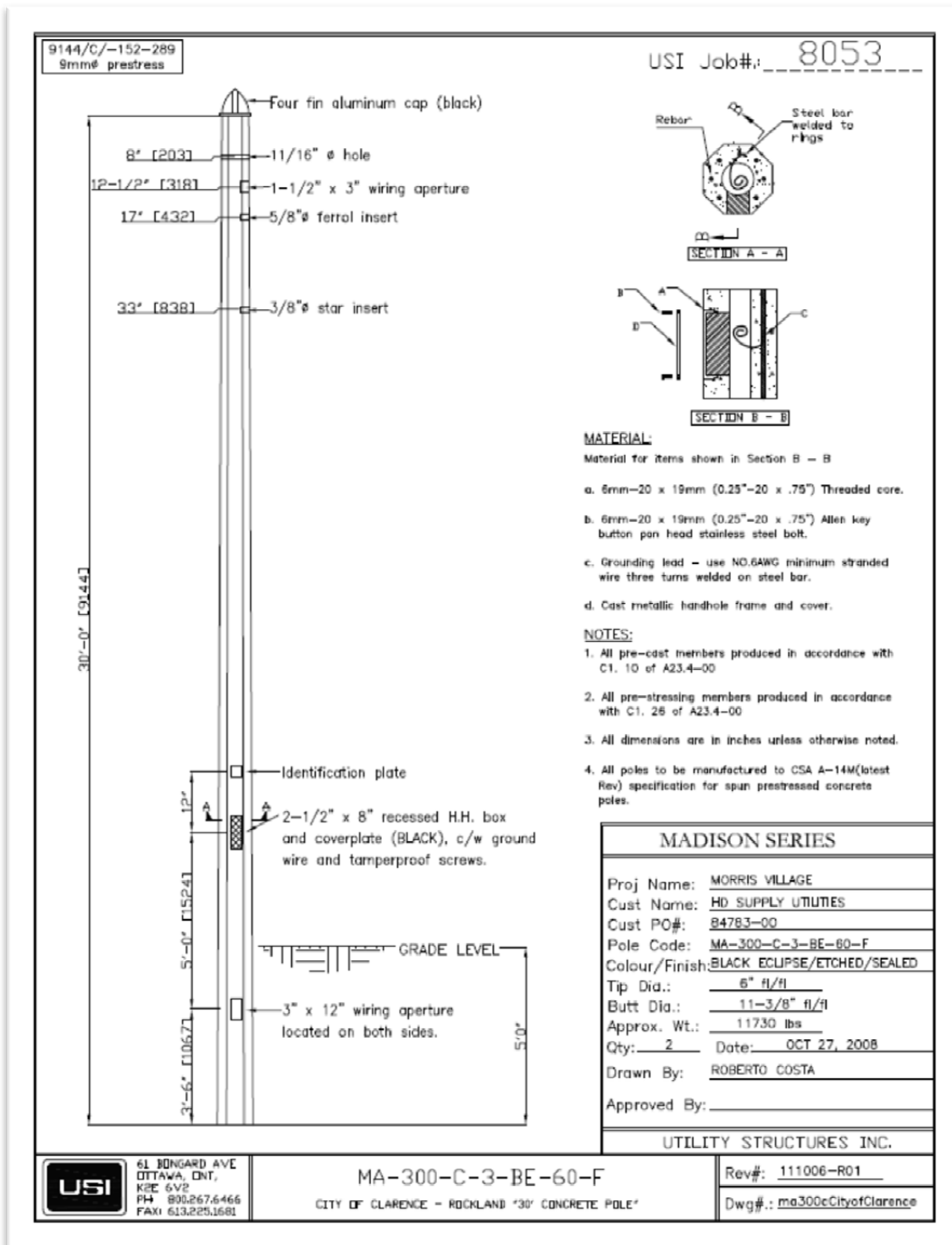


1. Finial: Decorative cast 356 aluminum, mechanically assembled.
2. Cupola: Decorative spun aluminum 1100-0, mechanically mounted on hood.
3. Hood: Spun aluminum 1100-0 dome, mechanically assembled on the luminaire.
4. Guard: in a round shape, this guard is a cast 356 aluminum with decorative arms welded to the fitter.
5. Globe: Made of one-piece seamless injected-molded acrylic. The globe is mechanically assembled on the access-mechanism.
6. Lamp: 100watts metal halide. ED 17 bulb, medium base.
7. Optical System: I.E.S. type 2 (asymmetrical). Optical system using the luminaire globe as retractor.
8. Ballast: High power factor of 90%. Primary voltage 120volts. Lamp starting capacity -20F(-30C) degrees. Assembled on a unitized removable tray with quick disconnect plug.
9. Access-mechanism: Rotomatic,



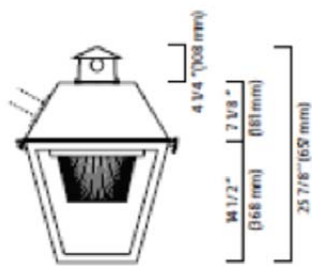


## L-B1 – Side Mounted Square Lantern



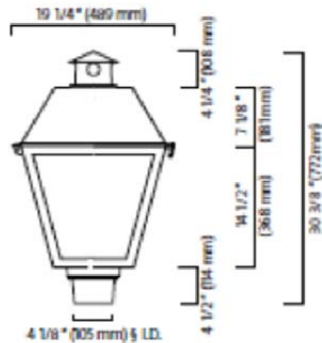
## LUMINAIRES

Conform to the UL 1598 and CSA C22.2250.0-08 standards



**L40U-STM-RACE optic**

sq. ft.  
Weight: lbs (kg)



**L40U-SFR-MS2 optic**

EPA: 2.80sq. ft.  
Weight: 50 lbs (22.7 kg)

## LAMPS / LED

LED = Philips Lumileds Luxeon R, CRI = 70, CCT = 4000K (+/- 350K)

System (LED + driver) Rated life = 100,000 hrs<sup>1</sup>

LED light engine technical information for L40U

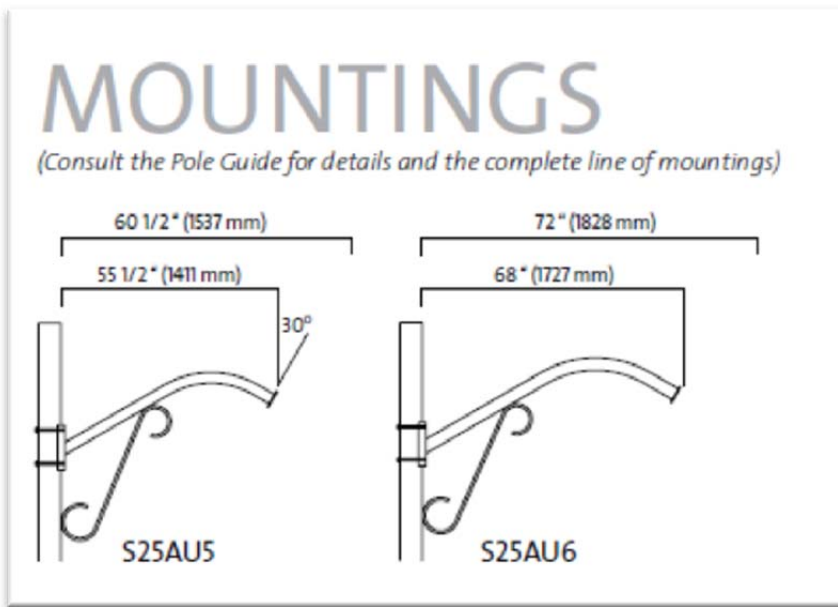
LAMP	TYPICAL DELIVERED LUMENS	TYPICAL SYSTEM WATTAGE <sup>2</sup> (W)	TYPICAL CURRENT @ 120V (A)	TYPICAL CURRENT @ 208V (A)	TYPICAL CURRENT @ 240V (A)	TYPICAL CURRENT @ 277V (A)	LED CURRENT (mA)	HID EQUIVALENT <sup>3</sup>	LUMINAIRE EFFICACY RATING (LM/W)	BUG RATING
35W32LED4K-R-LE2	2670	35	0.29	0.17	0.16	0.15	350	70-100	76.3	B1-U3-G1
35W32LED4K-R-LE3	2620	35	0.29	0.17	0.16	0.15	350	70-100	74.9	B1-U3-G1
35W32LED4K-R-LE4	2620	35	0.29	0.17	0.16	0.15	350	70-100	74.9	B1-U3-G1
35W32LED4K-R-LE5	2620	35	0.29	0.17	0.16	0.15	350	70-100	74.9	B2-U3-G1
55W32LED4K-R-LE2	3700	52	0.40	0.23	0.21	0.19	530	100-150	71.2	B1-U3-G1
55W32LED4K-R-LE3	3680	52	0.40	0.23	0.21	0.19	530	100-150	70.8	B1-U3-G1
55W32LED4K-R-LE4	3740	52	0.40	0.23	0.21	0.19	530	100-150	71.9	B1-U3-G1
55W32LED4K-R-LE5	3680	52	0.40	0.23	0.21	0.19	530	100-150	70.8	B2-U3-G1
55W48LED4K-R-LE2	3738	55	0.38	0.22	0.23	0.21	350	100-150	68.0	B1-U3-G1
55W48LED4K-R-LE3	3718	55	0.38	0.22	0.23	0.21	350	100-150	67.6	B1-U3-G1
55W48LED4K-R-LE4	3770	55	0.38	0.22	0.23	0.21	350	100-150	68.5	B1-U3-G1
55W48LED4K-R-LE5	3770	55	0.38	0.22	0.23	0.21	350	100-150	68.5	B2-U3-G1
80W48LED4K-R-LE2	5510	79	0.63	0.36	0.34	0.31	530	150-175	69.7	B2-U3-G2
80W48LED4K-R-LE3	5480	79	0.63	0.36	0.34	0.31	530	150-175	69.4	B2-U3-G2
80W48LED4K-R-LE4	5300	79	0.63	0.36	0.34	0.31	530	150-175	67.1	B2-U3-G2
80W48LED4K-R-LE5	5300	79	0.63	0.36	0.34	0.31	530	150-175	67.1	B3-U3-G2

<sup>1</sup> L70 = 100,000 hrs (at ambient temperature = 25°C and forward current = 700 mA)

<sup>2</sup> SYSTEM WATTAGE INCLUDES THE LAMP AND THE LED DRIVER.

<sup>3</sup> EQUIVALENCE SHOULD ALWAYS BE CONFIRMED BY A PHOTOMETRIC LAYOUT.

NOTE: DUE TO RAPID AND CONTINUOUS ADVANCES IN LED TECHNOLOGY LED LUMINAIRE DATA IS SUBJECT TO CHANGE WITHOUT NOTICE AND AT THE DISCRETION OF PHILIPS.



## 5.6 LUMINAIRE GROUPING FOR "URBAN and RURAL"

The luminaires for "Rural areas" were grouped together for convenience based on their general appearance and then further subdivided in subgroups (Semi Cut Off & Full Cut Off) by luminaire distribution as described by *RP-8-14 Roadway Lighting*<sup>1</sup>. There are four luminaire groups including; Cobra-Head Style Luminaires, Lantern Style Luminaires, Round Style Luminaires, and 'Shoe Box' Style Luminaires.

When selecting luminaires, poles and brackets, please refer to **Appendix A Street Lighting Selection Criteria and Equipment Inventory**.

## 5.7 ROADWAY LIGHTING EQUIPMENT CONTEXT

Table 5.2 *Roadway Lighting Equipment Context for "Urban" and "Rural Areas"* provides recommended standards for lighting equipment in various Road / Area classifications for "All Other Areas". The recommendations provide a variety of lighting options with pole heights being matched up with luminaires and lumen output. Table 5.2 will ensure a consistent approach to the installation of lighting poles and luminaires within the rights-of-way throughout the city.

**Table 5.1 Roadway Lighting Equipment for “Special Areas”**

Roadway Class	Luminaires	Lumens Output (note 1)		Pole Height Above Grade (note 1)				Pole layout	
		5000-8500	1900-4000	Mid			Short	Short-Height	Mild-Height
				7.6m Conc.	5.5m Conc.	5.5m Alumi.	4.3m Alumi.		
Urban	L-A1		√				√	√	
	L-B1	√		√	√	√			√
Rural	L-A1		√				√	√	
	L-B1	√							√

Note:

1. Lamp Wattage and Pole Height may be increased for if necessary to achieve the minimum lighting levels.

**Table 5.2 Roadway Lighting Equipment for “Urban” and “Rural” Areas**

Roadway Class		Area Class	Luminaires		Lumen Output Range		Poles				
			L-C1	L-C2	3000-5000	1900-3750	Aluminum		Concrete		
							9.8m	8.2m	10.7m	9.1m	6.1m
Urban	Collector	Employment/Enterprise Area		✓	✓	✓		✓		✓	
	Local	General Urban	✓	✓	✓	✓				✓	✓
Rural	Collector	All Other Areas	✓	✓	✓			✓	✓		
	Local	All Other Areas	✓	✓	✓				✓		✓

## **6.0 DESIGN CONSIDERATIONS**

In the design and implementation of roadway lighting, there are many things to consider, such as light pollution, transition of illumination, curvilinear road sections, etc. in order to provide a 'proper' lighting system.

### **6.1 LIGHT POLLUTION**

Light pollution is a term used to describe the negative effects of the use of lighting such as light trespass, sky glow, and glare. With the proper use of light luminaires and pole heights, light pollution can be minimized. The implementation of a maximum semi cut-off luminaire (5% up-light<sup>1</sup>) and the use of full cut-off luminaires (0% up-light<sup>1</sup>) will reduce the amount of unwanted light into the environment.

### **6.2 RURAL AREA HORIZONTAL CURVES**

The illumination of rural area horizontal curves shall be dealt with on a case-by-case basis and shall be subject to the availability of electric power and capital funding. If approved, the lighting of any rural area horizontal curve shall be complete with semi cut-off class luminaires with maximum lumen output of 5000 lumens.

### **6.3 STREET AND SIDEWALK LIGHTING SHADED BY TREES**

The City acknowledges that seasonally, street and sidewalk lighting shaded by the foliage of trees is sometimes unavoidable. The resulting reduction in levels of roadway and sidewalk lighting is acceptable provided that the original design and installation of street lighting equipment was properly coordinated with the location of the trees. Therefore, street trees will not be trimmed to accommodate the street lighting, except as may be approved in special circumstances by the Manager of Engineering and Operations.

**APPENDIX A STREET LIGHTING SELECTION CRITERIA AND EQUIPMENT INVENTORY**

Please contact the Manager of Engineering and Operations for the latest “*Street Lighting Selection Criteria and Equipment Inventory*” document for complete details.

(Note: LED Street lighting for Urban and Rural areas will be available upon receiving the Photometric study for all of Clarence-Rockland.)

**APPENDIX B MAIN STREET ROADS****URBAN AREAS**

Please consult with the City of Clarence-Rockland’s Planning and Infrastructure for the latest Urban areas boundaries.

Map Schedule “A” to “E”

**APPENDIX C LUMINANCE VERSUS ILLUMINANCE**

Right-of-way lighting designs are to be undertaken using the Luminance criteria for all tangent roadway sections as opposed to the Illuminance method. Luminance has become the preferred criteria for roadway lighting because it defines what the eye sees (meaning the light that is reflected from the roadway surface to the observer who is located 83m upstream from the calculation point and is looking downward at an angle of 1 degree). To perform this calculation, reflectance tables for the roadway surface are required. *IESNA RP-8* defines these reflectance values for four types of roadway surfaces, R1 to R4, where R1 is a concrete road surface and R2 to R4 are asphalt road surfaces of varying aggregate sizes/textures. Due to the requirements of the Luminance criteria (including the calculation method with the observer 83m upstream from the point of interest looking 1 degree downward and the reflectance tables), it will not be suitable for designing roadway lighting of curved roadway sections, intersections and sidewalks.

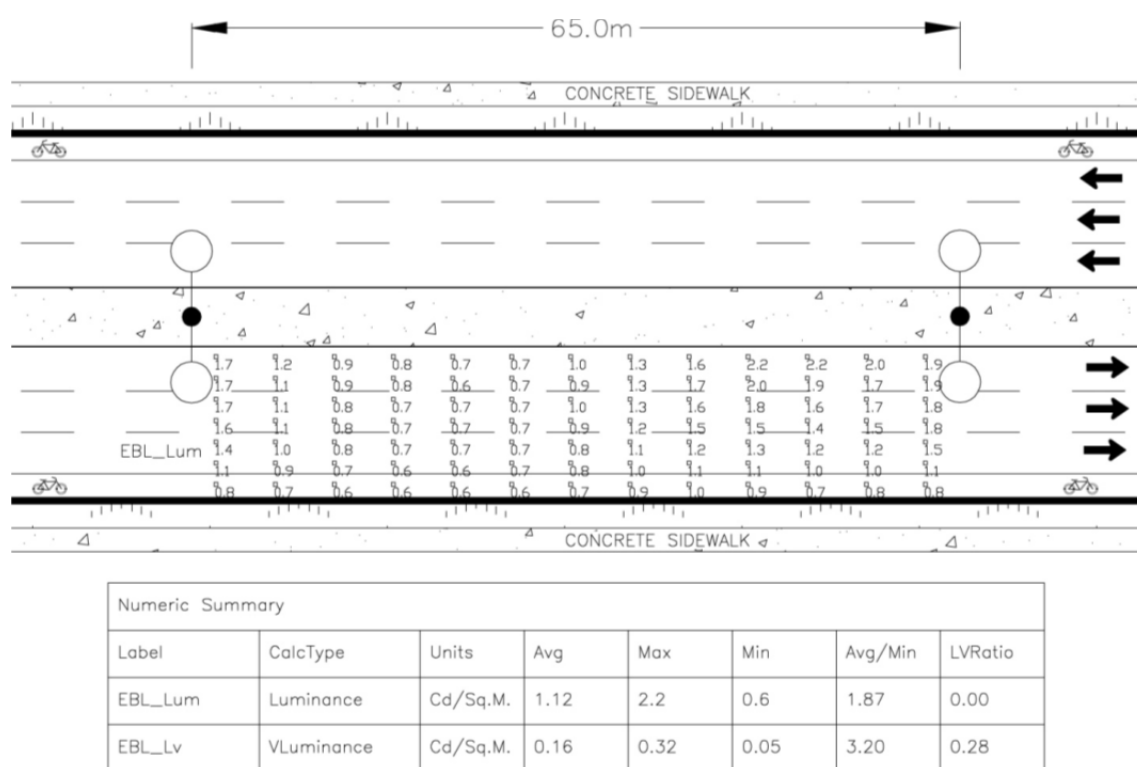
For curved roadway sections the observer is typically looking along the curve less than 83m ahead making it impractical to apply the Luminance criteria. For intersections, the light levels are typically increased due to the concentration of vehicular and pedestrian activity. This increase in light levels affects the Veiling Luminance calculations for glare which uses average Luminance to determine the glare ratio. Consequently, in order to correctly assess the Veiling Luminance of a roadway lighting design, Luminance calculations must be done in advance of or ahead of the intersection. For sidewalks, there is usually two components to the lighting design as recommended by the *IESNA RP-8*; horizontal or sidewalk surface (for detecting obstacles in the pedestrian’s path) and vertical or pedestrian surface (for facial recognition). Although one can dispute that we could define Luminance criteria for the horizontal sidewalk surface using R1 reflectance values, *IESNA RP-8* does not currently have recommended levels. Furthermore, it is not possible to perform Luminance calculations on a vertical plane since neither reflectance values for a surface that simulates a pedestrian nor calculation methods are available for performing such a calculation. Therefore Luminance cannot be used for sidewalk lighting.

Subsequently, the Illuminance criteria will still be used to design roadway lighting of curvilinear roadway sections, intersections and sidewalks. Illuminance is suitable in these instances as it is a measure of the amount of light that strikes a surface independent of an observer and reflectance properties of the surface and it can also be calculated on both a horizontal (roadway/sidewalk) and vertical (pedestrian) surface. Illuminance criteria will also be used as a verification tool for field measurements of designed lighting levels to actual light levels achieved on the roadway/sidewalk

Luminance and Illuminance should not be used in conjunction with each other in designing roadway lighting as it has a significant impact on the lighting installation in terms of higher initial capital construction cost, increase maintenance and operation costs, increased energy consumption and

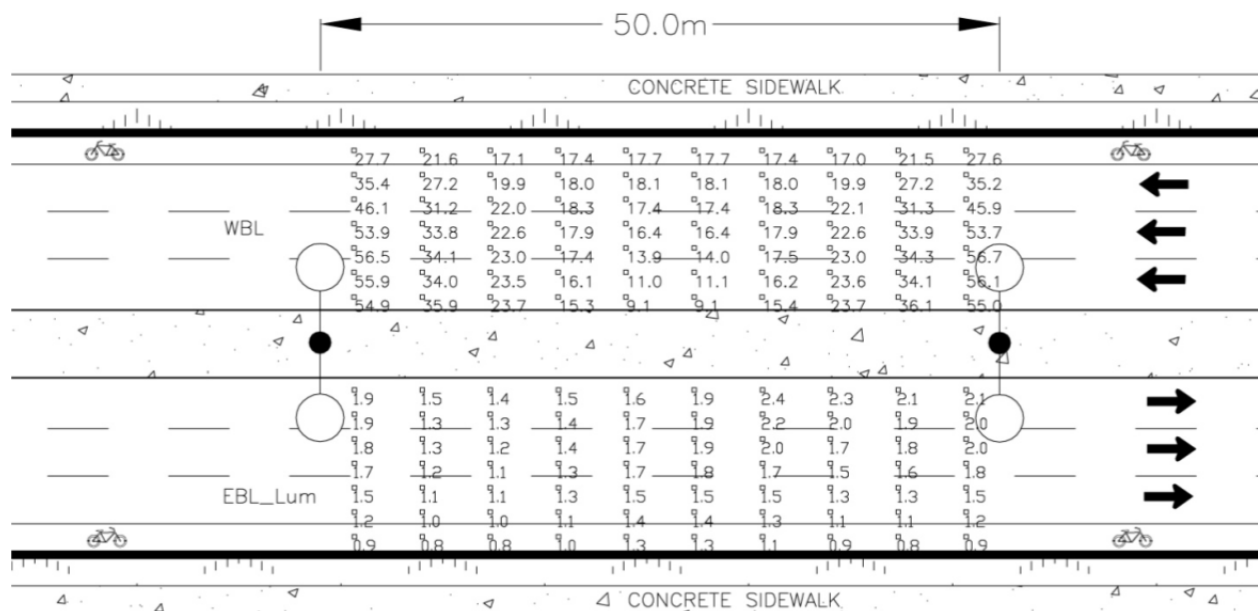
increase light pollution. The following sample calculation demonstrates the impact of utilizing both criteria for roadway lighting designs:

**Figure D.1 Roadway Lighting Design Using Luminance**, illustrates a lighting design of a typical arterial roadway section using the Luminance criteria. The design resulted in a lighting layout with about 16 light poles per kilometre with pole spacing of 65m. The designed average Luminance achieved was 25% higher than the recommended average. The increased lighting is inherent in any lighting design in attempting to satisfy all the lighting criteria (in this case; Average, Uniformity & Glare). ‘Over Lighting’ should be minimized as much as possible as discussed in **Section 2.1 Lighting Design Calculations**.



**Figure D.2 Roadway Lighting Design Using Luminance & Illuminance**, illustrates a lighting design for the same arterial roadway section using both Luminance and Illuminance criteria. This design resulted in a lighting layout with 20 Poles per kilometre with pole spacing of 50m. In attempting to achieve both criteria the designed average levels for Luminance was 65% higher than needed and for Illuminance it was 103% higher than actually recommended. The ‘over lighting’ again is a direct result of trying to achieve all the criteria for both Luminance and Illuminance (i.e. Average Luminance & Illuminance, Glare for Luminance and Uniformity for Luminance and Illuminance).





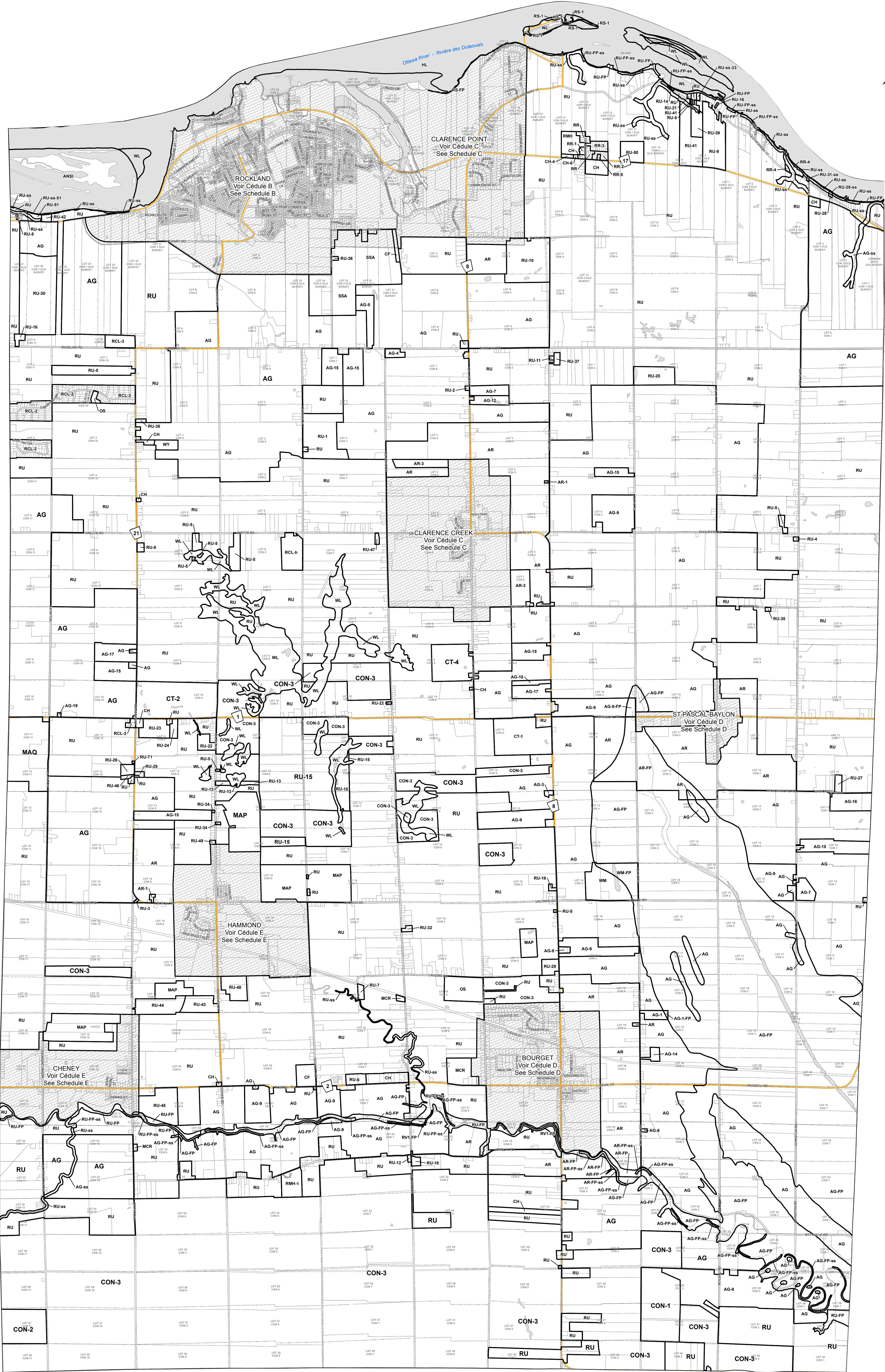
Numeric Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	LVRatio
WBL	Illuminance	Lux	26.41	56.7	9.1	2.90	N.A.
EBL_Lum	Luminance	Cd/Sq.M.	1.48	2.4	0.8	1.84	0.00
EBL_Lv	VLuminance	Cd/Sq.M.	0.22	0.38	0.08	2.75	0.26

In summary, using both Luminance and Illuminance methods produced a lighting design layout requiring an additional 4 poles per kilometre. The additional lighting poles resulted in significantly higher lighting levels than recommended; for both criteria Luminance average was 65% higher than recommended whereas with Luminance criteria only it was 25% higher. The higher lighting levels will result in increased energy consumption and light pollution. The sample calculation illustrates the advantages of using the Luminance criteria only for roadway lighting design such as reduced 'over lighting' in designed levels, increased poles spacing resulting in cost savings in the initial construction costs and ongoing operational and maintenance costs. For this reason Luminance shall always take precedence over Illuminance except for lighting designs where Luminance is not practical (e.g. curvilinear roadway sections, intersections and sidewalks).gg

1American National Standard Institute / Illuminating Engineering Society of North America (ANSI / IESNA)2Transportation Association Canada (TAC)3City of Ottawa Official Plan4Ministry of Transportation Ontario, Roadside Safety Manual5Electricity Act 19986Official Plan Schedule G – Rural Roads Network7Official Plan Schedule E – Urban Roadway Network

APPENDIX C SCHEDULE "A" TO "E"

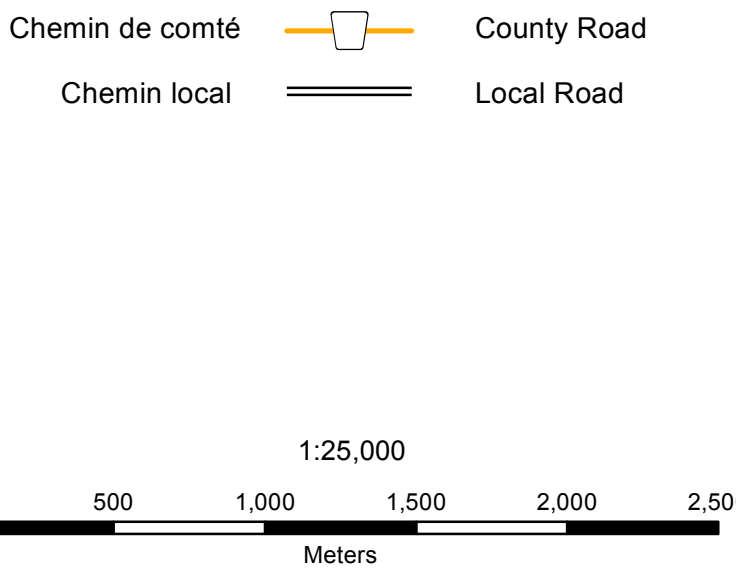




ZONES

Résidentielle rurale	<b>RR</b>	Rural Residential	Zone de gestion des déchets	<b>WM</b>	Waste Management
Résidentielle saisonnière	<b>RS</b>	Seasonal Residential	Ressources minérales - sablière	<b>MAP</b>	Mineral Aggregate - Pit
Résidentielle maisons mobiles	<b>RMH</b>	Mobile Home Residential	Ressources minérales - carrière	<b>MAQ</b>	Mineral Aggregate - Quarry
Résidentielle domaine	<b>RML</b>	Country Lot Residential	Ressources minérales - réserve	<b>MAR</b>	Mineral Aggregate - Reserve
Commerciale générale	<b>CG</b>	General Commercial	Terres humides	<b>WL</b>	Wetlands
Commerciale routière	<b>CH</b>	Highway Commercial	Conservation	<b>CON</b>	Conservation
Commerciale de récréation et hébergement	<b>CT</b>	Tourist Commercial	De contrainte	<b>HL</b>	Hazard
Installations communautaires	<b>CF</b>	Community Facilities	ZINS	<b>ANSI</b>	ANSI
Industrielle commerciale rurale	<b>MCR</b>	Industrial Commercial Rural	Secteur d'étude spéciale	<b>SSA</b>	Special Study Area
Cour de ferraille	<b>WY</b>	Wrecking Yard	Aménagement différé	<b>-h</b>	Holding Zone
Agricole	<b>AG</b>	Agricultural	Exception spéciale	<b>-#</b>	Special Exception Zone
Agricole restreinte	<b>AR</b>	Restricted Agricultural	Usage temporaire	<b>-t#</b>	Temporary Use
Rurale	<b>RU</b>	Rural	Pentes sensibles	<b>-ss</b>	Unstable Slopes
			Plaine inondable	<b>-FP</b>	Flood Plain

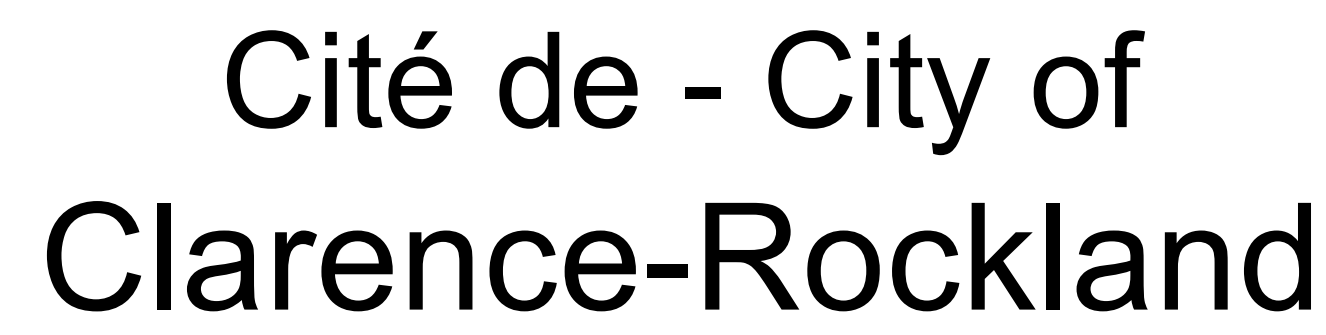
ROUTES / ROADS



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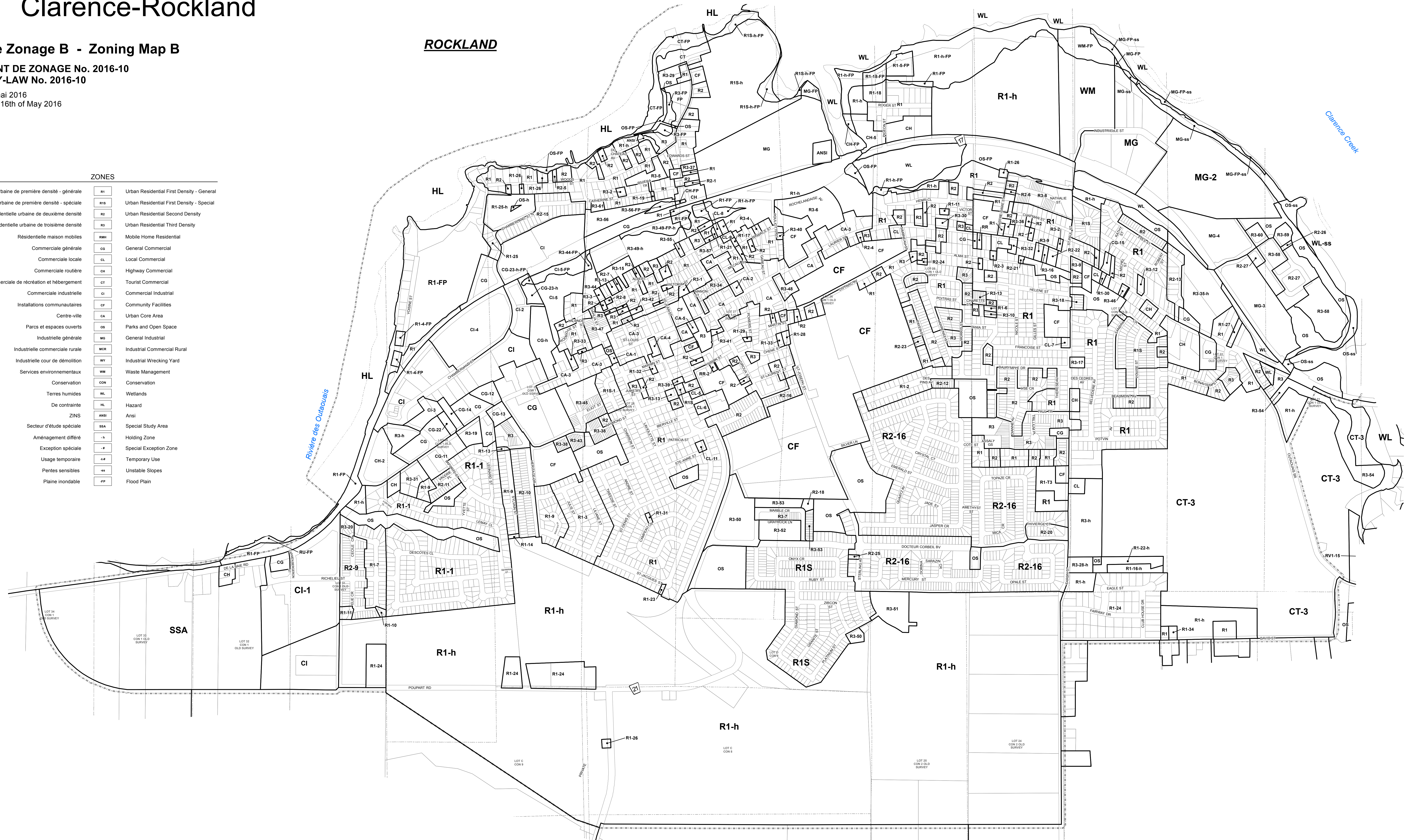




**RÈGLEMENT DE ZONAGE No. 2016-10**  
**ZONING BY-LAW No. 2016-10**

Consolidation:

ZONES		
Résidentielle urbaine de première densité - générale	R1	Urban Residential First Density - General
Résidentielle urbaine de première densité - spéciale	R1S	Urban Residential First Density - Special
Résidentielle urbaine de deuxième densité	R2	Urban Residential Second Density
Résidentielle urbaine de troisième densité	R3	Urban Residential Third Density
Résidentielle maison mobiles	RMR	Mobile Home Residential
Commerciale générale	C0	General Commercial
Commerciale locale	CL	Local Commercial
Commerciale routière	CH	Highway Commercial
Commerciale de récréation et hébergement	CT	Tourist Commercial
Commerciale industrielle	CI	Commercial Industrial
Installations communautaires	CF	Community Facilities
Centre-ville	CA	Urban Core Area
Parcs et espaces ouverts	OS	Parks and Open Space
Industrielle générale	IG	General Industrial
Industrielle commerciale rurale	MCR	Industrial Commercial Rural
Industrielle cour de démolition	WY	Industrial Wrecking Yard
Services environnementaux	WM	Waste Management
Conservation	CON	Conservation
Terres humides	WL	Wetlands
De contrainte	HL	Hazard
ZINS	ANSI	Ansi
Secteur d'étude spéciale	SSA	Special Study Area
Aménagement différé	-H	Holding Zone
Exception spéciale	-E	Special Exception Zone
Usage temporaire	-A	Temporary Use
Pentes sensibles	US	Unstable Slopes
Plaine inondable	-F	Flood Plain



1:5,552

300 400 500

meters

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# Cité de - City of Clarence-Rockland

## Carte de Zonage C - Zoning Map C

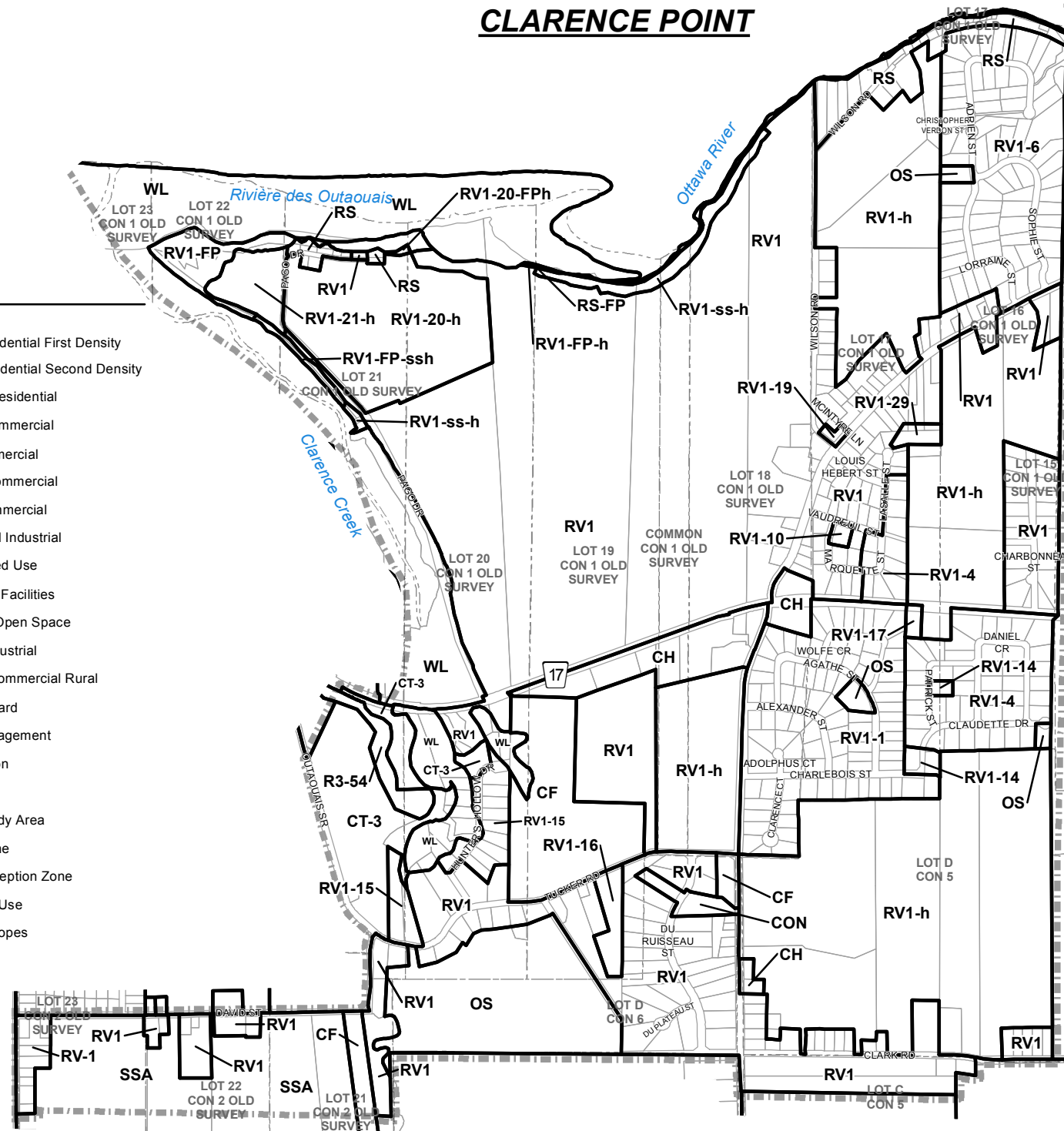
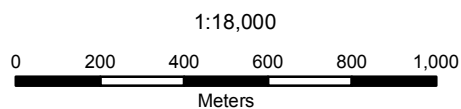
### RÈGLEMENT DE ZONAGE No. 2016-10 ZONING BY-LAW No. 2016-10

Adopté le 16 mai 2016  
Passed on the 16th of May 2016

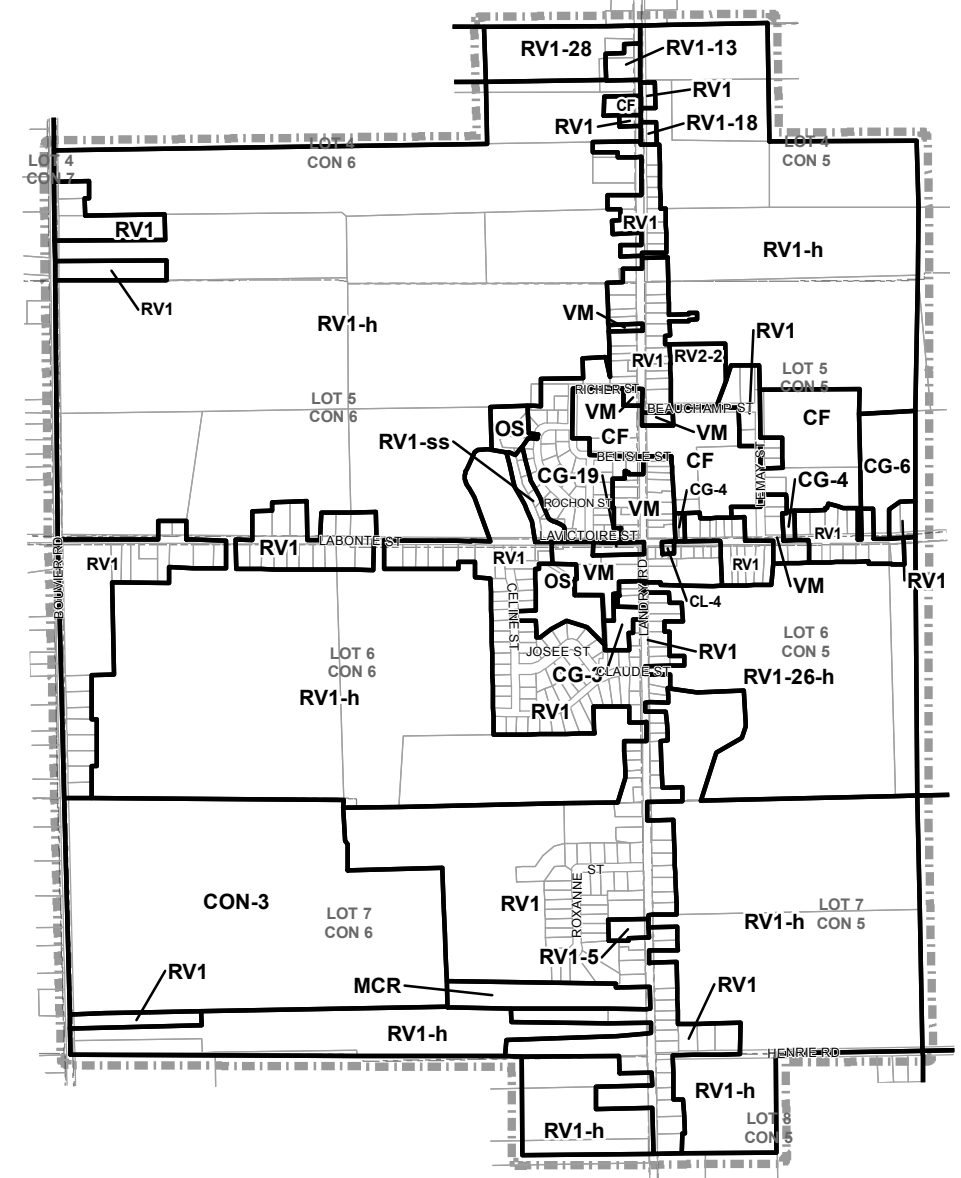
Consolidation:

#### ZONES

Résidentielle village de première densité	<b>RV1</b>	Village Residential First Density
Résidentielle village de deuxième densité	<b>RV2</b>	Village Residential Second Density
Résidentielle saisonnière	<b>RS</b>	Seasonal Residential
Commerciale générale	<b>CG</b>	General Commercial
Commerciale locale	<b>CL</b>	Local Commercial
Commerciale routière	<b>CH</b>	Highway Commercial
Commerciale de récréation et hébergement	<b>CT</b>	Tourist Commercial
Commerciale industrielle	<b>CI</b>	Commercial Industrial
Mixte village	<b>VM</b>	Village Mixed Use
Installations communautaires	<b>CF</b>	Community Facilities
Parcs et espaces ouverts	<b>OS</b>	Parks and Open Space
Industrielle générale	<b>MG</b>	General Industrial
Industrielle commerciale rurale	<b>MCR</b>	Industrial Commercial Rural
Cour de ferraille	<b>WY</b>	Wrecking Yard
Zone de gestion des déchets	<b>WM</b>	Waste Management
Conservation	<b>CON</b>	Conservation
Terres humides	<b>WL</b>	Wetlands
Secteur d'étude spéciale	<b>SSA</b>	Special Study Area
Aménagement différé	<b>-h</b>	Holding Zone
Exception spéciale	<b>-#</b>	Special Exception Zone
Usage temporaire	<b>-t#</b>	Temporary Use
Pentes sensibles	<b>-ss</b>	Unstable Slopes
Plaine inondable	<b>-FP</b>	Flood Plain



#### CLARENCE CREEK



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## Carte de Zonage D - Zoning Map D

RÈGLEMENT DE ZONAGE No. 2016-10

ZONING BY-LAW No. 2016-10

Adopté le 16 mai 2016

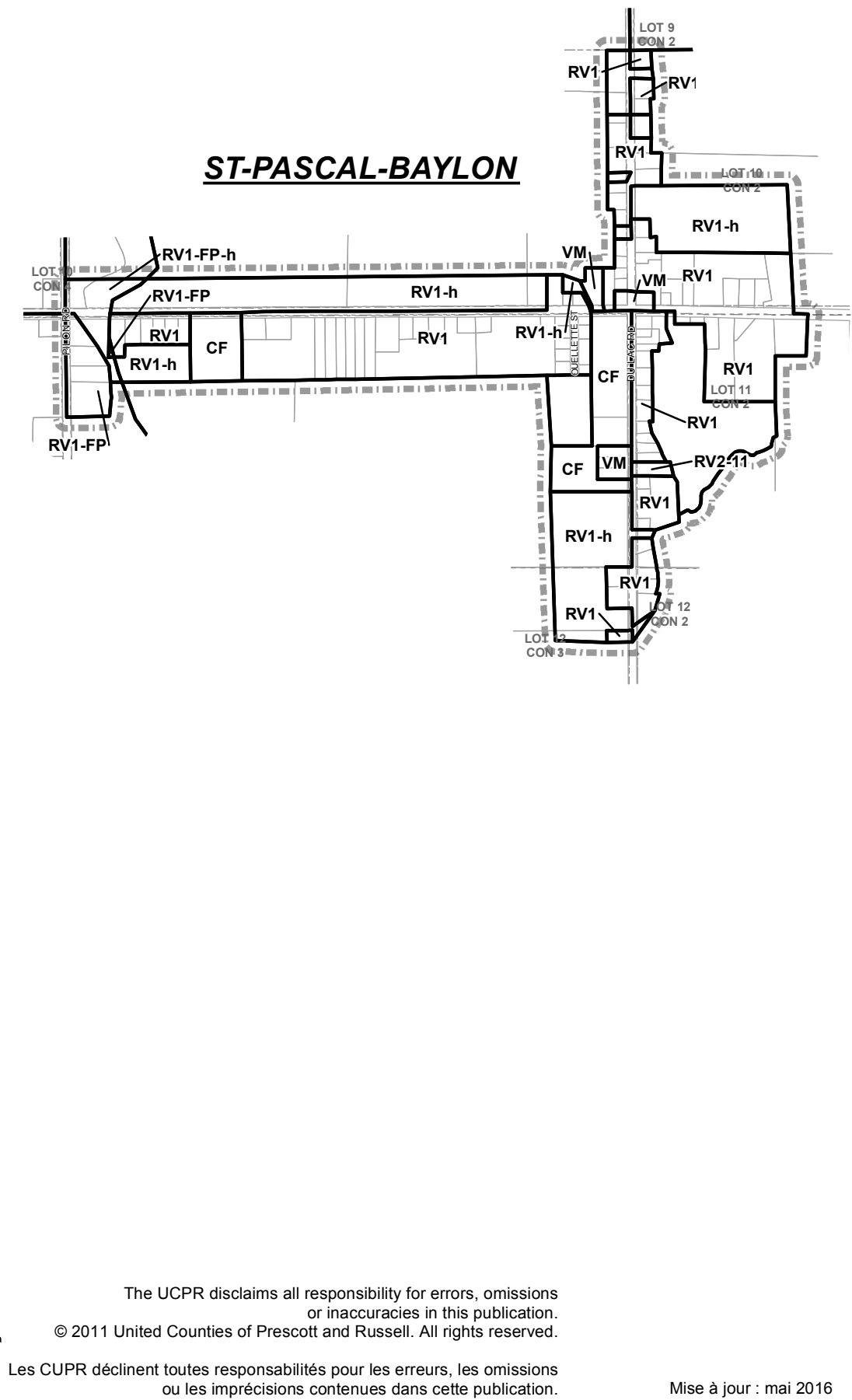
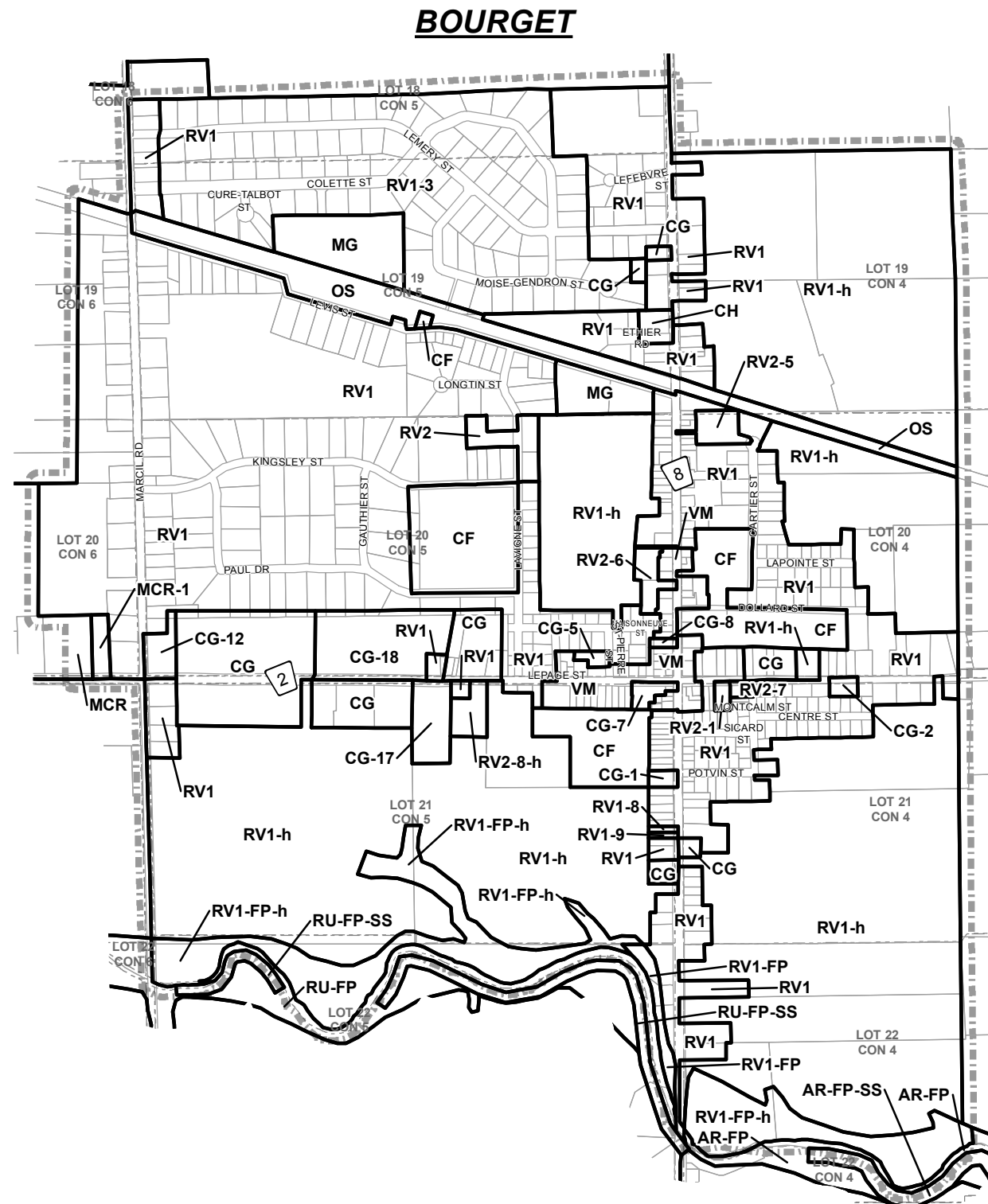
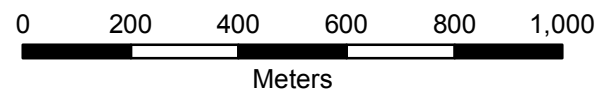
Passed on the 16th of May 2016

Consolidation:

### ZONES

Résidentielle village de première densité	<b>RV1</b>	Village Residential First Density
Résidentielle village de deuxième densité	<b>RV2</b>	Village Residential Second Density
Résidentielle saisonnière	<b>RS</b>	Seasonal Residential
Commerciale générale	<b>CG</b>	General Commercial
Commerciale locale	<b>CL</b>	Local Commercial
Commerciale routière	<b>CH</b>	Highway Commercial
Commerciale de récréation et hébergement	<b>CT</b>	Tourist Commercial
Commerciale industrielle	<b>CI</b>	Commercial Industrial
Mixte village	<b>VM</b>	Village Mixed Use
Installations communautaires	<b>CF</b>	Community Facilities
Parcs et espaces ouverts	<b>OS</b>	Parks and Open Space
Industrielle générale	<b>MG</b>	General Industrial
Industrielle commerciale rurale	<b>MCR</b>	Industrial Commercial Rural
Cour de ferraille	<b>WY</b>	Wrecking Yard
Zone de gestion des déchets	<b>WM</b>	Waste Management
Conservation	<b>CON</b>	Conservation
Terres humides	<b>WL</b>	Wetlands
Aménagement différé	<b>-h</b>	Holding Zone
Exception spéciale	<b>-#</b>	Special Exception Zone
Usage temporaire	<b>-t#</b>	Temporary Use
Pentes sensibles	<b>-ss</b>	Unstable Slopes
Plaine inondable	<b>-FP</b>	Flood Plain

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Carte de Zonage E - Zoning Map E

RÈGLEMENT DE ZONAGE No. 2016-10  
ZONING BY-LAW No. 2016-10

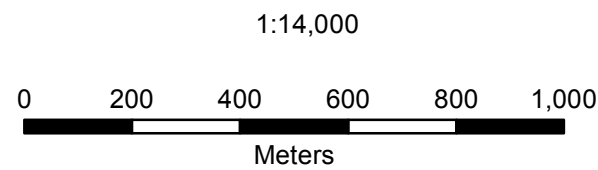
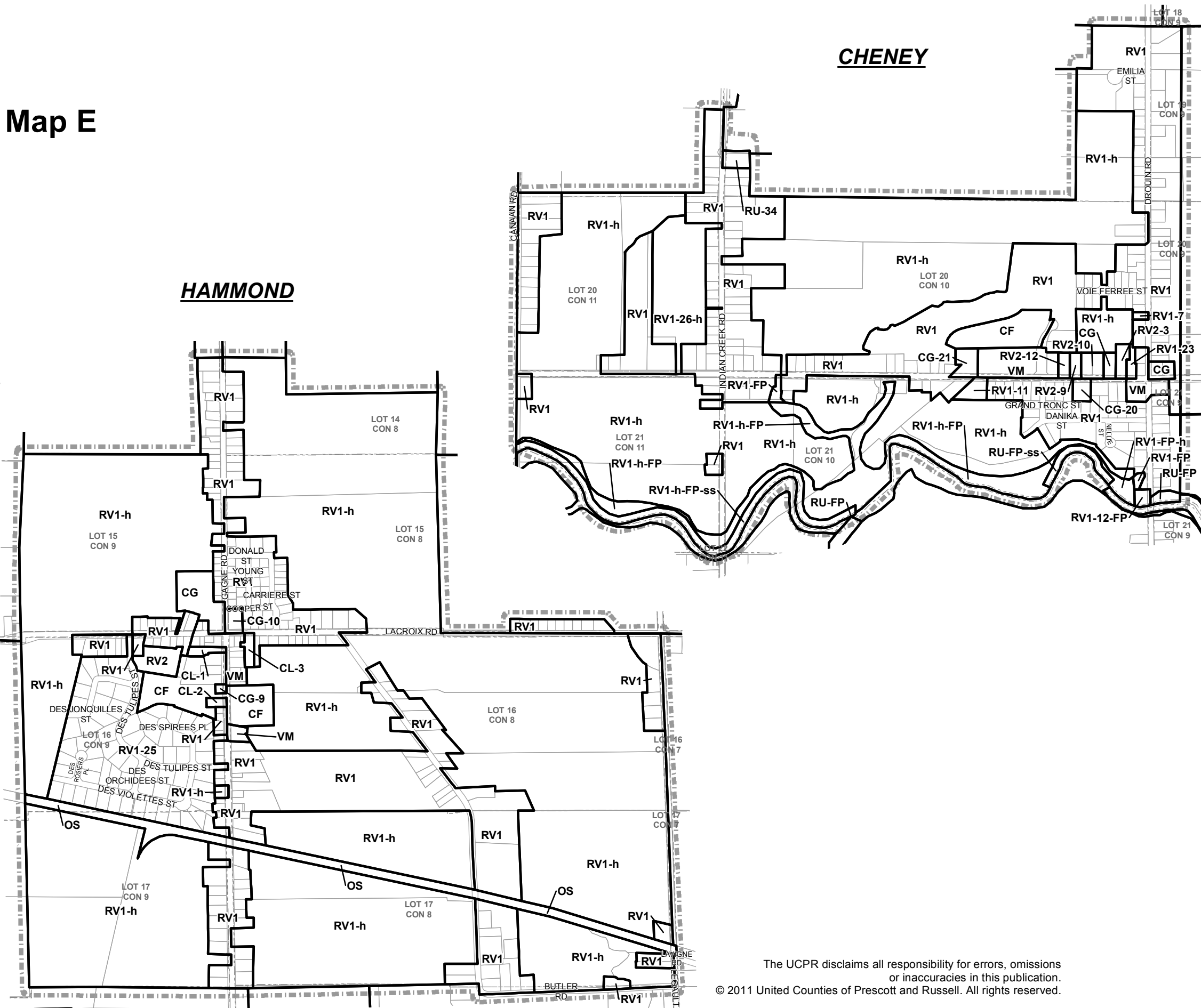
Adopté le 16 mai 2016  
Passed on the 16th of May 2016

Consolidation:



ZONES

Résidentielle village de première densité	RV1	Village Residential First Density
Résidentielle village de deuxième densité	RV2	Village Residential Second Density
Résidentielle saisonnière	RS	Seasonal Residential
Commerciale générale	CG	General Commercial
Commerciale locale	CL	Local Commercial
Commerciale routière	CH	Highway Commercial
Commerciale de récréation et hébergement	CT	Tourist Commercial
Commerciale industrielle	CI	Commercial Industrial
Mixte village	VM	Village Mixed Use
Installations communautaires	CF	Community Facilities
Parcs et espaces ouverts	OS	Parks and Open Space
Industrielle générale	MG	General Industrial
Industrielle commerciale rurale	MCR	Industrial Commercial Rural
Cour de ferraille	WY	Wrecking Yard
Zone de gestion des déchets	WM	Waste Management
Conservation	CON	Conservation
Terres humides	WL	Wetlands
Aménagement différé	-h	Holding Zone
Exception spéciale	-#	Special Exception Zone
Usage temporaire	-t#	Temporary Use
Pentes sensibles	-ss	Unstable Slopes
Plaine inondable	-FP	Flood Plain

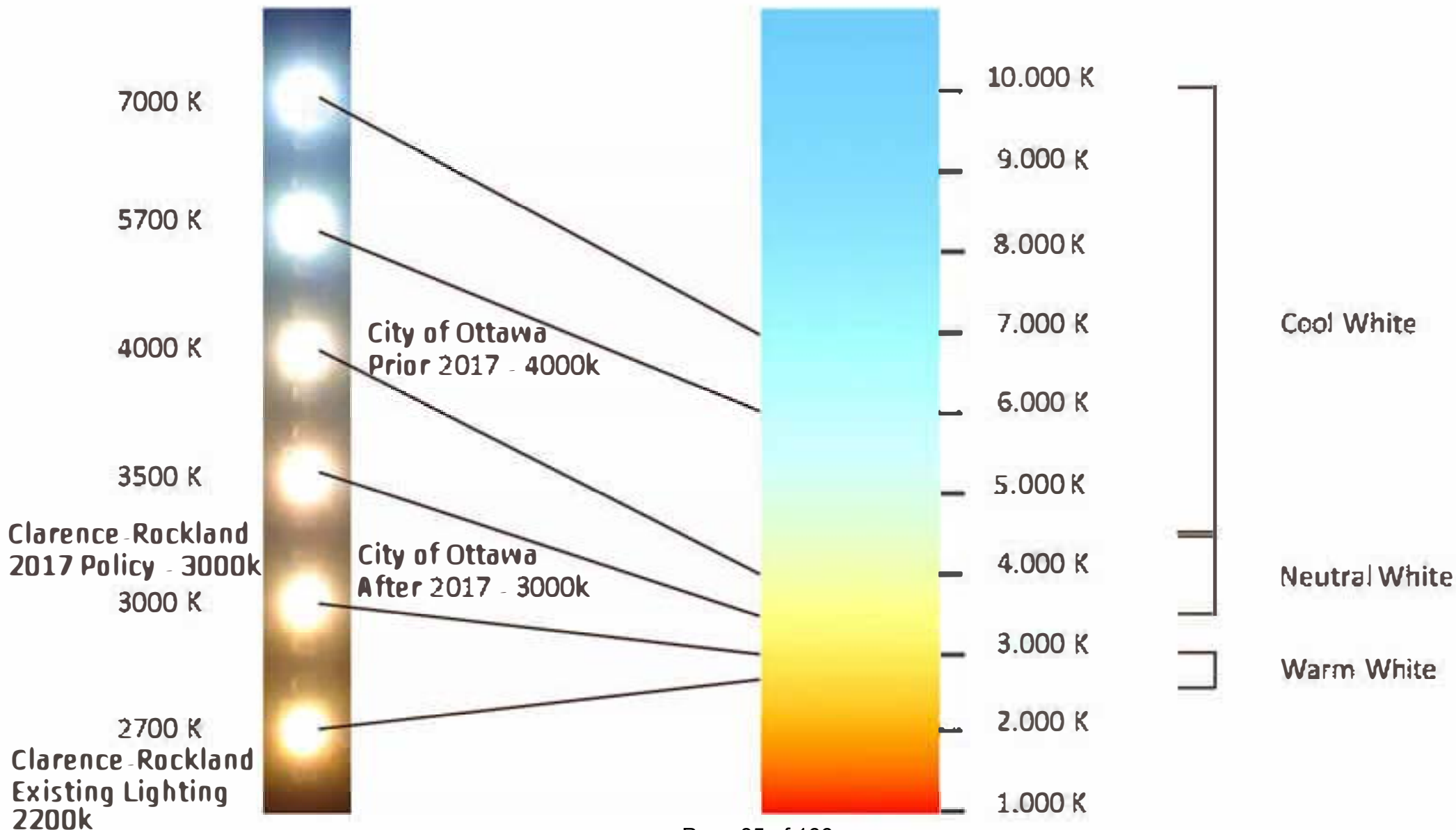






## LED Example

## Kelvin Color Temperature Scale







## REPORT N°INF2017-053 St-Joseph Project, Laurier/St-Joseph Intersection Configuration

<b>Date</b>	09/08/2017
<b>Submitted by</b>	Richard Campeau
<b>Subject</b>	St-Joseph Project, Laurier/St-Joseph Intersection Configuration
<b>File N°</b>	T04-STJO

### 1) **NATURE/GOAL :**

The purpose of this report is to obtain Council approval for the lane configuration at the Laurier/St-Joseph Street intersection.

### 2) **DIRECTIVE/PREVIOUS POLICY :**

N/A

### 3) **DEPARTMENT'S RECOMMENDATION :**

**WHEREAS** some members of Council have raised some concerns regarding the construction of the two (2) lane roadway on St-Joseph street at the intersection of Laurier street; and

**WHEREAS** the Department has been requested to undertake a full review of the intersection; and

**WHEREAS** Council has received and understands both options as explained in report No. INF2017-053;

**BE IT RESOLVED THAT** Council approves the two (2) lane roadway design on St-Joseph Street and in particular the current design for the St. Joseph Street-Laurier Street intersection; and

**BE IT FURTHER RESOLVED THAT** the hold on the work on St-Joseph street between Laurier street and avenue Du Parc be lifted thus permitting the work to carry on as originally intended.

**ATTENDU QUE** quelques membres du Conseil municipal on fait part de leurs inquiétudes vis-à-vis la construction de la route à deux (2) voies sur la rue St-Joseph; et

**ATTENDU QUE** le département a été demandé d'effectuer une revue complète de l'intersection; et

**ATTENDU QUE** le Conseil municipal a reçu et comprends les deux (2) options tel qu'expliqué dans le rapport no. INF2017-053;

**QU'IL SOIT RÉSOLU QUE** le Conseil municipal approuve la construction de la route à deux (2) voies sur la rue St-Joseph tel la configuration original, particulièrement le design de l'intersection des rues St-Joseph et Laurier; et

**QU'IL SOIT ÉGALEMENT RÉSOLU QUE** le Conseil municipal approuve que l'arrêt des travaux soit levé afin de permettre que la construction puisse continuer tel que prévu originalement.

#### **4) BACKGROUND :**

The St-Joseph Street project was originally approved as part of the 2014 Capital program. The main focus of the St. Joseph Street design addressed the safety of cycling and pedestrian traffic along with the vehicular speeds in the school zones.

Before the design could be finalized, the City undertook an Environment Assessment (E.A.) study which included the following requirements:

- Traffic study
- Correspondence with various approval agencies
- Public Open House (POH) meeting (March 30<sup>th</sup>, 2016)
- Geotechnical investigation
- Scoped Environmental Impact study
- Stage 1 and 2 Archaeological assessment
- Contamination Overview study
- Noise report

At the POH meeting, a few options were presented with respect to various design components of the project along with the preferred option for each of those components. One of the elements considered was the Laurier-St-Joseph intersection. The reconfiguration of the intersection was then available for consultation (see Annex "A"). Staff was on hand to answer any questions and/or gather any comments.

This E.A. study was then completed and available for consultation to the general public from May to July 2016.

Design immediately followed the completion of the E.A. study and the construction contract was awarded to STP Excavation and Construction Inc. at the December 13<sup>th</sup>, 2016 Council meeting. Construction commenced in February, 2017.

#### **5) DISCUSSION :**

On Monday, July 10th, it was brought to staff's attention that a few Council members had concerns about the construction of the two (2)

lane roadway at the St-Joseph Street-Laurier Street intersection. Based on emails and direct feedback from members of Council, the design concerns for this intersection can be summarized as follows:

1. Eastbound bus traffic will not be able to make the right hand turning movement from Laurier Street onto St. Joseph Street without encroaching into the northbound lane or impeding on the sidewalk.
2. The consolidation of the existing two northbound lanes to one northbound lane at the St. Joseph Street-Laurier Street intersection will create unacceptable operational characteristics at this location. It was understood by staff that some Council members are concerned about the traffic queue backing up too far on St-Joseph street while waiting at the red light.

In response to the above concerns, staff contacted the project engineering consultant (WSP Group) in order to confirm that there were no errors or omissions in project design and more particularly, to confirm that the Laurier Street-St. Joseph Street intersection would operate at an acceptable level of service with the revised two lane configuration.

The following addresses each of the above concerns:

**Concern #1:**

Annex "C" identifies a typical bus turning movement at the south-west corner of the Laurier Street-St. Joseph Street intersection. The front left wheel alignment (demonstrated by the red line) does not encroach over the northbound stop bar on St-Joseph. As well, the rear right wheel alignment (demonstrated by the green line) does not impede onto the sidewalk or the start of the southbound St-Joseph bicycle lane.

**Concern #2:**

With respect to the elimination of one of the northbound traffic lanes at the St. Joseph Street-Laurier Street intersection, there are several factors that come into play. The following factors were reviewed in consideration of a two (2) lane roadway:

- **Connectivity of both sidewalks and bicycle lanes** from St-Joseph Street to Laurier street. The main purpose of this project was to extend St-Joseph Street into Morris Village (to Sterling Ave.) while providing security for the pedestrian and cycling traffic.

Also, by building a sidewalk on both sides of St-Joseph Street, pedestrian crossings are reduced considerably at Laurier street.

Also, the sidewalk on the west side of St-Joseph Street was designed to create a controlled entrance for vehicles entering (or exiting) the Fashion Work Wear/Giant Tiger parking lot via St-Joseph street. The prior configuration had vehicles entering/exiting anywhere along the roadway and in close proximity to Laurier Street which was very dangerous.

- **Real estate**

While the City did purchase a parcel of land (1.5m wide) on the west side of St-Joseph Street, the purpose of this acquisition was to contain municipal infrastructure within the new right-of-way (ROW) width. The previous road layout (including curb and sidewalk) were a few inches outside the previous ROW. This land acquisition permitted the City to keep a consistent cross-section of the roadway including two (2) sidewalks, two (2) 1.5m bicycle lanes and two (2) 3.5m driving lanes while adding a catch basin behind the west sidewalk and improving the surface water drainage in that area.

If Council ultimately elects to reinstate a second northbound lane, an additional 2.0m wide of land would need to be acquired (see Annex "B"). In addition to the costs involved to purchase this parcel of the land, there would also be delays in completing the contract by the September deadline. Staff estimates that a two (2) month process would be required to secure the additional right-of-way requirements and having the parcel registered under the City of Clarence-Rockland's name.

- **Technical overview**

The WSP Group has produced a Technical Memo in order to justify the elimination of the second (2<sup>nd</sup>) northbound lane. The memo can be found in its entirety in Annex "D". The following highlights WSP's analysis:

- The Laurier Street-St. Joseph Street intersection has been designed for the year 2025. Daily AM peak hour flow has been determined based on a projected annual growth rate of 1.5%. This growth rate also coincides with the City of Clarence-Rockland's projected 2017 rate of approx. 1.8%.
- Current (2015) total vehicular volume on St-Joseph street (at Laurier Street) has an average daily traffic volume (AADT) of 2521.

- Designed wait time for northbound traffic in year 2025 is calculated at 52 seconds. This provides a Level of Service (LOS) "D" which is an acceptable level. Staff has been advised that further adjustments can be made to the signal timing in the future if operational problems begin to occur. Annex "E" provides an overview of the definition of various levels of service in terms of delay times and a general description of traffic flows.
- Northbound vehicle queue during 2025 AM peak hour is calculated to be 109m. The daily average queue length is projected to be 65m.
- It should be noted that the projected 2025 queue length can be accommodated within one (1) green light cycle. Also worth noting, a typical 45 sec. green light cycle can evacuate approximately 15 vehicles at a "T" intersection of this sort.

## **Costs**

The WSP Group has provided a cost estimate to reinstate a three (3) lane configuration at the Laurier Street-St. Joseph Street intersection. This cost estimate includes the following work elements:

- Removal of concrete curb, existing sidewalk and catch basins
- Building of the third (3<sup>rd</sup>) lane
- Relocating underground utilities and above ground infrastructures
- Additional costs requested by contractor and his subcontractors for work stoppage.
- Re-design of the intersection by the City's engineering consultant (WSP Group)
- Property acquisition
- 20% contingency (high risk intersection)

The Class "A" cost estimate (i.e. without the benefit of a detailed design) is \$260,000. This estimate is detailed in Annex "F").

In view of the above, staff is of the opinion that the current design of

the Laurier Street-St. Joseph Street intersection provides an acceptable level of service taking into consideration projected traffic growth.

If members of Council still wish to reinstate a second northbound lane at the intersection, consideration could also be given to eliminating the west side sidewalk and bike lane from avenue Du Parc to Laurier Street. This would provide sufficient right-of-way to accommodate the additional lane, although, it would compromise pedestrian and cycling safety and movements on St. Joseph Street.

**6) CONSULTATION:**

There was extensive community consultation through the Environmental Assessment process for this project.

**7) RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

**8) FINANCIAL IMPACT (expenses/material/etc.):**

At the present time the project budget has an allocated contingency amount of \$270,000. This amount is to be used for unforeseen or unexpected changes to the contract. As of to date, approximatively \$100,000 is remaining of this contingency.

If Council were to decide to proceed with the third (3<sup>rd</sup>) lane option, an additional \$300,000 in budget would be funded by new debt.

Once a resolution has been reached regarding the St. Joseph Street-Laurier Street intersection, staff will bring forward a financial status report on this project at the August 21, 2017 meeting.

**9) LEGAL IMPLICATIONS :**

N/A

**10) RISK MANAGEMENT :**

In the event Council decides to reinstate the second northbound lane , there are several risk management issues that have to be acknowledged:

- **Timing:** currently, the contract with STP Excavation & Construction stipulates construction will be substantially completed by August 25<sup>th</sup> 2017. In the event that the scope of work is



increased, the risks for the contractor to submit claims or request to negotiate some of his prices are greater.

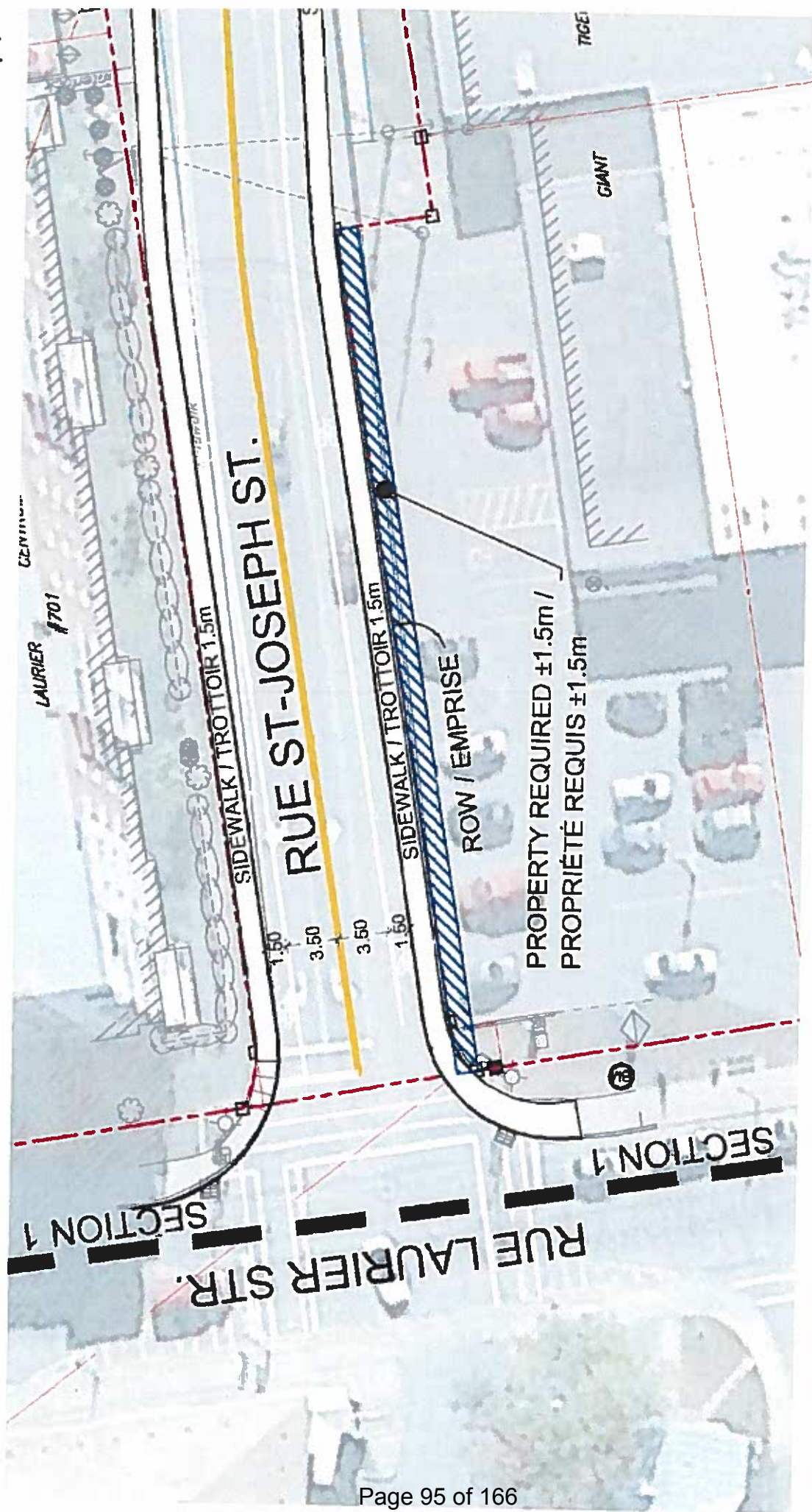
- **Land acquisition:** The negotiations for the first (1<sup>st</sup>) parcel of land went very well but land acquisition mid-way through the project is not always beneficial to the purchaser.

11) **STRATEGIC IMPLICATIONS :**  
N/A

12) **SUPPORTING DOCUMENTS:**

- **Annex "A",** Preferred lane configuration from Public Open House (POH) meeting, March 2016.
- **Annex "B",** Three (3) lane configuration c/w land acquisition sketch
- **Annex "C",** Typical bus turning movement sketch
- **Annex "D",** WSP Group's Technical memorandum regarding Laurier/St-Joseph streets intersection traffic analysis, July 2017.
- **Annex "E",** Level of Service (LOS) criteria's from Highway Capacity Manual
- **Annex "F",** Class "A" cost estimate for construction of third (3<sup>rd</sup>) lane.

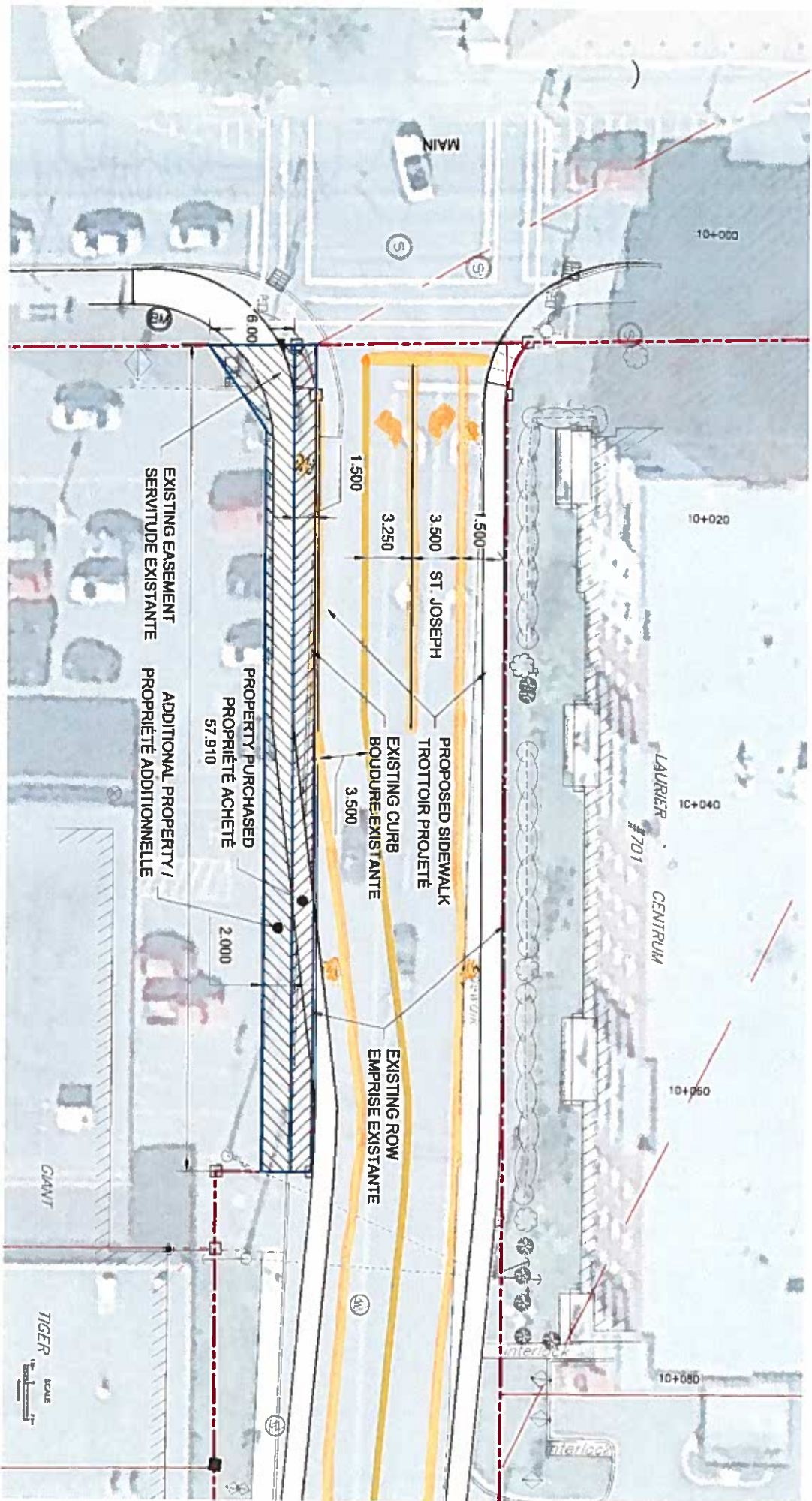








ANNEX "B"



# SECTION 1

## PROPOSED MODIFIED RIGHT OF WAY - EMPRISE MODIFIÉE PROJETÉE

ST. JOSEPH STREET RECONSTRUCTION & EXTENSION - TECHNICALLY PREFERRED PLAN  
RECONSTRUCTION ET PROLONGEMENT DE LA RUE ST-JOSEPH - PLAN TECHNIQUE PRÉFÉRÉ



ST. JOSEPH ST.

LAURIER ST.

OUTSIDE TURNING RADIUS OF SCHOOL BUS

INSIDE TURNING RADIUS OF SCHOOL BUS

TURNING RADIUS ALONG LAURIER ST.

Scale: 1:200

Legend:

- 1:200
- 1:100
- 1:50
- 1:25
- 1:12.5
- 1:6.25
- 1:3.125
- 1:1.5625
- 1:0.78125
- 1:0.390625
- 1:0.1953125
- 1:0.09765625
- 1:0.048828125
- 1:0.0244140625
- 1:0.01220703125
- 1:0.006103515625
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## TECHNICAL MEMORANDUM

**Date:** July 17, 2017  
**To:** Richard Campeau, City of Clarence-Rockland  
**From:** Mehemed Delibasic, M.Sc., P. Eng., Behzad Rouhieh, Ph.D., P. Eng.  
**Project No.:** 151-10014-00  
**Subject:** St-Joseph Traffic Study: Analysis of Northbound lanes at St-Joseph Street and Laurier Street Intersection

### 1.0 Introduction and Assumptions

The purpose of this technical memorandum is to present the results of traffic analysis for the intersection of St-Joseph Street and Laurier Street for the future estimated (2025) traffic conditions and northbound lane configurations at Laurier Street.

As part of this analysis the following lane configuration for the study intersection was assessed:

- One shared northbound left-/right-turn lane (as per WSP design)
- One shared eastbound through/right-turn lane (as existing)
- One shared westbound through/left-turn lane (as existing)

The Turning Movement Counts (TMCs) for the subject intersection were not available at the time of the study, therefore 24-hour daily traffic volumes from Automatic Traffic Recorders (ATR) were used to estimate TMCs. It should be noted that all traffic data, including the 24-hour daily traffic volumes from ATR, were provided by the City of Clarence-Rockland as part of the "St. Joseph Extension to Sterling Avenue Municipal Class Environmental Assessment - Traffic Study (Final)", prepared by WSP, in May 2016. In addition, as previously provided, based on the available traffic data, WSP estimated 2025 directional traffic volumes for St. Joseph study area. These estimated traffic volumes for 2025 horizon are presented in the Attachment 1 of this Memo.

Based on the estimated 2025 traffic volumes the highest volumes for northbound traffic at the intersection of St-Joseph Street and Laurier Street are in the AM Peak hour. Therefore, for the purpose of this analysis 2025 AM Peak hour was assessed.

The City advised that the intersection is currently functioning in a fixed time configuration as the existing actuation system is not operational.

The following assumptions were made to calculate the 2025 Peak hour traffic volumes at the study intersection and used for our capacity and queuing analysis to determine the level of service and queue lengths:

- Northbound left-/right-turn movements:
  - 50% of the 2025 northbound AM peak hour volume on St-Joseph Street, north of Du Park Avenue (422 vehicles as per Attachment 1) for each movement, i.e. 211 veh/h.
- Eastbound right-turn and westbound left-turn movements:
  - 50% of the 2025 southbound AM peak hour volume on St-Joseph Street, north of Du Park Avenue (266 vehicles as per Attachment 1) for each movement, i.e. 133 veh/h.

→ Eastbound and westbound through movements:

- 50% split of the 2015 non-directional AM peak hours on Laurier Street, west and east of St-Joseph Street, as identified in the final traffic study report prepared by WSP in May 2016 (Attachment 2).
- An average annual growth factor rate of 1.5% is applied to estimate the 2025 traffic volumes. Moreover, the eastbound right-turn and westbound left-turn volumes calculated above (133 veh/h) were deducted from the total directional volumes. The result would be 535 eastbound through and 226 westbound through moving vehicles.

→ It is assumed that 30 pedestrians would cross each cross walk during the AM peak hour. This assumption was made after consulting with the City staff and considering that sidewalks are now available at both sides of St-Joseph Street.

→ A cycle length of 100 seconds and an actuated traffic signal is assumed for the analysis. Similar to the existing condition, a protective-permissive left-turn phase is considered for the westbound left-turning traffic.

## 2.0 Capacity and Queuing Analysis (2025 estimated traffic volumes)

Synchro/SimTraffic 9.0 and HCM 2000 methodology was used to perform capacity and queueing analysis of the study intersection. The resulting volume to capacity (v/c), delay and Level of Service (LOS) are presented in Table 1.

**Table 1 – Intersection Capacity Analysis – 2025 AM Peak hour**

Intersection / Approach	AM Peak Hour		
	V/C	Delay (sec.)	LOS
<b>St-Joseph Street / Laurier Street</b>		<b>34</b>	<b>C</b>
Northbound approach (St-Joseph St)	0.87	52	D
Westbound approach (Laurier St)	0.93	47	D
Eastbound approach (Laurier St)	0.69	17	B

Based on the above results, in AM Peak hour, the St-Joseph Street/ Laurier Street intersection is expected to operate at an acceptable LOS C and the intersection approaches will have acceptable LOS D or better and all the movements will be below capacity.

SimTraffic was used to perform queueing analysis on St-Joseph Street and Laurier Street at the study location. Analysis period of 60 minutes with 10 minute warm-up period and five simulation runs were used. Table 2 shows queue length (average of ten runs) for each approach.

**Table 2 – Queuing Analysis – 2025 AM Peak**

Intersection / Approach	Storage Length (m)	AM Peak Hour	
		95% <sup>10</sup> Queue (m)	Average Queue (m)
<b>St-Joseph Street / Laurier Street</b>			
Northbound approach (St-Joseph St)	130m	109	65
Westbound approach (Laurier St)	>300m	288	166
Eastbound approach (Laurier St)	150m	110	68

Note: Storage lengths are measured to the adjacent major intersections.

The results indicate that the 95%<sup>10</sup> queue lengths for all approaches can be accommodated within their available storage lengths.

### **3.0 Conclusion**

The preliminary capacity analysis completed indicates that the study intersection will operate at an acceptable overall LOS C during the 2025 AM Peak hour with all the movements below capacity. The queuing analysis indicates that the 95%<sup>th</sup> queue lengths for all approaches can be accommodated within their available storage lengths.

It should be noted that after improvements (construction) on St. Joseph Street, the actual turning movement counts for the intersection of St-Joseph Street and Laurier Street should be collected to confirm optimum signal timings.

Based on actual traffic data if required the traffic signal controller at the study intersection could be optimized to improve the operation under 2025 traffic conditions.

**Comparison of 2025 Traffic Volumes along St. Joseph Street - with and without the Extension**

Link	AM Peak Hour			PM Peak Hour		
	NB	SB	Tot	NB	SB	Tot
<b>With St. Joseph Extension</b>						
St. Joseph St north of Du Park Ave	422	266	688	348	381	729
St. Joseph St north of Patricia St	404	173	577	334	282	616
St. Joseph St north of Silver Lane Rd	409	194	603	239	368	607
<b>Without St. Joseph Extension</b>						
St. Joseph St north of Du Park Ave	281	206	487	245	216	461
St. Joseph St north of Patricia St	246	113	359	221	117	338
St. Joseph St north of Silver Lane Rd	201	111	312	95	136	231



**Legend**  
Peak Hour Traffic AM(PM)

Figure 2-6  
Existing 2015 Peak Hour Traffic Volumes  
St Joseph Extension to Sterling Avenue – Traffic Study



151-10014tab 16-01-08 Peak Hour Traffic



## Highway Capacity Manual 2010

**Signalized intersection level of service (LOS)** is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour). Control delay is a complex measure based on many variables, including signal phasing and coordination (i.e., progression of movements through the intersection and along the corridor), signal cycle length, and traffic volumes with respect to intersection capacity and resulting queues. Table 1 summarizes the LOS criteria for signalized intersections, as described in the *Highway Capacity Manual 2010* (Transportation Research Board, 2010).

**Table 1. Level of Service Criteria for Signalized Intersections**

Level of Service	Average Control Delay (seconds/vehicle)	General Description
A	≤10	Free Flow
B	>10 – 20	Stable Flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F <sup>1</sup>	>80	Forced flow (congested and queues fail to clear)

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.

1. If the volume-to-capacity (v/c) ratio for a lane group exceeds 1.0 LOS F is assigned to the individual lane group. LOS for overall approach or intersection is determined solely by the control delay.

**Unsignalized intersection LOS** criteria can be further reduced into three intersection types: all-way stop, two-way stop, and roundabout control. All-way stop and roundabout control intersection LOS is expressed in terms of the weighted average control delay of the overall intersection or by approach. Two-way stop-controlled intersection LOS is defined in terms of the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns. This approach is because major-street through vehicles are assumed to experience zero delay, a weighted average of all movements results in very low overall average delay, and this calculated low delay could mask deficiencies of minor movements. Table 2 shows LOS criteria for unsignalized intersections.

**Table 2. Level of Service Criteria for Unsignalized Intersections**

Level of Service	Average Control Delay (seconds/vehicle)
A	0 – 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F <sup>1</sup>	>50

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.

1. If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.





## Cost Estimate

M:\2014\141-22994-00\_St Joseph St\141-22994-00-ClassA-St.JosephsStreet.xlsx

**City of Clarence-Rockland**  
**St. Joseph Street, Rockland - Additional Turning Lane Extra Costs**  
**Class "A" Cost Estimate**

WSP Project No. 141-22994-00

ITEM	DESCRIPTION	ESTIMATED UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	Removal of Existing Concrete Curbs	LM	60	\$15.00	\$900
2	Removal of Existing Concrete Sidewalk	M2	15	\$20.00	\$300
3	Removal of Existing Catchbasins	EA	2	\$3,500.00	\$7,000
4	250mm dia. Storm Sewer	LM	15	\$500.00	\$7,500
5	600 x 600mm Precast Storm Catchbasin	EA	2	\$12,000.00	\$24,000
6	Granular 'B'	T	140	\$18.00	\$2,520
7	Granular 'A'	T	60	\$20.00	\$1,200
8	Concrete Curb	LM	60	\$50.00	\$3,000
9	Concrete Sidewalk	M2	20	\$75.00	\$1,500
10	HL-3 Asphalt	T	25	\$120.00	\$3,000
11	HL-8 Asphalt	T	25	\$110.00	\$2,750
12	Asphalt Driveway Reinstatement (Residential)	M2	-100	\$25.00	-\$2,500
13	Line Painting (Lines)	LM	75	\$10.00	\$750
14	Line Painting (Symbols/Direction Arrows)	EA	2	\$50.00	\$100
15	Traffic Signal Revisions	LS	1	\$50,000	\$50,000
16	Utility Relocations	LS	1	\$40,000	\$40,000
17	Traffic Control	LS	1	\$15,000	\$15,000
<b>SUB-TOTAL CONSTRUCTION</b>					<b>\$157,020</b>
	Delay/Loss of Production Claim	LS	1	15,000	\$15,000
	Engineering Design and Contract Administration	LS	1	10,000	\$10,000
	Property Acquisition	LS	1	35,000	\$35,000
	Contingency	LS	1	20%	\$44,000
<b>TOTAL ESTIMATE</b>					<b>\$261,020</b>

Cost estimate does not include HST





## REPORT N° INF2017-054

<b>Date</b>	09/08/2017
<b>Submitted by</b>	Dave Darch
<b>Subject</b>	Caron Pond Engineering Services
<b>File N°</b>	<a href="#">Click here to enter text.</a>

### 1) NATURE/GOAL :

The purpose of this report is to provide Committee/Council with a status update on the Caron landfill monitoring/closure report and the construction of the Caron Storm Water Management Facility.

### 2) DIRECTIVE/PREVIOUS POLICY :

At its February 29, 2016 meeting, Council endorsed a staff report which recommended a strategy regarding the closure of the Notre Dame landfill site and the construction of Caron Street Storm Water Management Facility.

### 3) DEPARTMENT'S RECOMMENDATION :

**THAT** Report No. INF2017-054 be received as information.

**QUE** le Rapport no. INF2017-054 soit reçu à titre d'information.

### 4) BACKGROUND :

As members of Council will recall, the Ministry of Environment and Climate Change (MOECC) issued a Provincial Officer's Order with respect to the requirement to (a) develop an action plan to formally close the former Notre Dame landfill site and (b) a plan for managing the Caron Street storm water discharge. The area in question is identified in Attachment 1.

The Provincial Order identified a number of directives and timelines that were to be adhered to by the City. At the time of the Order, staff took steps to initiate a year-long monitoring program of the former landfill site. The results of that monitoring have now been received by the Department and a draft closure plan for the landfill site is being reviewed by staff for submission to the Ministry by the July 28, 2017 deadline. The Closure Plan identifies final capping and grading for the site. It is staff's intention to present a separate report to Council at a forthcoming meeting with respect to the results of the monitoring program and the specifics of the closure plan.

The February, 2016 staff report (referred to in section 2 above) presented two options for Council's consideration. Ultimately, Council approved staged implementation of the stormwater management pond. Construction was proposed for 2017/18.

## **5) DISCUSSION :**

Recently, staff has had contact with MOECC staff to discuss the following stormwater treatment options.

### ***Option 1-Pond Construction in Landfill Area***

This scenario proposes construction of the pond west of Caron Street within the existing landfill area. Ideally, in order to reduce costs, it is hoped that the MOECC will permit the construction of the pond over the landfill area without removing landfill materials. A formal submission with rationale for this option will have to be submitted to the MOECC staff for approval.

If the Ministry requires removal of the landfill material, the costs of the pond will increase.

It should be noted that Atriel Engineering was retained by area developers to design a storm water management facility immediately west of Caron Street over the landfill site. This concept still requires final approval from the MOECC.

### ***Option 2-Utilization of Provincial Significant Wetland***

This option would assess the feasibility of directing Caron Street and development stormwater flows to the Provincially Significant Wetlands situated in the southeast quadrant of the Caron Street-County Road 17 intersection. An engineering consultant will be required to assess the feasibility of this option from a technical perspective and secure if this site is deemed to be an appropriate stormwater management strategy. This option will also be costed.

The Ministry has indicated that they are willing to consider either of the above options providing the municipality can provide technical support of the recommended strategy.

### ***Engineering Services:***

The subdivision agreements for the Chapman Subdivision (SpaceBuilders) and Robert Street (Sanscartier) included, cost sharing conditions with respect to the construction of the Caron Pond. The pond is required to provide quality and quantity control for these developments as well as addressing the storm runoff from the Caron roadway.

As noted above, Atrél Engineering Limited was retained by developers to undertake the design of the stormwater management facility. The preliminary design has been completed and contemplates the construction of the pond over the former landfill site. Staff will have to prepare a technical rationale for the Ministry's consideration to enable the pond construction to occur over the landfill material. In a worst-case scenario, The Ministry may require that landfilled material be removed before pond construction. This would dramatically increase costs.

It is timely to retain a consultant to provide the following engineering services :

- Amend the existing design, if required, taking into consideration the findings of the landfill monitoring and landfill closure plan developed by the WSP Group
- In conjunction with WSP, assess the feasibility and cost of utilizing the Provincially Significant Wetland for storm water quality/ quantity control
- Prepare necessary documentation to secure MOECC approval for the preferred storm water management pond

Once a preferred option is identified it will be necessary to amend the scope and fees for engineering services related to design modifications, contract administration, site supervision, commissioning. This will be the subject of a future staff report to Council.

The cost of the above engineering services is estimated to be \$30,000.

In view of Atrél's extensive involvement in this project to date, the Department will retain Atrél Engineering Limited under the City's existing standing offer to provide the required engineering services.

### ***Project Costs/Budget Approval:***

Assuming the MOECC will approve construction of the pond over the existing landfill material, the projected total project cost is summarized as follows:

Construction	\$310,000
Engineering	\$100,000

Excavation	\$115,000
Geotextile	\$31,000
Sand Backfill	\$150,000
Bentonite Liner	\$185,000
Temporary Access	\$47,000
Erosion Control	\$15,000
Geotechnical	\$10,000
Contingency	\$82,000
-----	
Total Cost	\$1,045,000

It should also be noted that the above costs are "high level" projections only at this time and would be refined as the design of the pond progresses through to project completion.

Based on available WIP funding, there could be a shortfall in budget approval in the amount of \$822,000 (\$1,045,000-\$223,000). This shortfall does not take into consideration any potential funding contributions (if any) from benefiting developers. The additional budget approval for this project would be considered by Council as part of the 2018 budget capital works deliberation process. Funding for this project would be derived mainly from the issuance of debt.

## **6) CONSULTATION:**

N/A

## **7) RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

## **8) FINANCIAL IMPACT (expenses/material/etc.):**

Currently, the Caron Pond has available 2015 WIP funding approval in the amount of \$223,000. The required interim engineering fees of \$30,000 will be funded the 2015 WIP. As noted in Section 5 of this report, projected expenditures are estimated to be \$1,045,000 which leaves a funding shortfall of \$822,000. Since actual construction of the pond will take place in 2018, the budget shortfall will have to be addressed as part of the 2018 Capital Works budget deliberation process.

**9) LEGAL IMPLICATIONS :**

There is a requirement to initiate the pond construction as quickly as possible in keeping with the MOECC Order that was issued in 2016

**10) RISK MANAGEMENT :**

It is critical to proceed with the construction of the Caron St pond in order to address quality/quantity runoff issues from area development and the City's road infrastructure.

**11) STRATEGIC IMPLICATIONS :**

The implementation of the Caron Pond will enable the municipality to meet its environmental responsibilities with respect to new development and road infrastructure.

**12) SUPPORTING DOCUMENTS:**

Attachment 1 - key map











## INF2017-052 Garage Improvements Strategy

<b>Date</b>	09/08/2017
<b>Submitted by</b>	Dave Darch
<b>Subject</b>	Garage Improvements Strategy
<b>File N°</b>	A20 GAR Municipal Garage

### REPORT N°

#### 1) **NATURE/GOAL :**

The purpose of this report is to secure Council's approval of the municipal garage improvement work plan at the Clarence Creek facility.

#### 2) **DIRECTIVE/PREVIOUS POLICY :**

N/A

#### 3) **DEPARTMENT'S RECOMMENDATION :**

**THAT** Committee of the Whole recommends that Council endorses the garage improvement work plan as outlined in Report No.INF2017-052.

**QUE** le Comité plénier recommande que le Conseil approuve le plan de travail d'amélioration du garage tel qu'indiqué dans le Rapport no. INF2017-052.

#### 4) **BACKGROUND :**

In recent years, Council has approved funding for various garage improvements at the Clarence Creek Works facility. The budget approvals, expenditures to date and remaining budget are summarized as follows:

		Original Budget	Remaining Budget
2015	Garage Expansion	\$300,000	\$300,000
2016	FiiT <sup>3</sup> Recommendations	\$100,000	\$22,000
2017	Garage Improvements	\$68,000	\$68,000
		-----	-----
	Total	\$468,000	\$390,000

Approximately \$78,000 was spent against the \$100,000 budget allocation for the garage improvements as identified in the FiIT<sup>3</sup> inspection program leaving a budget balance of \$22,000 to complete this program. It is anticipated that the balance of the budget will required for minor electrical works, policy development, procedures and training.

## 5) **DISCUSSION :**

The Department proposes to complete the Clarence Creek municipal garage improvements over a two-year time period. The following summarizes the activities and associated costs by year:

### **2017 Program**

• level garage floor	\$15,000
• build sand storage unit	\$60,000
• Fleet Management software (Work Tech)	\$10,000
• lighting improvements	\$15,000
• site survey	\$5,000
• electrical works	\$5,000
• policy development/training	\$10,000
Contingency	\$15,000
Total	\$135,000

### **2018 Program**

• vehicle storage building	\$250,000
• Renovation (parts storage, offices, lunchroom, washrooms)	\$80,000
• installation-six jacks (hoist)	\$75,000
Contingency	\$50,000
Total	\$455,000

The total budget requirement for the two-year program is \$590,000. As noted above, there is a remaining budget allocation of \$390,000 leaving a shortfall of \$200,000. The Department proposes that the additional funding requirement be addressed as part of the 2018 capital budget deliberation process.

6) **CONSULTATION:**

The City retained a health and safety firm (FiiT<sup>3</sup>) to identify improvements to the works facility in order to meet health and safety regulations. Additionally, recommendations contained in the Maclaren Municipal Consulting study entitled Fleet Department Staffing will be fully implemented in 2017 at the exception of the purchase of the mobile hoist system that will be done in 2018 because of the limited storage area.

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

8) **FINANCIAL IMPACT (expenses/material/etc.):**

Funds have already been allocated for the proposed capital improvements for the municipal garage located at 417 Lemay Street. In keeping with the work plan identified above, the Department will not fully utilize the remaining budget allocation of \$390,000. The projected unallocated amount of \$255,000 (\$390,000 - \$135,000) for 2017 will be identified as WIP (work in progress) funding and be used to supplement the proposed capital program in 2018.

8) **Legal Implications :**

The implementation of the FiiT<sup>3</sup> recommendations and the Maclaren Study will address identified health and safety issues at the garage.

9) **RISK MANAGEMENT :**

The overall proposed garage improvement program is beneficial in mitigating many of the health and safety issues that have been identified at 417 Lemay Street. Implementation of the recommendations will improve risk management associated with the operation of the facility

10) **STRATEGIC IMPLICATIONS :**

The garage improvement program is consistent with the strategic direction of the municipality to be responsible for the health and wellness of our employees and ensuring that municipal assets are maintained and operated in a responsible manner.

11) **SUPPORTING DOCUMENTS:**

N/A







## REPORT N° FIN 2017-023

<b>Date</b>	12/06/2017
<b>Submitted by</b>	Rob Kehoe
<b>Subject</b>	Residential and non-residential Growth Forecast
<b>File N°</b>	D0 Development and planning

1) **NATURE/GOAL :**

To approve a growth forecast of residential and non-residential development to be used in future growth related studies.

2) **DIRECTIVE/PREVIOUS POLICY :**

- a. 2013-2037 Growth Forecast
- b. 2015 Clarence-Rockland Development Charges Study

3) **DEPARTMENT'S RECOMMENDATION :**

**WHEREAS** the Development Charges Act 1997 requires that a municipality completes a study to allow the collection of development charges and that the municipality approves a growth forecast to build the development charges study on;

**WHEREAS** City departments require growth projections to support their planning requirements e.g. transportation master plan, recreation master plan, development charges, etc., therefore,

**BE IT RESOLVED THAT** the residential unit growth forecast be approved at an average annual rate of 175 new housing units; and

**BE IT ALSO RESOLVED** that the non-residential development be approved at 33,000 square feet per year for the next 5 years, as recommended.

**ATTENDU QUE** la Loi des redevances d'aménagement de 1997 exige qu'une municipalité complète une étude pour permettre la collecte des redevances d'aménagement et que la municipalité approuve une projection de croissance pour le développement des frais de redevance;

**ATTENDU QUE** les services de la Cité ont besoin d'une projection de croissance pour appuyer leur planification ex. plan maître des transports, plan maître des loisirs, redevances d'aménagement; par conséquent,

**QU'IL SOIT RÉSOLU** que la projection de croissance résidentielle soit approuvée à un taux moyen annuel de 175 unités résidentielles; et

**QU'IL SOIT ÉGALEMENT RÉSOLU** que la projection de croissance pour le développement non résidentiel soit approuvé à 33 000 pieds carrés par année pour les cinq prochaines années, tel que recommandé.

4) **BACKGROUND :**

The City of Clarence-Rockland needs to undertake various growth-related projects including transportation master plan and development charges. The Development Charges Act 1997, S.O. 1997 c. 27 requires, under section 5 (1) that:

*"The anticipated amount, type and location of development, for which development charges can be imposed, must be estimated."*

This report is intended to provide the background information that will allow the City to establish an appropriate growth rate for residential and non-residential development that will support future growth-related studies.

5) **SUMMARY :**

a. Residential

This report supports a residential growth forecast of 175 new units per year for the next 5 years to be revisited in 5 years' time for the proceeding development charges study. The 10 year historic building activity has produced on average 170 units annually. There is confidence that the 175 units can be attained for the foreseeable future since 5,200 units have been submitted into the building permit process to date.

b. Non-residential

This report supports a non-residential growth forecast of 33,000 square feet of activity. The forecast is lower than the previous development charges study by 2,000 sq. ft. however, is reflective of the historic development trend. In addition, the forecast is supported by the growth that is in the early stages of the City's planning process.

Both these growth projections are further detailed in section 6 (G).

The recommendations for residential and non-residential development will be used in the completion of other studies including the transportation master plan and the development charges study. This growth forecast is a guide and may be adjusted at any time should new information become available.



## 6) **DISCUSSION :**

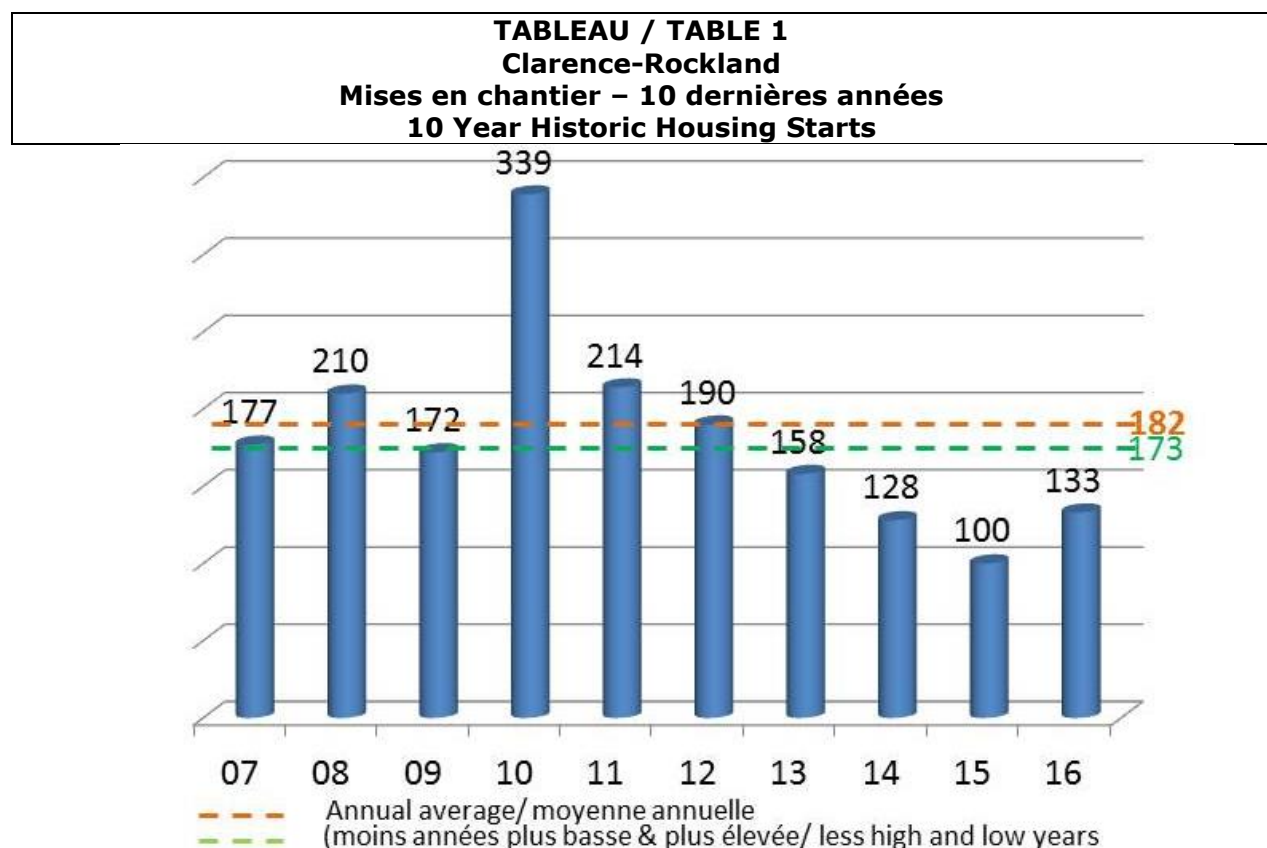
The growth forecast includes projections for both the residential and non-residential development. It has been developed by taking into consideration:

- A. Historic and current local housing starts
- B. Economic factors
- C. Local issues
- D. United Counties of Prescott Russell Official Plan
- E. Risk Factors
- F. Population History and Forecast
- G. Growth Forecast
  - a. Residential units
  - b. Non-residential development

### **A. Historic and Current Local Housing Starts**

#### a. Residential Housing Starts

**Table 1** below shows that the 10 year average historical housing starts in Clarence-Rockland was 182 units. To mitigate the impact of a spike or drop in building activity for any unusual reason the highest and lowest years have been eliminated from the annual average. The result is a revised average of 173 units.



b. Residential housing starts by area

**Table 2** provides the breakdown of the historic housing development by area in Clarence-Rockland for 2010 through 2016. In addition, the map in Appendix A illustrates the residential growth by development area and the remaining developable areas.

<b>TABLEAU / TABLE 2</b> <b>Clarence-Rockland</b> <b>Historique des mises en chantier par communauté</b> <b>Historic Housing Starts by Area</b>									
Communauté Area	2010	2011	2012	2013	2014	2015	2016	Total	Moy./ Avg. 2010-2016
Rockland	290	163	158	125	90	44	84	954	136
Clarence Point	2	8	4	1	4	1	2	22	3
Cheney	0	2	5	2	4	24	3	40	6
Bourget	7	9	5	7	3	5	9	45	6
Hammond	2	7	4	5	8	8	7	41	6
St-Pascal Baylon	2	1	2	2	0	0	0	7	1
Clarence Creek	4	7	2	4	7	6	15	45	6
Rural	32	17	10	12	12	12	13	108	15
Toutes / All	339	214	190	158	128	100	133	1,262	180
(moins années plus basse & plus élevée / less : high & low years)									Toutes / All <b>165</b>

c. Residential housing starts in the planning system

The projections used in this study are influenced by the housing starts in the planning process as of March 31<sup>st</sup>, 2017. The building permits that are currently in the building application process at the City that are either registered, approved, draft approved, in application or pre-consultation stage of the development process equate to 5,200 housing units which is **115 %** higher than the amount (2,400 housing units) in the planning system in 2012 when the last growth forecast was done. This is a significant increase and has a lot to say about the pent up supply and the confidence of the development community in Clarence-Rockland.

Assuming that all of these projects get full approval and are built over the next 25 years, this would result in an average of 208 units to be built (= 5,200 / 25 years). Therefore, even if no other developer came forward in the next 25 years, the City could see the addition of 208 new homes built annually assuming that all applications receive final approval and that the houses are sold.

The major land development projects that are in process are projecting the following build-out of residential units over the next 25 years:

### Rockland

- Brigil 1,100
- Morris Village Stage 5 655
- Sancor- Sanscartier 687
- CH Clement – Caron 108
- Regional Group – rd 17 115

### Clarence Point

- Regional Group 1,500

### Clarence Creek

- CR lands 185

## **B. Economic Factors**

In its Metropolitan Outlook 1: Ottawa – Gatineau Spring 2017, the Conference Board of Canada forecasts the following:

- Ottawa–Gatineau’s real GDP is forecast to grow 2.3 per cent in 2017, up from 1.5 per cent in 2016, and then average 1.8 per cent annual advances between 2018 and 2021.
- Employment rose 1.0 per cent in 2016 and is forecast to increase a faster 1.4 per cent in 2017.
- Ottawa–Gatineau’s population is expected to rise by 1.2 per cent annually between 2017 and 2021, slightly faster than the Canadian average.

The Canadian Press reports on June 28, 2017 that:

*"The governor of the Bank of Canada says it looks like low interest rates put in place in 2015 have "done their job" but he stopped short of predicting the central bank's next move.*

*Stephen Poloz said in an interview broadcast on business news channel CNBC that the Canadian economy has been recovering from the global financial crisis that erupted in 2008 and the sudden decline in oil prices that began in late 2014.*

*The Bank of Canada's next interest rate announcement is set for July 12 when it will also release an updated outlook for the economy in its monetary policy report...*

*... He says virtually every major area of the world seems to be gaining economic momentum — with the United States "way out in front."*

*He says the drop in oil prices set Canada's economy back — causing the Bank of Canada to compensate by lowering interest rates — but growth has returned to a more normal pace."*

These positive forecasts from the Conference Board and the Governor of the bank of Canada bode well for positive growth in

Clarence-Rockland.

### **C. Local Issues:**

Some of the more pertinent local issues include:

- a. Widening of 174/ County road 17
  - i. Economic development prefers West of Ottawa due to WEAK transportation links in East
  - ii. Slowing housing starts in UCPR (Rockland)
    - 1. Minto moved on
    - 2. Regional Group homes struggling to start
  - iii. New HOV/transit lanes on 174 will be good for the East end of Ottawa economy as residents will be encouraged to use designated HOV/transit lanes either with vehicle or preferably transit and meeting City of Ottawa LRT at Trim Road
- b. Lack of serviced Industrial land

The City had foresight in developing its industrial park on Industrielle Street. However, that site is totally built out and the City is actively studying a potential new site for light industrial development.
- c. Infrastructure gap in funding and local taxation

The City's asset management plan update will be going to Council this fall. It is apparent that there is a significant infrastructure funding shortfall and the City is not alone. Cities across the Country are struggling to meet the demands of infrastructure and although federal and provincial funding is helping, it is having little impact in reducing the infrastructure gap.

### **D. United Counties of Prescott Russell (UCPR) Official Plan**

It is the objective of the Official Plan to guide 85% of the housing unit growth to the urban and community policy areas and 15% or less to the Rural Policy Area. This growth forecast fits within these guidelines as 87% of the growth identified lies within the urban and community policy areas and 13% is identified as rural. It is intended to maximise development using existing infrastructure. Directing growth to our communities will result in compact development which in turn helps to ensure efficient use of existing infrastructure.

The Counties also targeted that 15% of all new residential units created through a planning period must be through intensification.

### **E. Risk Factors:**

While developing the growth forecast it is important to identify the risk of having an ambitious growth forecast and growth not happening. This puts the municipality at risk of paying for infrastructure without

development charges revenue to support the expenses. If development occurs as planned, the City can decide to revise the study or amend its infrastructure plan.

## F. Population history and forecasts

Between the years 2011-2016, Clarence-Rockland experienced 5.7% growth or 1.14% annually while the Province and the County of Prescott and Russell grew by just 4.6% (according to Statistics Canada census 2016).

	Clarence-Rockland	Orleans	Russell	County	Ottawa	Province
2016	24,512	128,281	16,520	89,333	934,243	13,448,494
2011	23,185	119,247	15,247	85,381	883,391	12,851,821
Change	1,327	9,034	1,273	3,952	50,852	596,673
5 year %	5.7%	7.6%	8.3%	4.6%	5.8%	4.6%
Annual %	1.14%	1.52%	1.67%	0.93%	1.15%	0.93%

If we focus on Clarence-Rockland, **Table 3** identifies the population and dwelling unit information from the last 3 censuses. It is evident that the period between 2006 and 2011 was a significant growth period for Clarence-Rockland with annual population and dwelling unit increases of 2.3% and 2.9%, respectively.

Notwithstanding this, it is difficult to predict whether this was an anomaly or whether this type of growth will reoccur. It is evident that if the significant factors affecting the local economy described earlier including the widening of County road 17 and the development of new industrial lands are attainable in the near future, it is likely that growth beyond the most recent cycle e.g. 2011-2016 will be possible.

<b>TABLEAU / TABLE 3</b> <b>Clarence-Rockland</b> <b>Recensement de la population et des unités d'habitation - Statistique Canada</b> <b>Census population and dwelling units - Statistic's Canada</b>				
	1996-01	2001-06	2006-11	2011-16
Population	19,612	20,790	23,185	24,512
Increase	979	1,178	2,395	1,327
Average per year	195.8	235.6	479	265.4
Annualized %	1.051%	1.201%	2.304%	1.145%

Dwelling units	6,846	7,667	8,796	9,537
Increase		821	1,129	741
Average per year		164.2	225.8	148.2
Annualized %		2.398%	2.945%	1.685%

If we apply historical residential growth factors to the Persons per unit (PPU) factor generated by Statistic's Canada in the 2016 census, the following annualized residential housing units are projected and displayed in **Table 4**.

<b>TABLEAU / TABLE 4</b> <b>Clarence-Rockland</b> <b>Population et projections des unités d'habitation – 25 ans</b> <b>25 Year Population and dwelling unit projections</b>				
Base year 2019 – 25,363 Persons per unit (PPU) – 2.6				
Historical Period	Annualized growth	Projected 2043	Increase	Annualized units
2011-2016	1.145%	33,712	8,349	128
2006-2011	2.304%	44,825	19,462	299
2001-2006	1.201%	34,187	8,824	136

## G. Growth Forecast:

### a. Residential

The preceding analysis creates somewhat of a contradiction.

Population growth based on recent history (section 6 (f)) shows recent annual growth of 1.14% for Clarence-Rockland. As well, the Conference Board of Canada predicts 1.2% growth over the next 5 years for the City of Ottawa and the study cites this as a high growth rate in comparison with other cities in Ontario. These types of growth rates project about 130-140 housing units per year.

Further, the United Counties of Prescott-Russell population projection that was released December 2012 presented a projection of 133 units annually. The forecast completed by Hemson was done using the provincially approved method of forecasting using the "Cohort Survival model" which accounts for births deaths, age of mother at birth, sex and migration. This forecast has not since been updated, however Russell Township recently did an Official Plan review and used this study.

Herein lies the dilemma. This modest growth rate is not supported by the number of residential housing units in the planning system as discussed in section 6 (c). Some 5,200 units have been registered, approved; draft approved, or is in the application or pre-consultation stage of the development process. This projects in excess of 200 annual housing units over a 25 year period. It is reasonable to assume that not all these housing units will be built but the difficulty is projecting at what level it will occur. Table 5 shows that for 2016-21, staff is projecting 192 residential units which is based on the amount of units currently in the City's planning process.

Further, as discussed earlier, the period from 2006-2011 was a period of strong growth of 225 annual residential units that will only be approached again should all the factors align for the City e.g. County road 17 is widened and a new industrial park is built. The City is confident and is moving forward with these initiatives although it is anticipated that they will occur beyond the immediate 5 year planning period.

Given these somewhat contradictory factors, the forecast should lay somewhere between these extremes of 130 and 200 residential units. As such, staff is recommending to maintain the estimate that was provided in the previous growth study in 2012 at 175 residential dwelling units.

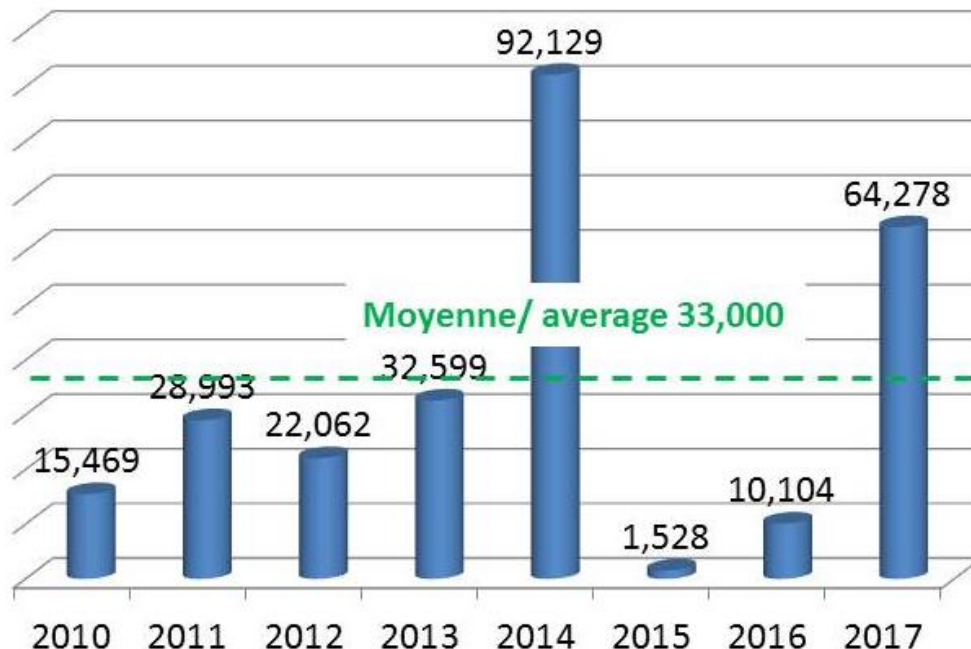
The following table summarizes historical and projected residential growth rate comparators:

<b>TABLEAU / TABLE 5</b> <b>Clarence-Rockland</b> <b>Taux de croissance des unités résidentielles</b> <b>Residential unit growth rates</b>				
	Historical		Projected	
	2006-11	2011-16	2016-21	Proposed
Rockland	161	111	135	120
Clarence Point	3	3	19	16
Cheney	1	7	3	3
Bourget	9	6	6	6
Hammond	4	7	6	6
St-Pascal Baylon	1	1	-	1
Clarence Creek	6	7	9	8
Rural	27	13	15	15
<b>Toutes / All</b>	<b>211</b>	<b>154</b>	<b>192</b>	<b>175</b>

## Non-residential

The historic information of the non-residential side of development has been summarized in **Table 6**. The details of the non-residential activity can be found in Appendix B.

**Tableau 6**  
**Clarence-Rockland**  
**Activités historiques de l'aménagement non résidentiel (Pieds carrés)**  
**Non-Residential Historical Activity (Sq. ft.)**



**Table 7** below provides a summary of the non-residential activity and projections. The previous development charges study anticipated an annual average of 35,000 sq. ft. The historic average of construction is 33,395 sq. ft., the median is 25,528 sq. ft. and the details are provided in Appendix B.

The number of commercial applications that are in the system is seven and represent about on average of 33,000 square feet of non-residential development for the next 2 years.



Since the non-residential development has been less than the previous development Charges study anticipated, it is recommended that the non-residential development in Clarence-Rockland be set at 33,000 sq. ft. or 2,000 sq. ft. less than the previous study square feet.

<b>Tableau / Table 7</b> <b>Clarence-Rockland</b> <b>Projection de croissance de l'aménagement non résidentiel</b> <b>Non-Residential Growth Forecast</b>		
Région / Area	Pieds carrés / Sq. ft.	Calcul Calculation assumptions
Étude précédente (2015) sur les redevances d'aménagement Previous 2015 Development Charges study	35,000	Voir l'étude See study
Moyenne annuelle historique Historic Annual Average	33,395	Voir le tableau 6 See table 6
Demandes en cours dans le système (66 900 pieds carrés) Applications currently in the system (66,900 sq ft)	33,450	estimés sur 2 ans estimate over 2 years
Clarence-Rockland ébauche de projection de croissance pour 2019 2019 Clarence-Rockland draft Growth projection	33,000	

7) **CONSULTATION:**

An official public meeting to present the development charges draft study and report will be scheduled in 2018 in time to set the new rates.

8) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/a

9) **FINANCIAL IMPACT (expenses/material/etc.):**

There are no direct financial implications of approval of this report. Impacts on future budgets will follow in subsequent planning reports e.g. Transportation Master plan, Development Charges, etc.

10) **LEGAL IMPLICATIONS :**

N/a

11) **RISK MANAGEMENT :**

N/a

12) **STRATEGIC IMPLICATIONS :**

Strategic implications will be discussed in future planning reports e.g. Transportation Master plan, Development Charges, etc.

13) **SUPPORTING DOCUMENTS:**

Appendix A – Residential Development (units)

Appendix B - Illustrative map – Residential development

Appendix C – Non-residential Development (Sq. ft.)

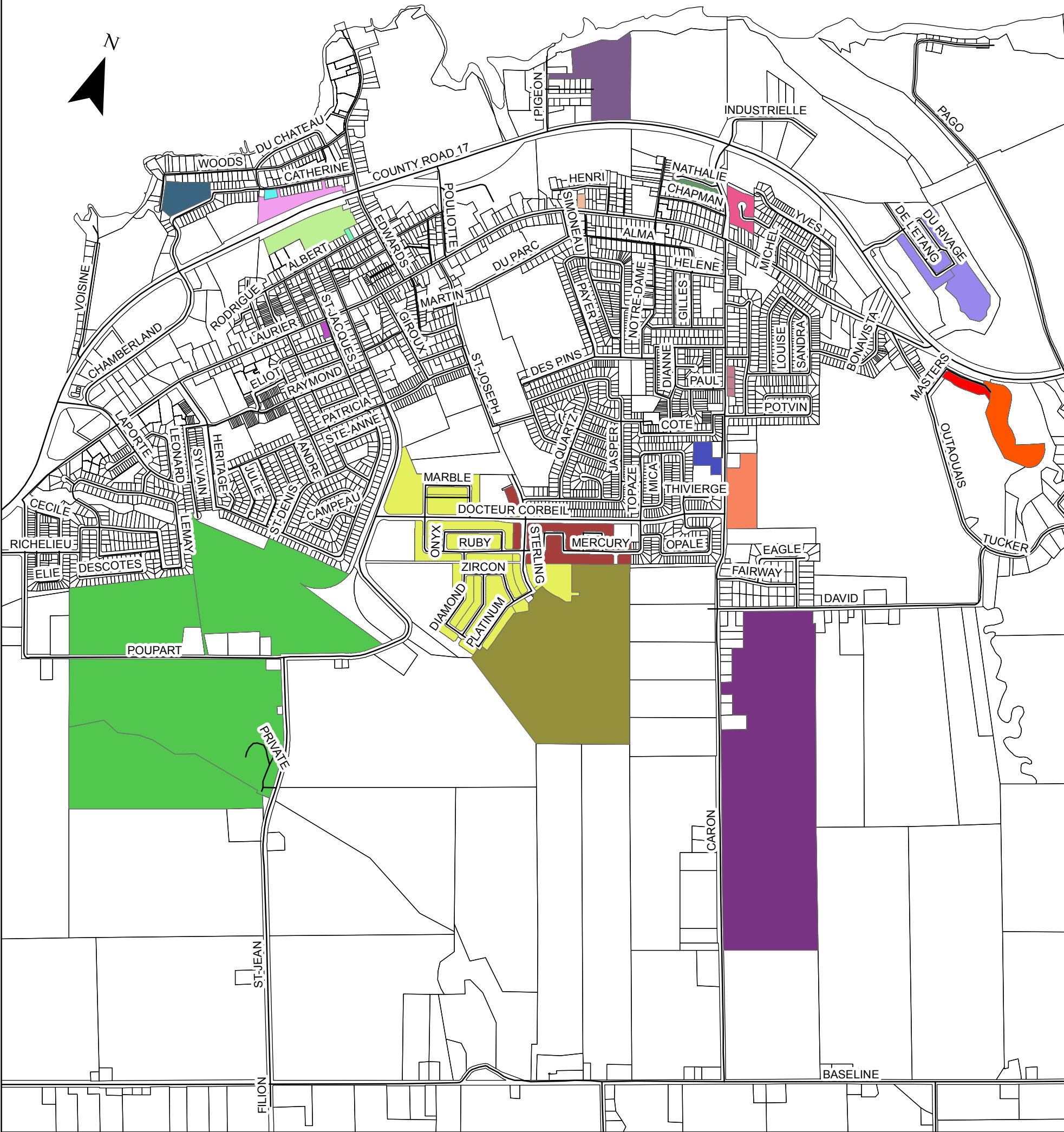
**CLARENCE - ROCKLAND**  
**GROWTH FORECAST - RESIDENTIAL UNITS**

Development - Site Plan Concept Plan based						Total At-Build
Name	Type	Stage	2013-16	2017-21	2022-26	
<b>ROCKLAND</b>						
CH Clement @ Nathalie	Towns	Registered	37	0	0	50
Morris Village - SB Stage 3	SF	Registered	39	1	0	84
Morris Village - SB Stage 4	SF	Registered	143	110	0	263
Morris Village - SB Stage 4	Town	Registered	43	25	0	68
Morris Village - SB Stage 4	Semi	Registered	4	0	0	4
CH Clement @ Golf Course	condos	Registered	10	36	0	46
CH Clement @ Golf Course #2	condos	under review	0	48	16	64
Loda Catherine-Woodfield	SF	Registered	0	18	4	22
Bernard SansCartier @ Robert st	SF	Registered	5	18	0	23
CH Clement @ st Jacques		approved	12	0	0	12
Devcor South of County rd	Apts/condo	under review	0	18	60	99
Devcor North Catherine St.	Apts/condo	under review	0	18	54	79
Regional Group County rd 17 parcel D	Mix	Registered	4	91	24	119
Morris Village - Spacebuilders block 288	Town	Registered	0	44	0	44
Brigil		Pre Consult.	0	150	250	1,100
Brigil 50% ajustement			0	-75	-125	0
Michel Labreche (Albert)	Appart.	plans review	0	9	0	9
Morris Village Stage 5 Spacebuilders	mix	Pre Consult.	0	90	150	655
Devcor Rue Roger	Towns, terrasse, semis	Pre Consult.	0	0	24	84
Marivo Rue Laurier	Appart.	approved	0	12	0	12
Spacebuilders- Caron	appar.	Registered	0	24	0	24
Alain Carriere Catherine	appart.	under review	0	12	0	12
Alain Carriere Caron	appart.	under review	0	18	26	44
CH Clement Caron	towns	under review	0	16	32	108
Sancor- Sanscartier	mix	Pre Consult.	0	100	500	687
Sancor- Sanscartier 50% adjust.			0	-50	-200	0
<b>SUB-TOTAL</b>			<b>343</b>	<b>733</b>	<b>815</b>	<b>3,712</b>
<b>CLARENCE POINT</b>						
Denis Verdon	SF	Registered	4	5	3	24
Hunters Hollow	SF	Registered	4	5	5	17
Marc Guay	SF	under review	0	8	8	25
Regional Group CP	Mix	under review	0	100	250	1,500
Regional Group CP 50% adjust.			0	-50	-125	0
Pago Point			0	44	74	126
<b>SUB-TOTAL</b>			<b>8</b>	<b>112</b>	<b>215</b>	<b>1,692</b>
<b>CHENEY</b>						
Mike Paquette	SF	Registered phase 1Draft appd for 2& 3	2	5	5	21
Bourgone Lavigne	SF	Registered	11	5	3	19
Bourgone Lavigne Ph 2	SF	under review	0	4	5	14
2- 10 units appartement	Appt.	Approved	20	0	0	0
<b>SUB-TOTAL</b>			<b>33</b>	<b>14</b>	<b>13</b>	<b>54</b>

**CLARENCE - ROCKLAND**  
**GROWTH FORECAST - RESIDENTIAL UNITS**

Development - Site Plan Concept Plan based						Total At Build
Name	Type	Stage	2013-16	2017-21	2022-26	
<b>BOURGET</b>						
Yvon Lepage	SF	Registered	18	14	0	32
Yvon Lepage Laval St.	Semi	Severances	6	0	0	6
Andre Lavoie		Under review	0	10	10	20
<b>SUB-TOTAL</b>			24	24	10	58
<b>HAMMOND</b>						
JML	SF	Registered	28	31	0	69
<b>ST PASCAL-BAYLON</b>						
			2	0	0	0
<b>CLARENCE CREEK</b>						
Simard	SF	Application	0	15	22	72
CR Lands - Roxanne	SF	Registered	32	21	0	53
CR lands - 2nd phase	SF	under review	0	0	15	150
<b>SUB-TOTAL</b>			32	36	37	275
<b>RURAL</b>						
Ryans Ridge Baseline Rd.	SF	Under review	0	14	25	147
Other			49	60	60	0
<b>SUB-TOTAL</b>			49	74	85	147
			0	0	0	0
<b>Total Projected Units</b>			519	1,024	1,175	6,007

# The City of Clarence-Rockland - Future Development



## Legend

— Roads

## Development

### Project

Alain Carriere Caron

Alain Carriere Catherine

Bernard SansCartier @ Robert st

Brigil

CH Clement @ Golf Course

CH Clement @ Golf Course #2

CH Clement @ Nathalie

CH Clement @ st Jacques

CH Clement Caron

Devcore Catherine St.

Devcore Roger

Devcore South of County Rd

LODA Catherine

Marivo Rue Laurier

Michel Labreche (Albert)

Morris Village - SB Stage 3

Morris Village - SB Stage 4

Morris Village Stage 5

Regional Group County rd 17 parcel D

Sancor - Sanscartier

Spacebuilders - Caron

0 0.25 0.5 1 Kilometers



		City of Clarence-Rockland Non-Residential Development (Sq.ft.)							
	Commercial	2010	2011	2012	2013	2014	2015	2016	2017
1	Potvin	13,069							
2	Garage (Dufrense)	2,400							
3	River Rock Inn		8,396						
4	Abello		5,000						
5	ST Hubert		4,402						
6	Shell + Pop shoes +2 unts		7,534						
7	Valoris		3,661						
8	Marcil			500					
9	Rockland Ford			2,850					
10	Macs Convenience			3,498					
11	Shell for 3 units (Vasco, supercut & pet V			4,456					
12	Vision			1,000					
13	Shell for 2 units (bulk barn and the source			7,000					
14	Kennels			2,680					
15	Neree Lavictoire			78					
16	Snap Fitness				2,032				
17	Caisse Populaire				3,293				
18	2634 Joannis Road				5,478				
19	1854 Laurier Daniel Frigault optometry				4,499				
20	Mark's Store (Rockland Plaza 6)				8,611				
21	Speedy auto and oil changes shell permit				8,686				
22	Rona					24,014			
23	Retirement Home					62,704			
24	Residence St-Mathieu					5,411			
25	Ecole Carrefour Jeunesse						1,528		

		City of Clarence-Rockland Non-Residential Development (Sq.ft.)							
	Commercial	2010	2011	2012	2013	2014	2015	2016	2017
26	Pilon fastners store/warehouse							2,400	
27	G & M sales auto							720	
28	Lamarche Electrique office							5,478	
29	Residence Cartier							1,506	
30	Carefour Jeunesse								9,095
31	Macs Convenience reconstruct								5,616
32	Mr. Gas Bar and store								1,033
33	Mc. Donalds restaurant								172
34	Rockland Manor								48,362
Totals		15,469	28,993	22,062	32,599	92,129	1,528	10,104	64,278
								Average	33,395
								Median	25,528





## REPORT N° INF2017-044

<b>Date</b>	13/06/2017
<b>Submitted by</b>	Julien Lenhart, Asset Management Analyst and Dave Darch, Interim Director, Infrastructure and Planning
<b>Subject</b>	Corporate Asset Management Plan
<b>File N°</b>	<a href="#">Click here to enter text.</a>

### 1) **NATURE/GOAL :**

The purpose of this report is to provide a status update on the development of a corporate asset management plan and to secure Council's approval for the implementation strategy of same.

### 2) **DIRECTIVE/PREVIOUS POLICY :**

In 2014, the municipality developed an asset management plan which in effect recommended preparation of lifecycle cost analysis, levels of service and risk assessments for the City's asset base. These initiatives did not progress further.

As members of Council will recall, the current draft Strategic Plan has identified a need to strategically manage corporate assets. The development of a multiyear sustainable capital works programs (based on predictable funding for key infrastructure) is of paramount importance. Accordingly, the administration has placed a high priority on the development of these programs.

### 3) **DEPARTMENT'S RECOMMENDATION :**

**BE IT RESOLVED THAT** Committee of the Whole table this report in order to provide members of Council with an opportunity to review and ask questions of staff regarding the proposed corporate asset management program,

**AND BE IT FURTHER RESOLVED THAT** this report be presented to the August 9, 2017 Committee of the Whole meeting for formal approval by Council at its August 21, 2017 meeting.

**QU'IL SOIT RÉSOLU QUE** le Comité plénier présente ce rapport afin de donner l'occasion aux membres du Conseil d'examiner et de poser des questions au personnel concernant le programme de gestion d'actifs corporatif,

**QU'IL SOIT AUSSI RÉSOLU QUE** ce rapport soit présenté à la réunion du comité plénier du 2 août 2017 pour une approbation officielle par le Conseil lors de sa réunion du 21 août 2017.

4) **BACKGROUND :**

In November, 2016 staff presented a framework to Council for the development of a 10 year capital works program. Since that point in time, The Chief Administrative Officer has dedicated a staff resource to deliver an asset management program for the municipality's major assets. A great deal of work has been put into this initiative and, it is timely, to provide members of Council with a status report on the progress of the asset management program. The following section of this document will provide an overview of the principles of asset management, the analysis that has been completed to date and a comprehensive implementation strategy.

5) **DISCUSSION :**

**1.0 The Asset Management Cycle:**

The Province has in recent years placed a strong emphasis on the need for municipalities to have a viable asset management program. Submissions for provincial/federal funding for capital infrastructure intake programs will not be considered unless the project in question is identified as a municipal priority in its asset management program.

The provincial government has recently posted its proposal for a new regulation that would govern asset management planning in Ontario. The regulation would set out the content requirements for municipal asset management plans, and require municipalities to use proscribed policies and best practices and link their asset management planning with budgeting, operations, maintenance and other municipal planning activities. It will also require municipalities to report annually on the implementation of their asset management plan.

It is believed that the regulation will reinforce the steps required to develop an asset management program in keeping with the asset management process highlighted in Attachment 1. As depicted in this attachment, a municipal asset management program is a continuously evolving process and requires that new and rehabilitated infrastructure be incorporated into the plan so that the City can determine its priorities in keeping with desirable levels of service and sustainable funding allocations.

**2.0 Scope of Asset Management Plan:**

The municipality's asset management plan will ultimately address the following infrastructure:

- buildings/facilities; includes treatment and waste management facilities

- fleet and equipment
- roads and traffic control signals
- culverts and bridges
- underground services: sanitary and storm sewers, water mains
- park facilities: structures and parking lots
- libraries

In view of the extensive amount of analysis that is required to develop comprehensive asset management plans for each of the above assets, it will be necessary to develop a phased implementation strategy. Accordingly, this report will focus on roads traffic control signals, bridges and underground infrastructure (i.e. sewers and watermains). Section 9.0 of this report provides an overview of the proposed phase-in schedule for all the municipal assets listed above.

### **3.0 Replacement Values By Asset Class:**

Table 1.1 provides an overview of the replacement value of the assets under consideration as well as an assessment of their condition. In total, the replacement value of the assets summarized in Table 1.1 is approximately \$633,200,000.

<b>Table 1.1 Replacement Value By Asset Class</b>		
<b>Service Category</b>	<b>Replacement Value (\$M)</b>	<b>Overall Condition</b>
<b>Transportation Services:</b>		
Roads	\$ 432.60	64% fair & above
Traffic Lights	\$ 1.30	100% fair & above
Bridges	\$ 12.00	82% fair & above
Culverts	\$ 13.50	79% fair & above
Storm Sewers	\$ 26.00	95% fair & above
<b>Waste Water Service</b>		
Waste Water Sewer	\$ 12.90	95% fair & above
Pumping Stations	\$ 14.00	Fair to Bad
Treatment Plant	\$ 27.00	Good
<b>Water Service</b>		
Watermain	\$ 56.70	96% fair & above
Water Towers	\$ 6.00	Good
Water Plant	\$ 30.00	Good
Lift stations	\$ 1.20	Good
<b>Total</b>	<b>\$ 633.20</b>	

As a general comment, the majority of the City's road network is in fair better condition. This same comment can be made with respect to

bridges, culverts, and underground infrastructure. It should be noted, however, that the majority of the urban road network in older sections of the municipality have not received any form of rehabilitation for many years. A great percentage of these roadways have reached the point where full reconstruction would normally be required. Unfortunately, the cost of this intervention strategy is substantial and well beyond the financial means of the municipality to address all of these roadway needs in a timely manner. As such, it will be necessary to consider "bridging" intervention strategies (e.g. scratch coat overlays) to address these roads within existing funding levels.

#### **4.0 Lifecycle Analysis:**

##### **Roadways**

Staff has developed roadway deterioration curves for the City's collector and local road networks. Attachment 2 identifies the deterioration curve for a collector road network. Staff is proposing that a tolerable pavement condition index (PCI) of 35 be used to determine the type of intervention strategy and timing of same. The development of capital programs will be premised on the principle of "just-in-time" interventions. Roadways with a PCI lower than 35 theoretically would be subject to more severe and costly rehabilitation strategies. However, this approach is not been recommended by staff.

This phase of asset assessment will identify various intervention strategies taking into consideration their longevity, cost and timing. By doing this, staff will be able to determine the optimum strategy taking into consideration funding availabilities. Staff anticipates that the bulk of road rehabilitation needs can be addressed by incorporating a mill and pave strategy. The program will not be recommending any major reconstruction initiatives. As mentioned earlier, it will be necessary to consider bridging strategies to address these roadways.

##### **Underground Services**

The assessment of the City's water mains confirms that a very small percentage (4%) is cast-iron. This is very good and means that there is a limited need to replace existing pipe. A great percentage of our system is constructed with PVC which is good. The water main network is fairly new and in good condition.

Approximately 5% of the storm and sanitary sewer network is in poor condition-95% is in a good state of repair. Accordingly, there should not be any significant needs in the foreseeable future to initiate replacement of this infrastructure. The City has a proactive TV inspection and flushing program for the storm and sanitary sewers. All

sewers will be inspected in five-year cycles and is funded from the City's operating budget.

Generally speaking, culverts are in good condition although there is an identified need of \$2 million to replace critical culverts in the municipality.

## **5.0 Sustainable Funding:**

The funding of water main and sanitary sewer infrastructure is derived from annual contributions to reserves. The annual contributions are \$700,000 and \$134,000 respectively.

However, the greatest financial demand is for roads, drainage, storm sewer works, bridges and the City's share of development charge funded projects. In total, there is only approximately \$2.5 million available to address these needs.

Table 1.2 summarizes current levels of funding as of 2017 and the reserve balances for the assets under consideration.

<b>Table 1.2 Sustainable Funding</b>			
<b>Core Assets</b>	<b>Funding Source</b>	<b>Current Funding - 2017 (\$M)</b>	<b>Balance in Reserves as of 12-31-17</b>
<b>Transportation Services</b>	Road Reserve (PAYG)	\$ 1.14	\$ 0.20
<b>Waste Water Services</b>	Waste Water System	\$ 0.15	\$ 0.84
<b>Water Services</b>	Water System	\$ 0.70	\$ 1.56
	Grants	\$ 1.40	\$ -
<b>Total</b>		<b>\$ 3.39</b>	<b>\$ 2.60</b>

It should be noted that it is appropriate to fund more significant projects via debt financing; however, this should be used judiciously for larger cost projects such as bridge works. Staff believes that development of the asset management program should comprise a debt management policy for Council's approval.

It will be necessary to distribute the \$2.5 million to road resurfacing initiatives, drainage improvements and the city's share of development charge projects. Staff is recommending that approximately \$1.9

million of this amount should be allocated for road resurfacing initiatives-principally mill and paving. This does not leave reasonable funding allocations for drainage works (e.g. culverts, ditching programs, storm sewer improvements); bridges and the City's share of DC funded projects.

**Since annual sustainable funding availability will not meet the needs of the municipality, Council should give favorable consideration to adopting a policy that would increase the annual contribution to the roads reserve by at least \$100,000 per year over the next 5 years.**

With respect to provincial/federal grant programs, the City will continue to make applications for grants under these programs. The approval of any funding would allow projects to advance earlier than projected in the 10 year program. It should be noted; however, that the receipt of any grant funding will not be considered a sustainable funding source.

#### **6.0 Levels of Service/Current Performance:**

A key component in the development of the asset management plan (refer to Attachment 1) is to assess the current level and desired level of service for a given asset. Attachment No 3 identifies the service attributes of the asset and the current level of performance. This attachment addresses roads, wastewater and water services. The first column identifies the service attributes that matter to our ratepayers. The second column highlights both the current and proposed level of service for each asset category. This information is critical in developing relative priorities for the city's assets.

#### **7.0 Risk Assessment:**

Each asset will be subject to a risk assessment. Risk will be determined based on two components: the likelihood of a failure occurring and the consequence of such a failure. This analysis is principally confined to the roads, bridges and culverts base

Attachment 4 provides the matrices that have been used by staff to undertake the risk assessment for the City's roads, bridges and culverts. The Likelihood Table considers four (4) possible scenarios for asset failure. The Consequence Table considers 7 weighted categories in the assessment of roads. Lastly, these scores derived from the Likelihood Table and the Consequence Table are used to develop a ranking number (refer to the Ranking Matrix Table). The last table in this attachment takes the results derived from the former tables to establish an overall risk score.

The risk assessment analysis will take into account traffic volumes on the city's collector and local road network. Updated traffic counts have been secured for all of our collector roadways and 50% to 60% of the local roadway network. As well, the Department has an accurate assessment of the composition of traffic on our collector roadways (i.e. heavy trucks, buses etc.). Traffic volumes and composition play a key factor in the expected deterioration of a roadway.

## **8.0 Implementation Schedule:**

The completion of the aforementioned analyses will enable staff to develop a multiyear capital program based on sustainable and predictable funding allocations. As noted above, staff is recommending a staged implementation of municipality's asset management program in view of the significant amount of analysis that must be conducted for each asset.

The following provides members of Council with a recommended implementation schedule for those assets identified in Section 2 of this report:

Table Asset Management Status Report	June 19, 2017
Asset Management Status Report-Committee Approval	August 9, 2017
Asset Management Status Report-Council approval	August 21, 2017
Phase 1 - Roads, Bridges, Underground Infrastructure	
• Committee Approval-Phase 1 Asset Management Plan	September 6 2017
• Council Approval-Phase 1 Asset Management Plan	October 2, 2017
Phase 2 -Balance of Infrastructure	March, 2018
• Council Approval-Phase 2 Asset Management Plan	May, 2018
• Consolidated Asset Management Plan Approval	June, 2018

It is recommended that the draft versions of Phase 1 and Phase 2 of the asset management program be tabled for a minimum period of one month to enable members of Council to review the draft programs and ask questions of staff is appropriate.

6) **CONSULTATION:**  
N/A

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/A

8) **FINANCIAL IMPACT (expenses/material/etc.):**

The development of the corporate 10 year plan does not require any additional funding allocation. Staff involved in this process are funded from within their respective operating budgets. However, approval of multiyear plans will be of great assistance to staff in determining future capital programs and costs.

9) **LEGAL IMPLICATIONS :**

The approval of a 10 year asset management plan for the corporation's major assets will reinforce the City's commitment to addressing its infrastructure needs in a systematic and responsible manner. This will be important if the municipality is legally challenged to defend its infrastructure rehabilitation strategies.

10) **RISK MANAGEMENT :**

The determination of timely intervention strategies to address the municipality's infrastructure needs and will help mitigate the likelihood of asset failure and the consequences of such failure.

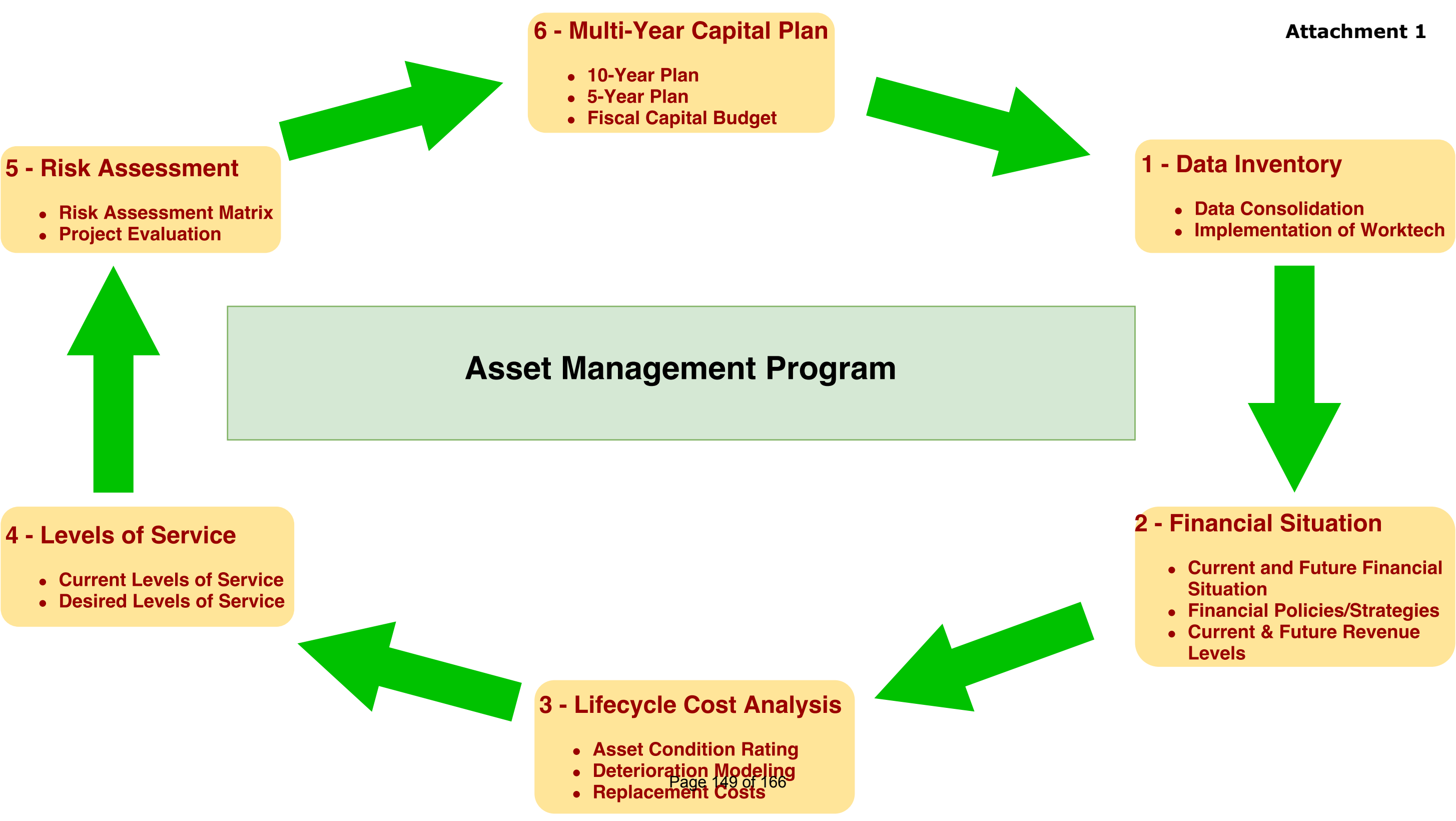
11) **STRATEGIC IMPLICATIONS :**

The approval and implementation of a 10 Year capital program represents the culmination of a key initiative by the municipality as highlighted in the draft Strategic Plan

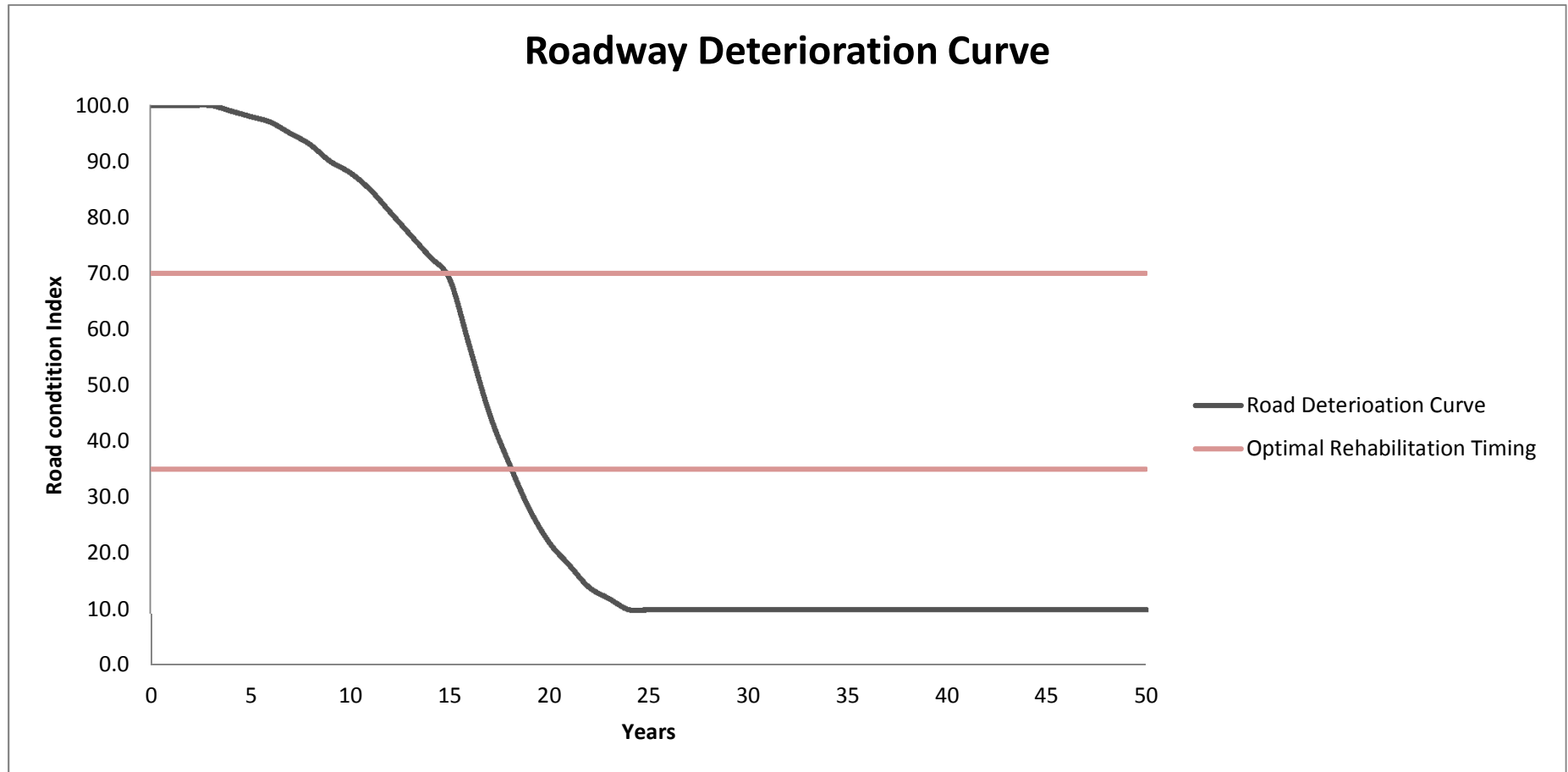
12) **SUPPORTING DOCUMENTS:**

- Attachment 1 - Asset Management Process
- Attachment 2 - Roadway Deterioration Curve
- Attachment 3 - Service Attributes
- Attachment 4 - Risk Assessment Matrices











## Transportation Service

Date updated: 13/06/2017

Completed by: Julien Lenhart

Note: this template links level of service and cost

Service Category:	Transportation	Annual service area budget:	
Assets providing services:	9.3km Asphalt collector roads, 143km Asphalt local roads, 1.3km Gravel collector roads, 97.7km Gravel local roads, 11 bridges, 7 traffic lights, 31km Sidewalk and paths, 2km		
Major asset components	Replacement value	Average expected remaining life	Condition
Roads	\$432,600,000		Good
Bridge	\$12,000,000		Very Good
Culverts	\$13,500,000		Good
Storm sewer	\$26,000,000		Good
Traffic lights	\$1,260,000		Good
Primary customer groups:	General public, Public transportation		
CUSTOMER LEVELS OF SERVICE			
Service attributes that matter to customers	Current performance	Desired performance (current)	Type of Adjustment Required
Quality - Roads and footpaths are well maintained.	64% of asphalt roads are maintained to a minimum PCI of 35 or above. Bridges are maintained to a minimum BCI of 45 or above.	Maintain	None
Reliability - Roads are opened reliably.	Unexpected road closures are rare, Collector roads have one lane opened at all times.	Maintain	None
Time Convenience - Traffic volumes/capacity ratio and wait times at intersections are convenient.	Traffic volumes/capacity ratio on collector roads level D 0.9.	Maintain	None
Health & Safety - Transportation network is safe to use.	Roads, bridges and traffic lights are routinely inspected to provincial standards (MMS).	Improve	Increase inspection frequency on roads that have a PCI of 35 or below and bridges that have a BCI of 45 or below.

Waste Water Service			
Date updated: 13/06/2017 Completed by: Julien Lenhart		Note: this template links level of service and cost	
Service Category:	Waste Water	Annual service area budget:	
Assets providing services:	50km Waste collection sewer, 4km Waste water trunk sewer, 5km force main, 8 Waste water pumping stations, 1 Waste water treatment plant, 822 Manholes		
Major asset components	Replacement value	Average expected remaining life	Condition
Sanitary sewer	\$12,900,000	28 years	Good
Pumping stations	\$14,000,000		Fair
Treatment plant	\$27,000,000		Good
Primary customer groups:	General public, Commercial, Institutional & Industrial		
CUSTOMER LEVELS OF SERVICE			
Service attributes that matter to customers	Current performance	Desired performance (current)	Type of Adjustment Required
Quality - Waste water service is designed and operates effectively.	Blocked sewers per Km/Year.	Maintain	None
Reliability - Waste water service is reliable.	Number of days sewer is over capacity per Km/Year.	Maintain	None
Time Convenience - Time taken to restore waste water services is convenient	100% of service interruptions are restored within 12 hrs.	Improve	Improve response time to restore service.
Health & Safety - Waste water service safely collects and treats waste water.	Waste water meeting MOECC requirements (% per year).	Improve	Capital investments required to continue meeting MOECC requirements

Water Service			
Date updated: 13/06/2017 Completed by: Julien Lenhart <span style="float: right;">Note: this template links level of service and cost</span>			
Service Category:	Water Service	Annual service area budget:	
Assets providing services:	142km Watermain pipe, 743 Fire hydrants, 1,637 Valves, 3 Water towers, 1 Water plant, 1 Lift station		
Major asset components	Replacement value	Average expected remaining life	Condition
Watermain pipes	\$56,800,000	28 years	Good
Water towers	\$6,000,000		Good
Water plant	\$30,000,000		Good
Lift station	\$1,200,000		Good
Primary customer groups:	General public, Commercial, Institutional & Industrial		
CUSTOMER LEVELS OF SERVICE			
Service attributes that matter to customers	Current performance	Desired performance (current)	Type of Adjustment Required
<b>Quality</b> - Water service is designed and operates effectively.	Main breaks per Km/Year	Maintain	None
<b>Reliability</b> - Water service is reliable.	Unmetered produced water/leak (%/year)	Maintain	None
<b>Time Convenience</b> - Time taken to restore waste water services is convenient	Service interruptions/boil water advisories (days in effect)	Maintain	None
<b>Health &amp; Safety</b> - Waste water service safely collects and treats waste water.	Produced water meeting MOE requirements (%/year)	Maintain	None





Consequence Table - ROADS						
Category	1	2	3	4	Weight	Notes
Operational Impacts	Requires semi annual monitoring or repair	Requires monthly monitoring or repair	Requires weekly monitoring or repair	Unable to maintain or operate OR repair requires greater than one week	0.6	Reactive operational effort above what is routine
Environment	Short term irritant (i.e. Dust)	Prolonged irritant (i.e. Dust) OR Aesthetic impact	Release of deleterious substances to environment (i.e. Hydraulic fluid, diesel fuel, etc.)	Release of deleterious substances to environment that result in a fine	0.8	O&G, fines to waterway, etc. Dust control Noise
Safety	Near miss	Minor injuries that do not require medical consultation	Injuries require medical consultation	Many people with major injuries OR fatality	1	Consider all road users - pedestrians, bikes, vehicular. Roads, lights, signs, etc.
Travel Time	Travel time is increased for a period of < 48 hours	Travel time is increased for a period of 48 hours - one month	Travel time is increased for period of one month - four months	Travel time is increased for period of > four months	0.6	
Affected Population	Short term access interruption <10 mins or less than 10 households/vehicles	Short term access interruption 10 min - 1 hour or less than 100 households/vehicles	Access interruption 1 - 24 hours or less than 1,000 households/vehicles	Service interruption to emergency services, more than 24 hours or more than 1,000 households/vehicles	0.8	If emergency services cannot access residences, goods and or other civic services. High weight. Assumption - no alternate route (if there is an alternate route, this is captured under Travel Time)
Service Delivery - Comfort	Minor decrease in ride comfort and increase in noise levels	Moderate decrease in ride comfort and noise levels. Obstructions visible but alteration in path and speed are not required.	Decreased speed required. Occasional alteration of path.	Frequently alter driving path. Vehicle damage. Major decrease in ride comfort and noise level	0.8	
Financial	<\$5k	>\$5k-\$100k	\$100k-\$1M	>\$1M	0.8	Reactive costs

Likelihood Table				
Likelihood	1	2	3	4
	Improbable	Possible	Likely	Almost Certain
	Could happen, but probably never will except under exceptional circumstances	The event might occur at some time as there is a history of this event occurring	There is strong possibility of this event occurring as there is a frequent history of occurrence	Very likely. Expected to occur in most circumstances.

Ranking Matrix					
Likelihood	Consequence				
		1	2	3	4
	1	1	2	3	4
	2	2	4	6	8
	3	3	6	9	12
	4	4	8	12	16

Risk Register - Roads

Assessment Scope		Roads		Note: Scores are given between 1 and 4 (lowest to highest). Each category holds a weighting from 0 - 1.								Consequence	Likelihood	Risk Treatment			
Date Last Modified:		13/06/2017										Weighted Consequence Score	Score	Risk Score	Current Mitigating Actions	Possible Mitigating Actions	General Notes
Number	Undesirable Event	Why?	Why?	Consequence - Notes	Operational Impacts	Enviro	Safety	Travel Time	Affected Population	Service Delivery - Comfort	Financial	Weighted Consequence Score	Score	Risk Score	Current Mitigating Actions	Possible Mitigating Actions	General Notes
					0.6	0.8	1	0.6	0.8	0.8	0.8						
1	Collector roads PCI below 35	Life cycle strategy not applied	Not applying asset management principals	It would have an impact on all risk categories.	4	0	1	4	4	4	4	15.40	4	61.60	Apply life cycle strategy and develop 10-year capital plan in accordance with asset management program.	Yearly inspection and condition assessment.	AMT requires training to perform yearly condition assessment.
2	Local roads PCI below 35	Life cycle strategy not applied	Not applying asset management principals	It would have an impact on most risk categories.	4	0	1	4	3	4	4	14.60	4	58.40	Apply life cycle strategy and develop 10-year capital plan in accordance with asset management program.	Yearly inspection and condition assessment.	AMT requires training to perform yearly condition assessment.
3	Collector road failure	Structural condition	Increased volume	Complete road closure	2	2	2	4	4	4	4	16.80	3	50.40	Yearly inspection and condition assessment.	Yearly traffic count of collector roads and intersections.	Most major underground infra. Is bellow collector roads
5	Gravel road failure	Designed as a rural road for minimal traffic			3	2	1	3	1	3	4	12.60	3	37.80	Regular grading of roadway.	Upgrade road surface when possible.	
8	Flooding urban road	Catch basin not draining	Sedimentation build up		4	2	0	0	4	0	2	8.80	4	35.20	AMT visits the site during all major rain events to monitor the site. Catch basins are cleaned more frequently where flooding occurs.	Subdivision design submissions should be carefully reviewed to ensure trap lows are properly placed and stormwater management is properly designed.	
9	Flooding rural road	Poor drainage, inadequate design	Standing water on either side of the roads - natural drainage is poor		4	3	0	3	0	0	2	8.20	4	32.80	AMT visits the site during all major rain events to monitor the site. More frequent monitoring.	Proactive ditch cleaning of problem areas.	A drainage study of drainage outlets is strongly recommended. Cleaning should always start at outlet.
6	Culvert road crossing failure	Structural failure			4	2	1	3	3	0	2	10.80	3	32.40	Annual inspection of road crossing culverts	Increase inspection of problem areas. Time replacement of CSP culverts with other activities.	
7	Bridge failure	Structural failure			4	1	1	3	4	0	4	12.40	2	24.80	Biannual inspection of bridge and culverts over 3m	Proactive maintenance.	Bridges are in a state of good repair.
4	Local road failure	Structural condition	Lack of funding		1	2	1	1	2	4	4	11.80	2	23.60	Yearly inspection and condition assessment.	Increase inspection of roads that have a PCI below 35.	Financially not possible to reconstruct the roads
10	Traffic light failure	Power outage	Accident or snowplow damage	It would have an impact on safety increased possibility of collision	2	0	2	1	4	0	2	8.60	2	17.20	Routine inspections (MMS) and maintenance.	Install bollards at problem areas.	
												0.00		0.00			



## REPORT N° FIN2017-026

<b>Date</b>	24/07/2017
<b>Submitted by</b>	Rob Kehoe
<b>Subject</b>	2018 Budget Timetable
<b>File N°</b>	F05 Budget

1) **NATURE/GOAL :**

To establish a budget timetable for 2018 budget.

2) **DIRECTIVE/PREVIOUS POLICY :**

N/a

3) **DEPARTMENT'S RECOMMENDATION :**

That Council approve the budget timetable as presented in Table 1 of Report no. FIN2017-026.

QUE le Conseil approuve le calendrier pour le processus budgétaire tel que présenté à la Table 1 du Rapport no. FIN2017-026.

4) **BACKGROUND :**

A budget timetable was presented in report FIN2017-014 Budget guideline on June 19, 2017 that contained some erroneous dates including week-end dates.

5) **DISCUSSION :**

The following dates in Table 1 are proposed for the 2018 budget deliberations. They provide sufficient time for public consultation and Council deliberation. It is planned that the budget discussion should take three days from November 7 to 9 after which the budget would be approved at the regular Council meeting of November 20. However, if additional time is required, November 15 and 16 have been set aside and an alternate budget approval date of November 27 is proposed.

<b>Table 1 - PROPOSED 2017 BUDGET TIMETABLE</b>		
Budget Guideline Report	<b>June</b>	
Operating budget workshop	<b>August</b>	
Capital budget workshop – 10 year plan - staff	<b>September</b>	
Draft budget book - Council	<b>October</b>	
Council deliberations (including Library Board and public presentations)	<b>November</b>	<b>7 (Tuesday), 8 (Wednesday), 9 (Thursday)</b>
(if required)		<b>15 (Wednesday), 16 (Thursday)</b>
Council approval	<b>November</b>	<b>20 (Monday) Regular meeting,</b>
(if required)		<b>27 (Monday) Special meeting</b>

6) **CONSULTATION:**

N/a

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

N/a

8) **FINANCIAL IMPACT (expenses/material/etc.):**

N/a

9) **LEGAL IMPLICATIONS :**

N/a

10) **RISK MANAGEMENT :**

N/a

11) **STRATEGIC IMPLICATIONS :**

N/a

12) **SUPPORTING DOCUMENTS:**

N/a



## REPORT N° FIN2017-022

<b>Date</b>	22/06/2017
<b>Submitted by</b>	Rob Kehoe
<b>Subject</b>	Clarence-Rockland Arena and the CIH Agreement – Ongoing financial difficulties
<b>File N°</b>	F05 GEN BUDGETS & ESTIMATES

1) **NATURE/GOAL :**

To ensure an ongoing viable operation of the Clarence-Rockland arena and that the communities needs are addressed in any negotiations.

2) **DIRECTIVE/PREVIOUS POLICY :**

CIHA agreement – By-law 2015-89  
Amendment By-law 2016-120

3) **DEPARTMENT'S RECOMMENDATION :**

**THAT the** Committee of the Whole directs staff to prepare an amending agreement to the CIH management agreement in order to reduce the fee from \$150,000 to \$100,000 for the fiscal years of 2017-18 and 2018-19, for Council's consideration; and

**THAT** the CIH operations be reviewed in one year for the purpose of reporting back to Council.

**QUE** le Comité plénier mandate le personnel à préparer une entente pour modifier l'entente de gestion de la CIH afin de réduire les frais de gestion de 150 000 \$, à 100 000 \$ pour les années fiscales de 2017-2018 et 2018-2019, pour la considération du Conseil; et

**QU'**une révision des opérations du CIH soit effectuée dans un an dans le but d'apporter un rapport au Conseil.

4) **BACKGROUND :**

The Clarence-Rockland arena was built in 2009 and has been managed by CIH since its inception under an informal agreement. A formal agreement was approved by Council in 2015 and amended in 2016 to reflect debt refinancing and other items identified below.

The City's original agreement with CIH required annual payments of \$208,000 representing a management fee. It has been used by the City to fund the outstanding loan for the arena. This management fee

was amended in 2016 to \$150,000 to reflect the reduction in the outstanding debt of the Clarence-Rockland arena related to debt refinancing, development charges funding and a rebate of \$170,000 from Hydro One.

As at December 31, 2016, the outstanding debt associated with the Clarence-Rockland arena is \$5.2 million.

5) **DISCUSSION :**

CIH have formally advised the City that they are having financial difficulties and have incurred financial deficits each year that have grown to about \$350,000 per year.

In addition, they have advised that the status quo cannot continue and that changes are required in order to ensure the financial viability of the arena operations.

The items in Appendix 1 have been identified by the CIH management as the principle reasons why the deficits have occurred. In summary, they include the management payment of \$150,000 that CIH pay the City, hydro rates, community events, hockey association hours and naming rights.

6) **CONSULTATION:**

Staff have met with CIH management on a number of occasions to better understand its financial difficulties.

7) **RECOMMENDATIONS OR COMMENTS FROM COMMITTEE/ OTHER DEPARTMENTS :**

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8) **FINANCIAL IMPACT (expenses/material/etc.):**

Subject to Council approval, the loss of \$50,000 in management fee will be included in the next financial status report and in the 2018 budget.

9) **LEGAL IMPLICATIONS :**

Staff have received legal advice from the City's solicitors.

10) **RISK MANAGEMENT :**

N/a

11) **STRATEGIC IMPLICATIONS :**

The Clarence-Rockland arena is a key strategic municipal asset that meets the recreation component of the City's strategic plan. Any changes to this agreement need to take into consideration the municipal programs that are being delivered through this agreement.

12) **SUPPORTING DOCUMENTS:**

Appendix 1 - CIH – Reasons for ongoing financial issues

### CIH – Reasons for ongoing financial issues

#### 1. CIH operational lease and major fund replacement payment of 150K per year

- It has become clear that arena operations cannot support such a payment without significantly raising the ice rates. Many factors, some from the very onset and others through the years have contributed to this issue but it is nevertheless the reality. As an example we know of managed arena facilities charging upwards of \$316/hr in order to allow them to cover a lease/major fund replacement payment. CIH are still at \$235\$/hr and this is under the purview of the City e.g. rates. This \$81 shortfall projected over 4000 rented hour's results in 324K in additional revenue. However, the market would likely not be able to bear such an increase. Therefore, other measures will be necessary.
- 
- Furthermore, repayment of 150K was highly dependent on secondary revenue such as a restaurant rental, more seats to entertain larger events but these were not approved in order to meet construction budget.

#### 2. Hydro rates

- Since the first year of operations hydro rates have skyrocketed. At the beginning, CIH was receiving some reductions but we were told we no longer eligible to receive these reductions or maybe even we were not supposed to get them, nevertheless hydro costs increased by well over 100K from the period of September 1<sup>st</sup> 2011 to August 31, 2012 in which we had costs of 240K. Again, nobody could have foreseen such an increase in rates. Again, this increase should have been reflected in ice rates because alone it represents a \$25/hr additional cost to CIH. Hydro rates may be frozen or even go down based on announcement made by the Ontario government but we can wait and see if the impact is sufficient. The City could agree to cover some costs should they exceed a certain amount. We are also open to have the City review and see if any efficiencies can be gained on the hydro utilization.

#### 3. Community Events

- CIH has continued to support community events, including the community tournament, allowing a significantly lower ice rental rate and allowing the tournament to keep all proceeds of food and



beverage sales. In normal circumstances, CIH would be more than happy to contribute to such initiatives but given the fact that it loses north of 350K/year, it is hardly justifiable. The City could alternatively decide to subsidize such events.

4. Flexibility of CIH of moving hours when revenue generating opportunity occur

- In the past, we have had opportunities to rent additional ice but it required moving some hours to make things fit. We have been unable to do so and we understand that the City may wish to back the community on certain matters, this is unfair to CIH when CIH is the ultimate responsible for any loss revenue opportunity.

5. Working with associations

- A couple of things may help on this front. First off would be starting at earlier times of weekends. This would allow CIH to sell hours during the day on weekends that would be much easier to sell. Although there has been progress on this front, more can be done. We also believe that some of the associations could consider reducing their own ice rental costs by simply splitting the ice (ei some games for younger kids would likely be better for all involved if they were played on a smaller surface, ei half ice)

6. Naming rights of the arena

- There is value in putting up a name on the arena and it is something we have entertained in the past but had to first wait to get the operational agreement signed and then to find the right fit for the right dollar. We think the City could consider to put it's name (or a name of their choice) for an annual fee, this would help cover part of the arena operations but also put an official name for the arena.

7. Ability to rent space not used or rental opportunities

- We have some rooms that are empty (ei community room) and other room upstairs (previous Chamber of Commerce) that could be rented out for additional arena revenue. In the past, we also had the opportunity to rent space for a kiosk from the United Counties but were refused. Again, we need the ability to explore all possible options and get the backing of council in order to try and remedy the situation.

8. All other possible options

- CIH is willing to entertain all options at this point that would not end in remitting the arena keys to the City.

## 9. Arena Management

- Should all else fail or the City wish to take back the arena, we have received some interest for other parties that would like to offer their services and we could put the City in contact with them.