

**7. KENNEDY-BURNETT STORMWATER MANAGEMENT FACILITY
ENVIRONMENTAL ASSESSMENT AND FUNCTIONAL DESIGN STUDY**

**ÉVALUATION ENVIRONNEMENTALE ET ÉTUDE DE CONCEPTION
FONCTIONNELLE DE L'INSTALLATION DE GESTION DES EAUX
PLUVIALES KENNEDY-BURNETT**

COMMITTEE RECOMMENDATION

That Council approve the results of the Class Environmental Assessment Study for the Kennedy-Burnett Stormwater Management Facility Project, as detailed in Document 1, and direct staff to proceed with filing 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 du projet d'installation de gestion des eaux pluviales Kennedy-Burnett, comme l'explique en détail le document 1, et de demander au personnel de publier l'avis d'achèvement de l'étude en vue de la période d'examen public de 30 jours, conformément au processus de l'annexe « B » de l'Évaluation environnementale municipale de portée générale de l'Ontario..

DOCUMENTATION/DOCUMENTATION

1. Director's report, Planning Services, Planning, Infrastructure and Economic Development Department, dated 13 June 2017 (ACS2017-PIE-PS-0031)

Rapport de la Directrice, Service de la planification, Direction générale de la planification, de l'infrastructure et du développement économique, daté le 13 juin 2017 (ACS2017-PIE-PS-0031)

2. Extract of draft Minutes, Planning Committee, 27 June 2017

Extrait de l'ébauche du procès-verbal, Comité de l'urbanisme, le 27 juin
2017

**Report to
Rapport au:**

**Planning Committee / Comité de l'urbanisme
June 27, 2017 / 27 juin 2017**

**and Council / et au Conseil
July 12, 2017 / 12 juillet 2017**

**Submitted on June 20, 2017
Soumis le 20 juin 2017**

**Submitted by
Soumis par:
Alain Gonthier,
Director / Directeur**

**Infrastructure Services / Services de la planification
Planning, Infrastructure and Economic Development Department / Direction
générale de la planification, de l'infrastructure et du développement économique**

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Ward: BARRHAVEN (3)

File Number: ACS2017-PIE-IS-0007

**SUBJECT: Kennedy-Burnett Stormwater Management Facility Environmental
Assessment and Functional Design Study**

**OBJET: Évaluation environnementale et étude de conception fonctionnelle
de l'installation de gestion des eaux pluviales Kennedy-Burnett**

REPORT RECOMMENDATION

That the Planning Committee recommend Council approve the results of the Class Environmental Assessment Study for the Kennedy-Burnett Stormwater Management Facility Project, as detailed in Document 1, and direct staff to proceed with filing 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'urbanisme recommande au Conseil d'approuver les résultats de l'évaluation environnementale de portée générale du projet d'installation de gestion des eaux pluviales Kennedy-Burnett, comme l'explique en détail le document 1, et de demander au personnel de publier l'avis d'achèvement de l'étude en vue de la période d'examen public de 30 jours, conformément au processus de l'annexe « B » de l'Évaluation environnementale municipale de portée générale de l'Ontario.

BACKGROUND

The Kennedy-Burnett Stormwater Management (SWM) Facility was constructed in 1976. The facility receives runoff from approximately 200 hectares of predominantly residential lands north of Strandherd Drive, along with a portion of commercial development in the Barrhaven Town Centre. As a result of a design that pre-dates current Ministry of Environment and Climate Change (MOECC) standards, the facility is undersized for the existing catchment and has difficulty achieving current effluent water quality objectives. The location of the Kennedy-Burnett SWM Facility is shown on Document 2.

The South Nepean Urban Area has been undergoing significant urbanization, and, as a result, the City has undertaken studies to address how storm water drainage from the subwatershed will be managed. Two studies that have addressed Master Servicing and Subwatershed Planning for the area are the South Nepean Urban Area Master Servicing Study – Environmental Study Report (J.L. Richards & Assoc. Ltd., 1997), and the Jock River Reach One Subwatershed Study (Stantec 2007). Both studies recommended a SWM plan to address both existing and future development lands in the area.

CH2M Hill Canada Ltd. (CH2M) was retained by the City to assist in the preparation of a Municipal Class Environmental Assessment (EA) and Functional Design for the expansion and retrofit of the existing Kennedy-Burnett SWM Facility. The expansion of the existing facility is required to achieve current MOECC 'Enhanced Level' treatment (80 per cent total sediment removal) for existing and future developments within its catchment area.

This report summarizes the Class Environmental Assessment (EA) for the Kennedy-Burnett SWM Facility and adjustments to the planned stormwater services for future development lands in the area.

DISCUSSION

The City retained CH2M to complete the Class EA and Functional Design Study for the expansion and retrofit of the Kennedy-Burnett SWM Facility. Given the potential implications to development servicing plans in the area, owners of vacant development land retained Novatech Engineering Consultants Ltd. (Novatech) in 2013 to represent their interests. Novatech was responsible for coordinating the input from local land developers and for developing storm servicing options for the vacant lands adjacent to the facility.

The Class EA process for a "Schedule B" undertaking has been followed. The proponent of a Schedule B project is required to undertake a screening process involving mandatory contact with the public and relevant review agencies.

The coordinated studies produced three main storm servicing options for the treatment of stormwater from new developments adjacent to the facility. For all options, the Kennedy-Burnett facility would continue to receive drainage from existing contributing areas. These options are described below:

- Option 1: Drainage from all new development conveyed to expanded Kennedy-Burnett SWM Facility for treatment.
- Option 2: Drainage from all new development conveyed directly to the Fraser-Clarke Drain and Jock River. Water quality treatment chambers would provide enhanced level of treatment before discharge to the receiving streams.
- Option 3: Drainage from approximately 45 ha of new development conveyed to the expanded Kennedy-Burnett SWM Facility. Installation of oil/grit separators on each storm outlet draining to the facility would be used to

remove sediment and debris before discharging to the pond for enhanced treatment. Flows from the remaining vacant lands conveyed to the Fraser-Clarke Drain and Jock River with water quality treatment chambers designed to provide enhanced level of treatment.

Stormwater quantity measures would be required for all areas draining to the Fraser-Clarke Drain. Stormwater quantity measures would not be required for areas draining to the Kennedy-Burnett SWM Facility and Jock River because they would provide no benefit.

The combined input of local land developers was reflected in the recommended options in the Novatech report, which provided a framework for CH2M to develop potential upgrade options for the SWM Facility. CH2M conducted additional hydraulic and hydrologic studies based on the Novatech servicing options to assess the facility upgrades, particularly from a water quality perspective. In conjunction with the City and other stakeholders, CH2M identified alternatives for the expansion of the facility based on the servicing options listed above.

A 'Reasoned Argument' evaluation methodology was used to identify a preferred option based on the relative advantages/disadvantages of each concept, in consultation with the City and project stakeholders. The following five evaluation criteria categories were developed and used to select the preferred option: natural environment, social environment, technical, planning and economic.

The recommended alternative for local storm servicing and the expansion of the Kennedy-Burnett SWM Facility is Option 3. The preferred configuration is shown on Documents 3 and 4. The benefits of this alternative can be summarized as follows:

- Provides 80 per cent long-term removal of total suspended solids from storm water runoff;
- Minimizes the length of sewers that would be permanently submerged with water and associated operations and maintenance issues;
- Avoids reductions to the level of service for existing development areas;
- Maximizes use of the available SWM facility footprint within City of Ottawa owned lands; and
- Establishes a practical framework to facilitate the development of lands adjacent to the facility.

Preliminary and detailed design of the facility will follow the completion of the Class EA process. Construction is expected to be initiated in 2019.

The total Class C capital cost estimate for the facility expansion, including infrastructure needs within the SWM block, is \$12.96 million (2016 dollars) which includes engineering, contingencies and related City costs. The capital requirement for this project was identified in the City's rate budget forecast (903324) and will be updated in the 2018 budget process.

The preferred plan requires that a small new stormwater facility on Minto lands be constructed to provide water quality, quantity and erosion control to approximately 15 hectares of existing and future areas naturally draining to the Fraser-Clarke Drain. Minto and Tartan will enter into a cost sharing agreement to pay for the new pond.

Staff have reviewed this proposal and have determined that it is consistent with the 2014 Provincial Policy Statement.

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

Public and agency consultation is a key element of the Class EA process. Key stakeholders contacted during the project include the following:

- Technical Advisory Committee comprised of representatives from various City Departments and the Rideau Valley Conservation Authority.
- Provincial and Federal Governmental Agencies.
- Ward Councilor.
- Local Community Associations.
- Utility Companies and School Boards.
- Algonquins of Ontario Consultation Office.
- Métis Nation of Ontario Head Office.
- Land owners.

- General public.

Various forms of communication were utilized in this study to keep the public and stakeholders informed of progress and decisions. The key points of public contact were:

- A Public Information Website was developed and made available for review at the project onset. Interested parties were encouraged to provide comments to the project team regarding the materials presented on the website.
- Publication of Notice of Study Commencement (May 15, 2015).
- Letters sent to all stakeholders informing them of the project initiation, a public information session, and recommended alternative.
- Stakeholders were invited to a Public Open House, held on March 21, 2016 at the Walter Baker Sports Centre from 5:30 to 8:30 pm. The purpose of the open house was to allow participants to learn of the preferred alternative for storm servicing and expanding the facility, and provide them with the opportunity to speak with the project team. Display boards were used to outline the: Municipal Class EA process; project purpose; opportunities and constraints; the alternative solutions; evaluation criteria for determining the preferred alternative; describe the recommended servicing option; and next steps.

A total of 26 individuals attended the open house and signed the attendance register. The majority of questions received during the open house were from land owners and the consulting firms representing the land owners.

In general, stakeholders (with one exception) and the public either support or do not object to the findings of this EA study. Comments received from one landowner throughout the consultation process involved the location of the stormwater expansion, sediment management area and future roadway located within their property (3285 Borrisokane Road). The City's response to these comments are summarized below:

- The preferred location of stormwater management related works at 3285 Borrisokane Road was identified in past master servicing, subwatershed and planning studies. All surrounding vacant lands within the South Nepean Town Centre Community Design Plan and Area 8 Secondary Plan have been zoned for residential and commercial use. This EA study has identified measures to minimize the amount of private property needed at 3285 Borrisokane to satisfy the MOECC water quality requirements by deepening and expanding the existing

facility within City-owned lands and by reducing the ultimate catchment area serviced by the facility.

- All roadways crossing the SWM facility have been identified in the Council-approved South Nepean Town Centre Community Design Plan (2006).

COMMENTS BY THE WARD COUNCILLOR

Councillor Harder is aware of this report.

LEGAL IMPLICATIONS

There are no legal impediments to approving the recommendations contained in the report.

RISK MANAGEMENT IMPLICATIONS

Implementation of this project will eliminate the risk of contaminating the Jock River by treating stormwater from existing and future developments.

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 Kennedy-Burnett Stormwater Management Facility 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

The total Class C capital cost estimate for the facility expansion, including infrastructure needs within the SWM block, is \$12.96 million (2016 dollars). The total existing and forecasted budget for this project is \$10,353,000 (903324 Kennedy Burnett SW Pond); of which \$1,000,000 is existing authority and \$9,353,000 is identified in the 2018

forecast. The 2018 requirement will be updated and brought forward through the budget process for Council consideration.

ACCESSIBILITY IMPACTS

There are no accessibility implications associated with this report.

ENVIRONMENTAL IMPLICATIONS

The proposed SWM facility expansion and servicing plan will provide water quality treatment to future development lands and improve water quality treatment to existing development areas that are tributary to the facility.

Construction activities will take place in the urban area of Barrhaven just south Strandherd Drive directly west of the Barrhaven Town Centre.

The assessment of environmental impacts associated with this project has been completed. The assessment indicates that with the incorporation of mitigation measures identified in this study, the Kennedy-Burnett SWM Facility project will not create any significant negative environmental impacts.

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) *Fisheries Act* Approval:

A Self-Assessment under the Fisheries Act to determine if an authorization from the Department of Fisheries and Oceans will be required.

ii) Environmental Compliance Approval:

An Environmental Compliance Approval per the *Ontario Water Resources Act* will be required.

iii) Development, Interference with Wetlands, and Alternations to Shorelines and Watercourses Permit:

The watercourses referenced herein are within the jurisdiction of the Rideau Valley Conservation Authority.

TERM OF COUNCIL PRIORITIES

Implementing the plan described in this report will further the Term of Council priority of providing Sustainable Environmental Services.

SUPPORTING DOCUMENTATION

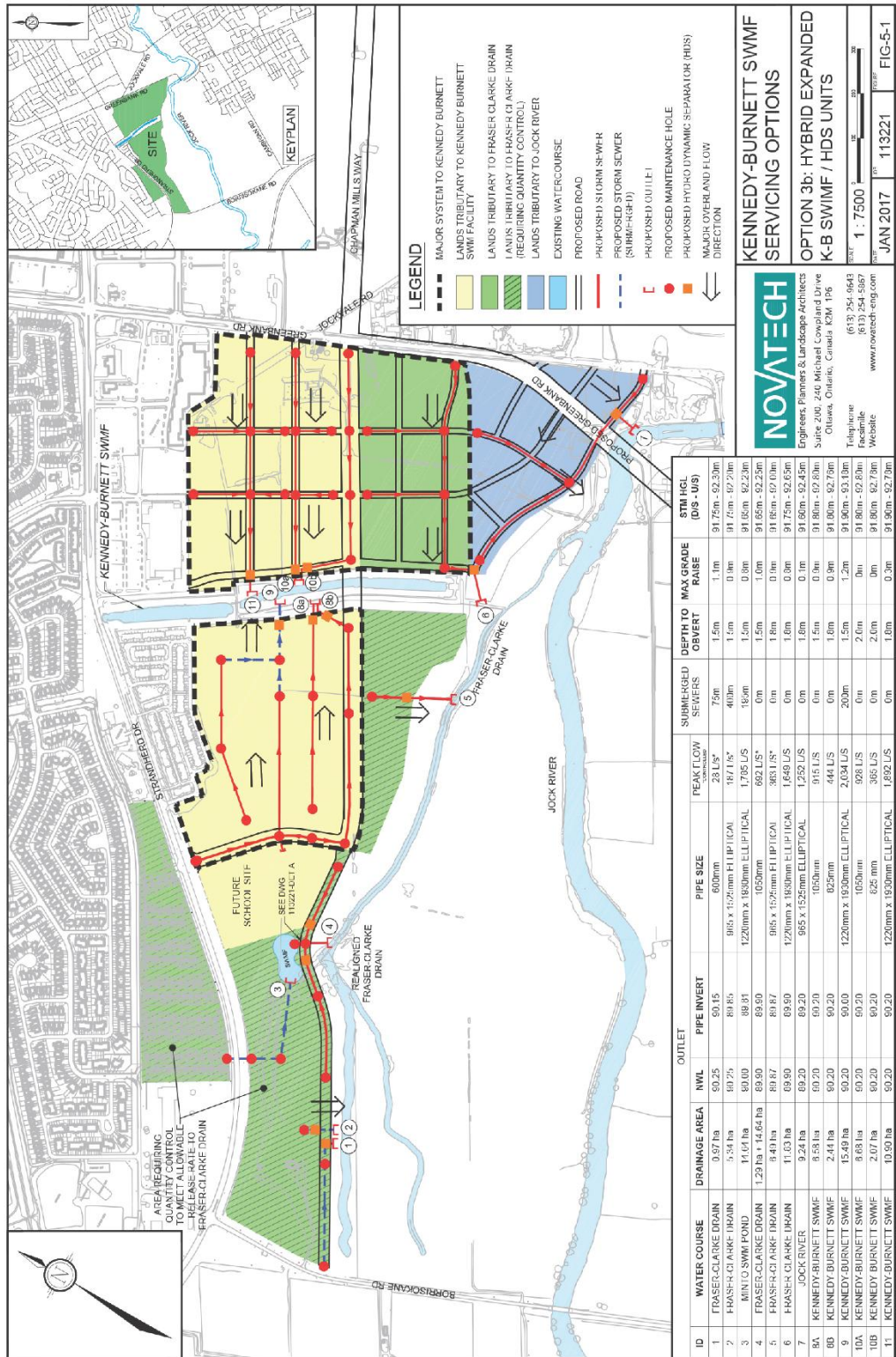
- Document 1 Kennedy-Burnett SWM Facility Environmental Assessment Study and Functional Design Report (distributed seperately)
- Document 2 Kennedy-Burnett Environmental Assessment Study Area
- Document 3 Kennedy-Burnett SWM Facility Preferred Servicing Option
- Document 4 Kennedy-Burnett SWM Facility Preferred Expansion Alternative

DISPOSITION

Once the EA report is approved by Council, the document will be placed on the public record for a 30-day public review. The public will be notified through the posting of a 'Notice of Completion' which will be published in local newspapers and on the City's website dedicated to this study. The Notice of Completion is issued to complete the screening requirements for this Schedule B project.

If no request is received within the review period specified in the Notice, the City will proceed to design and construction of the SWM facility expansion, and the detailed servicing plans for future development in the area will proceed accordingly.

Document 3 – Kennedy-Burnett SWM Facility Preferred Servicing Option



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Document 4 – Kennedy-Burnett SWM Facility Preferred Expansion Alternative

