

**1. BASELINE WOODROFFE STORMWATER MANAGEMENT POND CLASS
ENVIRONMENTAL ASSESSMENT**

**ÉVALUATION ENVIRONNEMENTALE DE PORTÉE GÉNÉRALE DU BASSIN
DE GESTION DES EAUX PLUVIALES SITUÉ À L'ANGLE BASELINE-
WOODROFFE**

COMMITTEE RECOMMENDATION

That Council approve the results of the Class Environmental Assessment Study for the Baseline Woodroffe stormwater management pond as detailed in Document 1 and direct staff to proceed with posting the Notice of Study Completion for a 30-day public review period in accordance with the *Ontario Municipal Class Environmental Assessment Schedule "B"* process.

RECOMMANDATION DU COMITÉ

Que le Conseil approuve les résultats de l'évaluation environnementale de portée générale visant le bassin de gestion des eaux pluviales Baseline-Woodroffe, comme l'expose en détail le document 1, et charge le personnel de diffuser l'avis d'achèvement d'étude pour une période d'examen public de 30 jours, conformément à la procédure de l'annexe « B » de l'Évaluation environnementale municipale de portée générale de l'Ontario.

DIRECTIONS TO STAFF:

That, prior to this matter being considered by Council at its meeting of Wednesday, 28 June 2017, staff respond, via memorandum to all members of Council to:

- 1) Provide a breakdown of:
 - the options that were considered, in addition to the one being recommended;
 - what costs were associated with each option, and;

- the respective net benefit of each option on water quality at the point where the outflow reaches the Ottawa River.
- 2) Provide a clear explanation of the necessity for the recommended option, along with an explanation of steps that can be taken to mitigate its impacts on the immediate environment and adjacent neighbours.

INSTRUCTIONS AU PERSONNEL

Que, avant que cette question ne soit étudiée par le Conseil lors de sa réunion du 28 juin 2017, le personnel réponde par note de service à tous les membres du Conseil afin de faire ce qui suit :

- 1) Fournir le détail :
- des options étudiées en plus de celle recommandée;
 - des coûts associés à chaque option;
 - des bénéfices nets de chaque option en ce qui concerne la qualité de l'eau à l'endroit où elle atteint la rivière des Outaouais.
- 2) Fournir une explication claire de la nécessité d'appliquer l'option recommandée et des mesures qui peuvent être prises pour réduire ses conséquences sur l'environnement immédiat et les quartiers voisins.

DOCUMENTATION/DOCUMENTATION

1. Director's Report, Infrastructure Services, dated 9 June 2017 (ACS2017-PIE-IS-0006)

Rapport du Directeur, Services de la planification, daté le 9 juin 2017
(ACS2017-PIE-IS-0006)

2. Extract of draft Minutes, Environment and Climate Protection Committee, 20 June 2017.

Extrait de l'ébauche du procès-verbal, Comité de l'environnement et de la protection climatique, le 20 Juin 2017

**Report to
Rapport au:**

**Environment and Climate Protection Committee
Comité de l'environnement et de la protection climatique
20 June 2017 / le 20 juin 2017**

**and Council
et au Conseil
28 June 2017 / 28 juin 2017**

**Submitted on June 9, 2017
Soumis le 9 juin 2017**

**Submitted by
Soumis par:
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Ward: COLLEGE (8) / COLLÈGE (8)

File Number: ACS2017-PIE-IS-0006

**SUBJECT: Baseline Woodroffe Stormwater Management Pond Class
Environmental Assessment**

**OBJET: Évaluation environnementale de portée générale du bassin de
gestion des eaux pluviales situé à l'angle Baseline-Woodroffe**

REPORT RECOMMENDATION

That the Environment and Climate Protection Committee recommend Council approve the results of the Class Environmental Assessment Study for the Baseline Woodroffe stormwater management pond as detailed in Document 1 and direct staff to proceed with posting the Notice of Study Completion for a 30-day public review period in accordance with the *Ontario Municipal Class Environmental Assessment Schedule "B"* process.

RECOMMANDATION DU RAPPORT

Que le Comité de l'environnement et de la protection climatique recommande au Conseil d'approuver les résultats de l'évaluation environnementale de portée générale visant le bassin de gestion des eaux pluviales Baseline-Woodroffe, comme l'expose en détail le document 1, et charge le personnel de diffuser l'avis d'achèvement d'étude pour une période d'examen public de 30 jours, conformément à la procédure de l'annexe « B » de l'Évaluation environnementale municipale de portée générale de l'Ontario.

EXECUTIVE SUMMARY

Assumption and Analysis

The Pinecrest Creek/Westboro Stormwater Management (SWM) Retrofit Study (P/W Study) is one of 17 separate projects that comprise the Council-approved Ottawa River Action Plan (ORAP). It identifies a long-term plan aimed at mitigating the historical impacts of development on the Creek and local reach of the Ottawa River, and was endorsed by City Council on October 26, 2011.

The Baseline Woodroffe SWM pond was identified as a priority project in the P/W Study. The proposed pond would be located at the northeast corner of Baseline Road and Woodroffe Avenue on National Capital Commission (NCC) property to treat approximately 435 hectares of primarily residential area that currently drain uncontrolled to the Creek.

NCC's conditional acceptance of the pond at this location, and of the position that it would compensate for the impacts of increased runoff from the Baseline station upgrades associated with implementation of Stage 2 Light Rail Transit (LRT), was

confirmed in 2014 after extensive consultation with the NCC and further study subsequent to the P/W Study.

The required Municipal Class Environmental Assessment study (Class EA study) for the pond has now been completed. The process included a detailed review of existing environmental conditions on the site, accounting for additional project specific considerations, and undertaking the required public consultation.

As the pond is required to support future Baseline LRT station works, detailed design and construction of the pond has been bundled with the Stage 2 LRT project.

Financial Implications

Funding to complete the detailed design and construction of the pond is available from 2015 SWM retrofit account 907484 and cost-shared funding provided in support of Baseline station improvements (Southwest Transitway account 906569).

Public Consultation/Input

Consultation efforts included a Technical Advisory Committee (TAC) consisting of City staff and agency representatives from the National Capital Commission (NCC), Ministry of Environment Climate Change (MOECC) and the Rideau Valley Conservation Authority (RVCA). The Algonquins of Ontario (AOO), Algonquins of Pikwàkanagàn, Kitigan Zibi Anishinabeg, and *Métis* Nation of *Ontario* were contacted to provide information on the project and provided opportunities for input.

The public were provided notice of opportunity for input through various means including mailing lists, newspaper advertisement and mail outs. The feedback received was primarily focused on public health and safety (potential for increase in mosquitoes, open water, location within the airport's bird hazard zone, and potential for basement flooding); consultation; and endangered species (butternut trees and Monarch butterflies). Risks have been assessed and managed, and required mitigation measures identified, as detailed in the report and supporting documents. With respect to consultation, moving forward, the implementation team will be as consultative as possible on pond design and construction, as well as being a pro-active good neighbour during construction with a dedicated Stage 2 stakeholder relations team. As noted, this project is being bundled with the Stage 2 project. The City/Stage2 implementation will

monitor the pond after construction for compliance with approvals and maintain the pond over its life, including undertaking mitigative measures as they arise.

With additional study and the public consultation completed as part of the Class EA, refinements have been made to the pond concepts and the study team has arrived at the preferred concept that satisfies the objectives and outcomes as set out for this project.

RÉSUMÉ

Hypothèse et analyse

L'Étude de modernisation de la gestion des eaux pluviales (GEP) du ruisseau Pinecrest/Westboro constitue l'un des 17 projets distincts faisant partie du [Plan d'action de la rivière des Outaouais \(PARO\)](#), approuvé par le Conseil. Elle définit un plan à long terme destiné à atténuer les répercussions historiques de l'aménagement du ruisseau et de la rivière des Outaouais dans lequel il se déverse, et a été approuvée par le Conseil municipal le [26 octobre 2011](#).

Le bassin de GEP Baseline-Woodroffe a été désigné comme projet prioritaire dans l'Étude de modernisation. Aménagé à l'angle nord-est du chemin Baseline et de l'avenue Woodroffe, sur un terrain de la Commission de la capitale nationale (CCN), il permettrait de traiter les eaux pluviales d'un secteur essentiellement résidentiel couvrant une superficie d'environ 435 hectares, des eaux qui s'écoulent actuellement sans aucun contrôle dans le ruisseau.

L'acceptation conditionnelle par la CCN de la construction d'un bassin à cet endroit, et du fait qu'il compenserait les répercussions du ruissellement plus important attribuable à la réfection de la station Baseline effectuée dans le cadre de la phase 2 du projet de train léger, a été confirmée en 2014, au terme d'une consultation approfondie auprès de la CCN et d'études menées après l'Étude de modernisation.

L'étude environnementale (ÉE) municipale de portée générale requise pour l'aménagement du bassin est à présent terminée. Ce processus comprenait un examen détaillé des conditions environnementales observées sur place, qui tenait compte de considérations supplémentaires propres au projet, et la réalisation de la consultation publique obligatoire.

Puisque ce bassin doit servir lors des travaux de la future station de TLR Baseline, sa conception détaillée et sa construction ont été liées à la phase 2 du projet de TLR.

Répercussions financières

Les crédits nécessaires pour permettre l'achèvement de la conception détaillée et l'aménagement du bassin sont disponibles dans le compte 907484 de 2015 pour la modernisation des installations de gestion des eaux pluviales et dans le financement à coûts partagés prévu pour les améliorations à la station Baseline (compte 906569 – Transitway sud-ouest).

Consultation publique et commentaires

Dans le cadre des initiatives de consultation menées, un comité consultatif technique a été créé. Il était formé d'employés de la Ville ainsi que de représentants de la Commission de la capitale nationale (CCN), du ministère de l'Environnement et de l'Action en matière de changement climatique, et de l'Office de **protection de la nature de la vallée Rideau**. Des représentants des Algonquins de l'Ontario (AOO), des Algonquins de Pikwàkanagàn, de la Première Nation des Kitigan Zibi Anishinabeg et de la Nation *Métis* de l'Ontario ont reçu de l'information sur le projet et ont pu faire part de leurs commentaires.

Les membres du public ont été avisés de la possibilité de recevoir de l'information à ce sujet par divers moyens, notamment des listes d'envoi, des annonces dans les journaux et des envois postaux. Les commentaires reçus portaient essentiellement sur la santé publique et la sécurité (risque d'augmentation du nombre de moustiques, eau libre, aménagement dans la zone de péril aviaire de l'aéroport et risque d'inondation des sous-sols), sur la consultation et sur les espèces en voie de disparition (noyers cendrés et monarches). Les risques ont été évalués et pris en compte, et les mesures d'atténuation requises ont été désignées, comme l'exposent en détail le rapport et les documents à l'appui. Au chapitre de la consultation, l'équipe de mise en œuvre s'appliquera dorénavant à être le plus consultative possible en ce qui concerne la conception et la construction du bassin, et à faire preuve de bon voisinage proactif lors des travaux de construction, grâce à une équipe de relations avec les intervenants au cours de la phase 2 du projet. Comme il a été souligné, le présent projet est regroupé avec le projet de l'Étape 2. La Ville et les responsables de la mise en œuvre de la phase 2 vérifieront la conformité du bassin après sa construction, en obtenant les

approbations nécessaires, et veilleront à son entretien tout au long de sa durée de vie, notamment en appliquant des mesures d'atténuation lorsqu'elles seront nécessaires.

Grâce à l'étude supplémentaire et à la consultation publique menées dans le cadre de l'ÉE de portée générale, des ajustements ont été apportés aux concepts du bassin et l'équipe chargée de l'étude a privilégié l'un d'entre eux, qui correspond aux objectifs et aux résultats attendus pour ce projet.

BACKGROUND

On February 24, 2010, Council adopted the Ottawa River Action Plan (ORAP). Two key objectives of ORAP are to maintain a healthy aquatic ecosystem, with a focus on addressing challenges presented by existing development and infrastructure; and optimize recreational use and economic development of the River, with a focus on reducing beach closures. To achieve these objectives, ORAP identified that the impacts of uncontrolled stormwater runoff must be addressed.

The Pinecrest Creek/Westboro Stormwater Management (SWM) Retrofit Study (P/W Study) is one of 17 separate projects that comprise ORAP. It identifies a long-term plan composed of a range of SWM retrofit capital projects, outreach efforts and monitoring aimed at mitigating the historical impacts of development on the Creek and local reach of the Ottawa River. The P/W Study was endorsed by City Council on October 26, 2011.

The Baseline Woodroffe SWM pond was identified as a priority project in the P/W Study. It is proposed at the northeast corner of Baseline Road and Woodroffe Avenue on National Capital Commission (NCC) property to treat approximately 435 hectares of primarily residential area that currently drain to Pinecrest Creek in an uncontrolled manner. This includes most of the area bounded by Woodroffe Avenue, Baseline Road, Merivale Road and the rail corridor and some additional area north of Baseline Road.

Document 2 provides a location plan of the proposed pond. Document 3 illustrates the total contributing drainage area to the proposed pond.

Additional consultation with NCC staff was undertaken following completion of the P/W Study. Discussions were related to the construction of a new storm sewer outfall required as a result of the (then) Baseline BRT station upgrades for the Southwest Transitway, and the need for a feasibility study of a pond that would offset the discharge

of station stormwater to Pinecrest Creek. The Baseline outfall was constructed in 2011 but has not yet been connected to the creek.

Further discussions with NCC led to the preparation of the Feasibility Study for a Surface Stormwater Management Facility at Baseline Road and Woodroffe Avenue, J.F. Sabourin and Associates Inc., June, 2015 (Feasibility Study). The draft results of this study, presented to NCC staff on March 26, 2013, demonstrated that implementation of the pond, located upstream of Baseline station, could compensate for the release of uncontrolled stormwater flows from the upgraded Baseline station and the new storm outfall. NCC staff provided an approval in principle of the pond, subject to the following conditions:

- that the cumulative effects of all anticipated major projects on the Pinecrest Creek corridor and adjacent NCC lands be investigated and addressed in a comprehensive manner;
- that the City commit to the implementation of retrofit measures beyond the “end-of-pipe” including retrofits within the right-of-way and at the lot level throughout the Pinecrest Creek subwatershed (as recommended in the P/W Study); and
- that it be demonstrated the proposed pond design will have significant positive environmental, visual and landscaping benefits for the open space corridor and will maintain a recreational pathway link through this area.

With NCC’s conditional acceptance of the SWM pond concept at Baseline and Woodroffe, the required Municipal Class Environmental Assessment (as amended 2011) (Class EA) for the pond was commenced in conjunction with the required cumulative impacts study.

Following the construction of the uncommissioned Baseline station outfall, preparation of the draft Feasibility Study (2013) and NCC’s conditional acceptance of the pond in 2014, Council approved the functional design of the Baseline LRT station in July 2015 and authorized staff to begin the procurement process for the Stage 2 LRT project. This included the extension of the Confederation Line west to Baseline and Bayshore stations. Council’s decision would result in direct conversion of Baseline station to LRT rather than remain a BRT station on an interim basis. As such, conversion of the station,

including the commissioning of the outfall built in 2011, became part of the Stage 2 LRT project.

DISCUSSION

The Pinecrest Creek/Westboro Stormwater Management (SWM) Retrofit Study (P/W Study) that was completed as a Master Plan under the Municipal Class Environmental Assessment (Class EA) process, identified a preferred SWM retrofit plan composed of multiple projects. Prior to implementation, individual infrastructure projects within the plan are required to complete additional Class EA requirements. For the Baseline Woodroffe pond, the Class EA process for a "Schedule B" undertaking has been followed, which requires the proponent to undertake a screening process with the public and relevant review agencies.

The P/W Study identified the problem of uncontrolled stormwater runoff and evaluated a range of stormwater management retrofit "scenarios" to address this problem. The scenarios were comprised of different combinations and amounts of SWM retrofit measures that manage runoff "on the lot," within the right-of-way, or at the "end-of-pipe." Six potential end-of-pipe locations were evaluated within five alternative retrofit scenarios, including:

- Do Nothing (existing conditions);
- Highest Practical SWM Implementation without End-of-Pipe Facilities;
- Highest Practical SWM Implementation with End-of-Pipe Facilities;
- Moderate SWM Implementation with End-of-Pipe Facilities; and
- Public Property Only SWM Implementation with End-of-Pipe Facilities.

The Moderate SWM Scenario with End-of-Pipe facilities was identified as the preferred scenario. This scenario included a pond at the northeast corner of Baseline Road and Woodroffe Avenue. NCC, as the landowner, was consulted about the potential to locate a pond on this parcel during the P/W Study and was supportive in principle, subject to the conditions noted previously.

Following completion of the P/W Study in 2011, the Feasibility Study (2015) was undertaken to provide further detail and confirm the NCC's support. The Feasibility

Study identified two pond concepts (“Option 1” and “Option 2”), both of which were designed to maximize water quality and quantity benefits within the space available. Subsequent to a review of these options, NCC confirmed their support for a pond on the site in 2014. The two pond options are illustrated in Document 4.

This Class EA study for the pond has built upon the work completed in the P/W Study and the Feasibility Study, includes completion of a detailed review of existing environmental conditions on the site, accounts for additional project specific considerations, and has undertaken the required public consultation. The Class EA process followed is documented in detail in Document 1 and public consultation efforts summarized in a subsequent section of this report.

Revised Preferred Pond Concept

Through the additional study and public consultation completed for this Class EA, refinements have been made to the pond concepts as summarized below. The revised preferred pond concept is provided in Document 5.

Connectivity: While Option 1 from the Feasibility Study was initially identified as the preferred concept, this would have required pedestrians to walk around the pond to cross the middle of the pond site. Existing “desire lines” bisect the site and students attending the adjacent St. Daniel’s School cross from Baseline Road to the back of the school. This resulted in a reconsideration of Option 2 with a pedestrian crossing of the pond included near the middle of the facility.

Species at Risk: One butternut tree was originally identified in the Feasibility Study. Additional study was completed in January, 2017 and 56 butternut trees (*Juglans cinerea*) have been identified in the area. Under the *Species at Risk Act* (S.C. 2002, c. 29), all butternuts found on federal property are protected, unless they are determined to be hybrid. Hybridity testing will be undertaken during detailed design to confirm the genetic status of the trees. As a precautionary approach, a 50-metre buffer will be applied to the single mature butternut (not a hybrid), and an appropriate buffer will be applied to all other true butternuts on site. The landscaping and pathway relocation originally proposed on the eastern portion of the site has been substantially reduced to avoid butternut tree impacts. While the relocated pathway and the pond grading may encroach on some of these buffers, appropriate mitigation techniques will be applied.

The existing open meadow areas provide habitat for the Monarch butterfly which is protected under the federal *Species at Risk Act* (SARA). The landscaping plan will include plants which have breeding and nectaring habitat opportunities such as milkweed.

- iii) Bird Hazard: The proposed pond is located at the extreme northern edge of the primary bird hazard zone of the Ottawa MacDonal Cartier International Airport (Airport). The Airport Zoning Regulation, enacted in 2010, includes the following Bird Hazard Clause:

- (6) No owner or lessee of land within the limits of the bird hazard zone shall permit any part of that land to be used for activities or uses attracting birds that create a hazard to aviation safety.

Document 6 illustrates the location of the proposed pond in relation to the primary bird hazard zone of the Airport.

Beacon Environmental, a wildlife management expert, was retained to complete a risk assessment and provide recommendations on the proposed pond concept, in relation to the airport's primary bird hazard zone. The following information is summarized from Beacon's memorandum, provided as an appendix in Document 1.

Risk Assessment:

- Gulls and Canada Geese represent the primary bird hazard that could be associated with the proposed pond.
- Though the pond is located within the Airport's primary bird hazard zone, it is located significantly distant (6.6 km) from Runway 14-32. As such, aircraft using this runway would be more than 1,000 feet above ground level when over the location the pond, whereas local bird movements are typically below 500 feet above ground level. The likelihood of a bird strike attributed to the existence of the pond is significantly reduced.
- The pond in this location does not pose a significant increase in the risk of a bird strike occurring for aircraft operating at the airport. To mitigate the potential for increased risk, the design of the pond must:

- avoid creating an attractive area for overnight roosting by gulls and geese which would result in daily bird movements to and from the pond occurring at a higher altitude with a larger number of birds; and
- ensure that it does not function as a highly attractive feeding and breeding site for gulls and geese as this could result in increased movements of a greater number of birds to the Airport lands, Rideau River, parks, golf courses and other SWM ponds that occur in the vicinity of the Airport.

Design Recommendations: The following table summarizes the design recommendations that will be integrated into the detailed design to mitigate the potential for increased risk of birds being attracted to the area.

Preferred Pond Design Features (Beacon Environmental)	Rationale for Design Feature	Initial preferred pond concept ("Option 1")	Revised preferred pond concept and detailed design direction ("Modified Option 2")
Narrow and linear pond; length to width ratio of 3:1 or greater	Geese prefer open water areas that provide sufficient physical distance from potential predators (circular or square in shape)	Meets criteria	Meets criteria
Permanent water surface area less than 2ha	Permanent water surface area of less than 2ha will generally support fewer birds	Permanent water surface area 2.7ha	Permanent water surface area to be reduced to less than 2.7 hectares (while still meeting other SWM objectives); area to be confirmed during detailed design

Preferred Pond Design Features (Beacon Environmental)	Rationale for Design Feature	Initial preferred pond concept ("Option 1")	Revised preferred pond concept and detailed design direction ("Modified Option 2")
Permanent pool depth of 2m or greater	To avoid creating feeding habitat	Forebay: 3m depth Cells 1 and 2: 1.5m depth	Cells 1 and 2 to be increased to 2m depth
Minimum 5m width of dense shrub planting around pond edge	To prevent geese from walking into pond; to prevent nesting opportunities along shoreline; to skew site lines of geese if they are within pond (making them feel less safe)	Mix of riparian plantings, tall grasses and rushes around pond edge	Continuous minimum 5m-wide band of riparian shrub planting to be provided
Permanent depth of 1m or greater at water's edge	To limit growth of emergent and submergent vegetation attractive to geese	3.5m wide flat bench around perimeter of pond with maximum permanent water depth of 0.3m	3.0m wide flat bench with maximum permanent water depth of 0.3m; mandatory to address public safety concerns; continuous 5m band of dense riparian shrub planting to mitigate lack of 1m water depth at pond edge
Minimize use of in-water berms;	In-water berms are attractive to	Wide peninsula with mix of riparian	Peninsula narrowed to 6-15m; "root wad"

Preferred Pond Design Features (Beacon Environmental)	Rationale for Design Feature	Initial preferred pond concept ("Option 1")	Revised preferred pond concept and detailed design direction ("Modified Option 2")
where required, use high steep banks with dense shrub planting on the berm	geese as nesting sites	planting and tall grasses and rushes	edge treatment added to create steep banks; dense riparian tree and shrub plantings on peninsula
No manicured areas on site (save for 1.5m mow strips along pathways)	Manicured area highly attractive to geese and gulls for feeding and "loafing"	Meets preferred criteria: all areas except mow strips will be reforested, meadow (tall grasses, wildflowers) or replanted with dense shrubs	Meets preferred criteria: all areas except mow strips will be reforested, meadow (tall grasses/wildflowers) or replanted with dense shrubs

In addition, the following monitoring and contingency recommendations were provided:

Monitoring: A two to three year monitoring program should be established. Baseline data is being collected in the 2017 breeding season and will also occur in the summer and fall prior to the pond being constructed. Following commissioning of the facility, monitoring will commence to establish bird numbers during the spring and fall migration period as well as summer breeding/feeding/loafing numbers, in comparison to the pre-pond condition.

Contingencies: In the event that the hazard level and associated risk to aircraft associated with the pond reaches an unsatisfactory level, contingency measures can be considered including:

- Design: Additional landscape hardening of pond shore; specific alternate landscape planting; and, over-wiring of the pond.
- Wildlife control: egg oiling; capture-release; and harassment (effigies/dogs, etc.).

City staff, Beacon Environmental and the Class EA study team met with staff of the Airport Authority and Transport Canada to present the results of the risk assessment, pond design recommendations, and monitoring plan/contingencies. Transport Canada is reviewing the recommended pond design and mitigation measures within the context of their mandate.

Funding

Funding to complete the detailed design and construction of the pond is available from 2015 SWM retrofit account 907484 and cost-shared funding provided in support of Baseline station improvements (Southwest Transitway account 906569).

RURAL IMPLICATIONS

There are no rural implications. The proposed pond, its drainage area and the watercourse to which it will outlet are all located within the urban boundary.

CONSULTATION

The purpose of the public consultation was to provide background information on the identification of the problem/opportunity and alternative solutions as identified in the 2011 Class EA Master Plan (P/W Study); provide stakeholders an opportunity to review potential environmental impacts; and solicit comments regarding the selection of the preferred pond option. Public consultation efforts included:

- i) Technical Advisory Committee (TAC): A TAC consisting of City and agency staff provided input and guidance on the direction of the work. The TAC included representatives from the NCC, Ontario Ministry of the Environment and Climate Change (MOECC), and the Rideau Valley Conservation Authority (RVCA). City business units included Stage 2 LRT (O-Train Planning), Transportation Planning, Asset Management, Construction Services, and Stormwater Management and Environmental Monitoring.

A separate meeting was held with NCC staff on June 28, 2016 to respond to comments from NCC's Internal Design Review Committee.

- ii) Aboriginal Communities: The Algonquins of Ontario (AOO), Algonquins of Pikwàkanagàn, Kitigan Zibi Anishinabeg and the Métis Nation of Ontario were contacted to provide information opportunities for input.

Points of contact with the public included:

- i) Online Information Session: This session was held from November 3, 2016 to January 16, 2017. A total of 98 responses to the online questionnaire were received.
- ii) Public Meetings: In response to the feedback received from the online information session, a public meeting was held on January 9, 2017. A total of 49 people signed in at this meeting. An additional public meeting was held on May 17, 2017 at which a total of 36 people signed in.

Comments received via the online information session and the January, 2017 public meeting are summarized and responses provided in Document 7. Comments received at the May 2017 public meeting are summarized in Document 8.

Notification was provided through a project mailing list compiled from previous studies and added to throughout the study, as well as newspaper advertisements, and mail outs.

Detailed documentation of the public consultation undertaken is provided in Document 1.

COMMENTS BY THE WARD COUNCILLOR

Councillor Chiarelli provided the following comments:

“After extensive community consultations, residents remain opposed to the pond and are troubled by the conflicting messages coming out of the project regarding the necessity of the pond and, more importantly, the potential benefit to the river and also consequences of not establishing a pond.”

LEGAL IMPLICATIONS

There are no legal impediments to the adoption of the recommendation in this report.

RISK MANAGEMENT IMPLICATIONS

There are risk implications related to constructing a wet pond within the primary bird hazard zone of the Airport. These risks have been identified and explained in the report and will be addressed during detailed design, monitored after construction of the pond, and managed on an on-going basis by the appropriate staff.

Negotiations are ongoing with NCC with respect to acquisition of the land interest. It is anticipated this will take the form of a long-term lease or easement.

ASSET MANAGEMENT IMPLICATIONS

The recommendations documented in this report are consistent with the City's Comprehensive Asset Management (CAM) Program (City of Ottawa Comprehensive Asset Management Program) objectives.

The Class Environmental Assessment Study for the Baseline Woodroffe stormwater management pond supports a forward looking approach to meet future challenges, including legislative and environmental factors. Operation, maintenance and capital renewal works associated with the proposed pond are consistent with existing practices. The anticipated ongoing operation, maintenance and future renewal costs will be captured as part our budget updates, Long Range Financial Plans and Asset Management Plans.

FINANCIAL IMPLICATIONS

Funding to complete the detailed design and construction of the pond is available from 2015 SWM retrofit account 907484 and cost-shared funding provided in support of Baseline station improvements (Southwest Transitway account 906569).

ACCESSIBILITY IMPACTS

The relocated pathways and pedestrian crossing of the pond will be designed and built in accordance with the City's Accessibility Design Standards, 2nd Edition, November 2015.

ENVIRONMENTAL IMPLICATIONS

The proposed pond will improve the health of Pinecrest Creek and the local reach of the Ottawa River by providing water quality treatment of some 435 hectares of existing residential development; mitigating ongoing erosion in the creek; and providing some flood control benefits for the Sir John A. MacDonald Parkway below Carling Avenue.

Construction of the pond will have to comply with all applicable regulations and legislation. Required permits and approvals will be confirmed during detailed design but will likely include:

- i) Federal Land Use and Design Transaction Approval: NCC approval will be required as the pond is located on federal lands in Canada's Capital Region (*National Capital Act*). The NCC has been closely consulted throughout the study.
- ii) Federal Environmental Effects Evaluation: The NCC will require an Environmental Effects Evaluation to ensure that the project will not cause significant adverse environmental effects before a Federal Land Use and Design Transaction Approval (FLUDTA) will be issued.
- iii) *Fisheries Act* Approval: A Self-Assessment will be required to determine if an authorization from the Department of Fisheries and Oceans will be required.
- iv) Environmental Compliance Approval: An Environmental Compliance Approval per the *Ontario Water Resources Act* will be required.
- v) *Species at Risk Act*: The *Species at Risk Act* provides automatic protection to species classified as endangered, threatened, or extirpated on federal lands. Butternut trees are endangered and protected under this *Act*, unless determined to be hybrid. Hybridity testing will be undertaken for all butternut trees that could be affected by the pond construction.
- vi) Development, Interference with Wetlands, and Alternations to Shorelines and Watercourses Permit: Pinecrest Creek is within the jurisdiction of the Rideau Valley Conservation Authority (RVCA). As a federal agency, NCC is not subject to RVCA's regulation but typically works with RVCA to address the intent of the regulation as a matter of policy.

TERMS OF COUNCIL PRIORITIES

Implementing the pond will further the Term of Council priorities of providing Sustainable Environmental Services (ES1) and meeting the City's transportation needs by ensuring that the Stage 2 LRT Confederation Line Baseline Station can open on schedule (TM3).

SUPPORTING DOCUMENTATION

Document 1 Baseline Woodroffe Stormwater Management Pond Class Environmental Assessment (June 2017) *(held on file with City Clerk)*

Document 2 Location Plan

Document 3 Drainage Area to Pond

Document 4 Feasibility Study Pond Concepts

Document 5 Preferred Pond Concept

Document 6 Pond Location in Relation to OMCIA Primary Bird Hazard Zone

Document 7 Summary of Comments from Online Information Session and January 2017 Public Meeting *(held on file with City Clerk)*

Document 8 Summary of Comments from May 2017 Public Meeting

DISPOSITION

Should Committee and Council approve, the Baseline Woodroffe Stormwater Management Pond Class Environmental Assessment study report will be made available to the public for a 30-day review period in accordance with the Ontario Municipal Class Environmental Assessment Schedule "B" process.

City staff will ensure the required design recommendations to discourage geese and gulls from frequenting the pond are incorporated in the detailed design of the pond, undertake the recommended monitoring, and further develop potential contingency measures.

City staff will oversee completion of the ongoing cumulative impact assessment of the proposed pond, transit projects, additional SWM retrofit projects and projected future

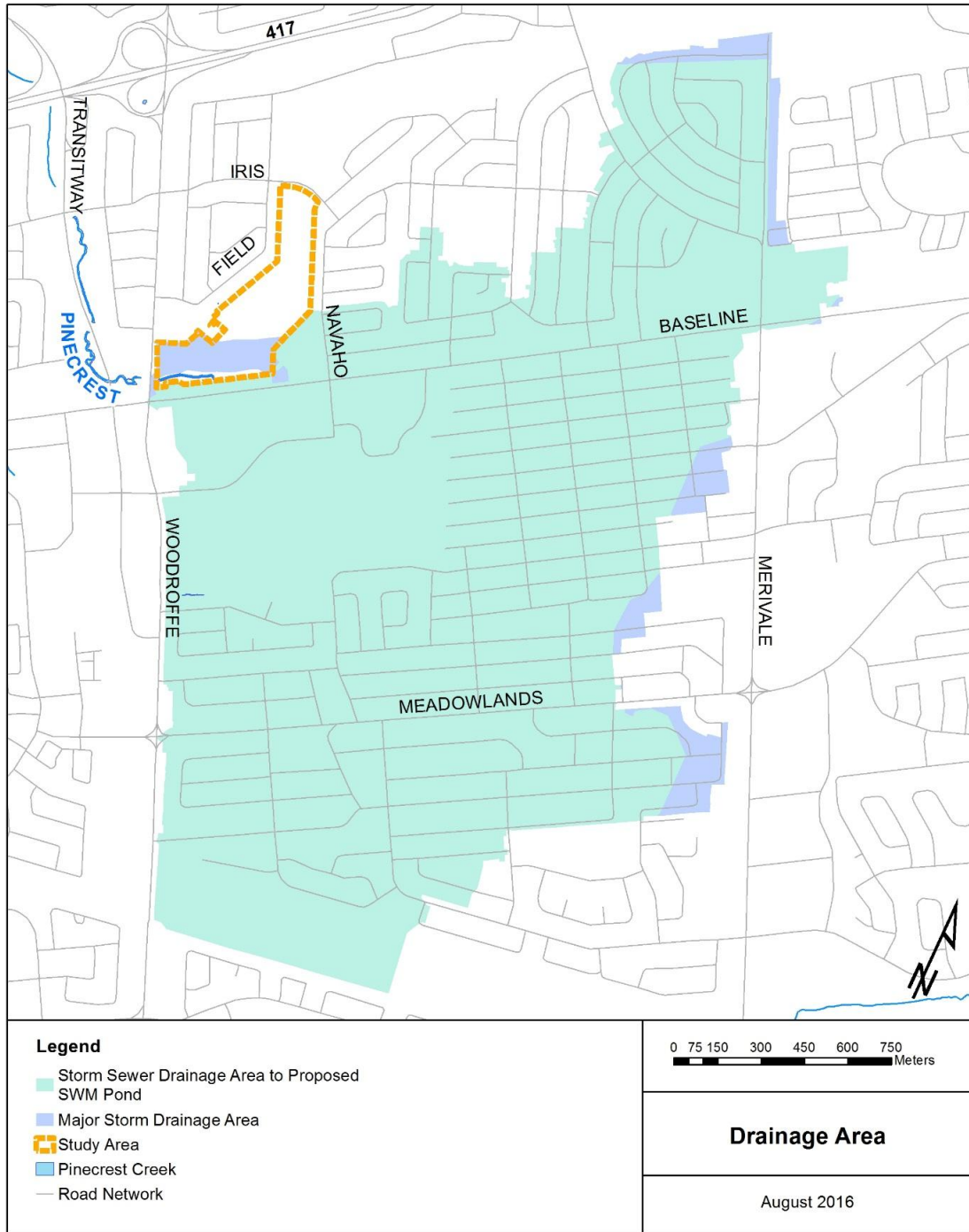
infill and redevelopment on the Pinecrest Creek corridor in fulfillment of NCC's condition for final approval of the pond.

Stage 2 staff will be responsible for managing the design and construction of the pond, ensuring the EA commitments are implemented, obtaining the necessary approvals for the pond, and managing the "bundling" of the project as part of the Confederation Line West project procurement process.

Document 2 – Location Plan



Document 3 – Drainage Area to Pond



Document 4 - Feasibility Study Pond Concepts



Option 2

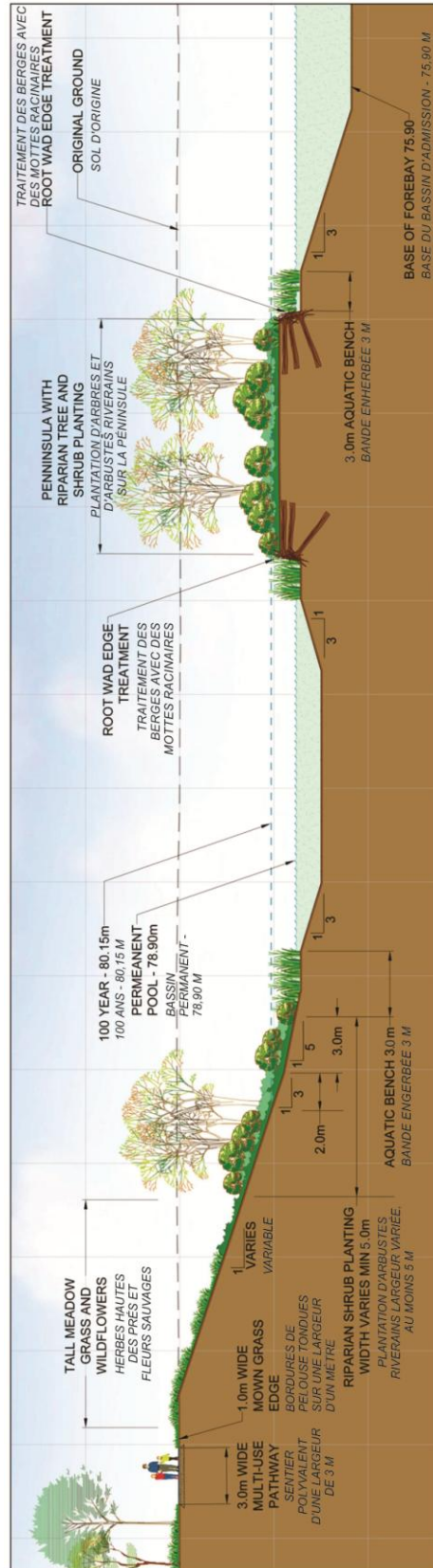


Originally prepared for the Feasibility Study for a Surface Stormwater Management Facility at Baseline Road and Woodroffe Avenue, 2015
Préparé à l'origine pour l'étude de faisabilité pour l'installation de gestion des eaux pluviales de surface du chemin Baseline et de l'avenue Woodroffe, 2015

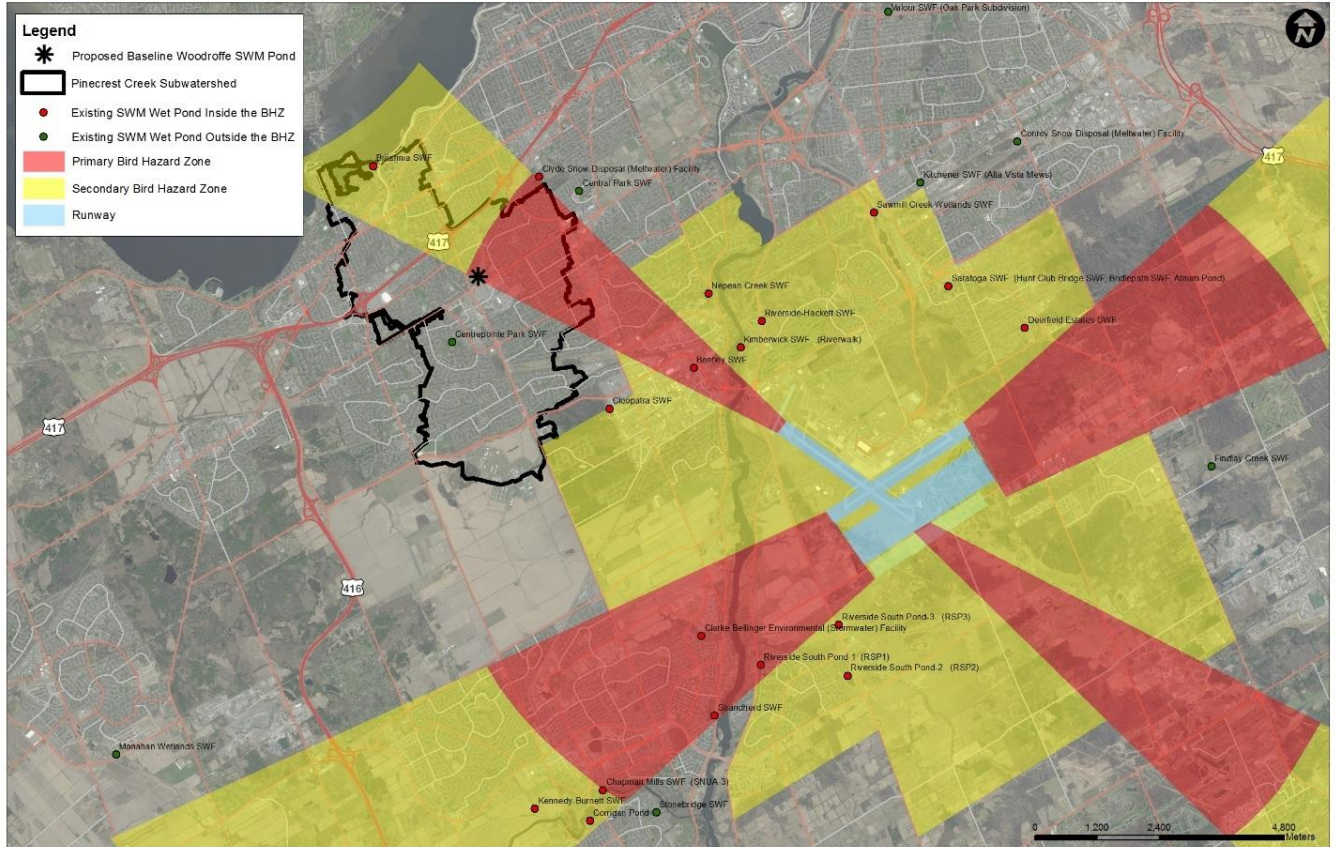


Document 5 – Preferred Pond Concept





Document 6 – Pond Location in Relation to OMCIA Primary Bird Hazard Zone



Document 8 – Summary of Comments from May 2017 Public Meeting

Baseline Woodroffe Stormwater Management Pond Class Environmental Assessment

Public Meeting #2

May 17, 2017

Summary of public comments and responses:

Major themes heard from the public included safety around the pond (particularly with children in the winter), the airport hazard zone/risk of bird strikes, and a potential increase of mosquitoes. Questions were raised around pond performance and water quality, sediment dredging and odour.

Responses to key concerns and questions raised by the public were provided and are summarized below:

- **Pond Performance:** The pond is required to improve water quality, reduce erosion and flooding in Pinecrest Creek from existing development upstream of Baseline and to mitigate the runoff impacts of the future Baseline LRT Station. Incremental benefits may also be realized downstream at the Ottawa River. The pond is anticipated to achieve 70 per cent to 80 per cent removal of total suspended solids.
- **Public Safety** - An East-West pathway connection will cross the pond providing a safe, direct and clearly defined route across the site. Although the existing pathways are not cleared of snow in the winter, a request was made to maintain the pedestrian crossing of the pond in winter so that pedestrians would be clearly directed to cross in this location. Signage and thick dense plantings around the pond will help discourage anyone from accessing the pond. A submerged, shallow aquatic bench will be provided around the perimeter of the pond to reduce the risk of falling into deep water. A request was made to provide a safety barrier/fence to “funnel” or direct pedestrians/school children to the crossing and further discourage crossing the frozen pond surface in winter.
- **Bird Hazards** - In response to the risk that the project could attract geese/gulls to areas within the Airport’s bird hazard zone, the City retained a wildlife

management expert to assess the risk and provide design recommendations to discourage geese/gulls. The risk assessment indicates no significant increase in risk given the pond location and relative elevation of birds and airplanes at this location. Design features include a long linear pond, tall and dense plantings, and minimal manicured areas. Monitoring will be ongoing, and contingencies such as egg oiling/addling implemented if necessary. Clear signage will help deter the public from feeding the birds.

- **Mosquitoes** - The pond will have sufficient wind and water movement over much of the pond surface that will help limit mosquitoes. An increase in mosquitoes is not anticipated based on the experience with many other wet ponds in the City. However, should mosquitoes become a concern, larvicide would be applied. A concern was raised that local residents might have to pay for the application of larvicide but it was confirmed there would not be additional charge to local residents.
- **Maintenance** - Approximately once every 10 years the sediment in the forebay will be dredged in winter. The sediment will be stored on site to dry and then either trucked away for disposal or regraded and reseeded on site. Odours should not be an issue as a result of winter dredging due to frozen conditions. The anticipated sediment loading and accumulation was requested by one resident and these numbers will be provided.
- **Underground Storage** – A number of attendees inquired about switching from a wet pond to underground storage. This was not an option given the cost to construct an underground tank to achieve the same benefits as the wet pond would be \$10's of millions more than the cost of the wet pond.
- **Location of Meeting** – It was commented that the meeting location was too far outside the community and closer locations (St. Daniel's school) should have been considered. Lack of other available sites was the reason for having the meeting at St. Paul's school, which is approximately 3 km from the proposed pond location.