Greenbank Road Realignment and Southwest Transitway Extension

Marketplace Avenue to Barnsdale Road

Online Engagement Opportunity June 2021





Welcome

Welcome to the Online Engagement Opportunity for the Greenbank Road Realignment and Southwest Transitway Extension, Marketplace Avenue to Barnsdale Road.

The purpose of this online engagement opportunity is to inform the community of the project, present an overview of the Functional Design, and provide an opportunity to ask questions and provide comment.

Please review the information presented and **provide your questions and comments by phone or email**, as noted on the last page of this document, **by July 8, 2021**. In addition, a virtual public information session is being held on **Thursday, June 24, 2021, at 5 pm.** If you wish to participate, please use the following link to register: <u>https://zoom.us/j/92222890475</u>

Additional public information sessions will be scheduled and held throughout the design process. Project updates will also be distributed in letters and postings the project website: <u>Greenbank Realignment and</u> <u>Southwest Transitway Extension</u>, so stay tuned.





Project Overview

This project will provide a key transportation link for the existing and fast-growing community of Barrhaven south of the Jock River, as identified on the Key Plan and through these City planning documents:

- Official Plan (and current "Draft" Official Plan) support growth and servicing needs in the area;
- Transportation Master Plan (and ongoing Active Transportation Plan) identify transit, transportation, cycling, and pedestrian requirements;
- South Nepean Town Centre and Barrhaven South Expansion Area Community Design Plans identify neighborhood features;
- Barrhaven Light Rail Transit and Rail Grade-Separations Environmental Assessment (on-going).







Project Overview

The current Updated Function Design is based on previously completed transportation planning studies, including:

- Greenbank Road (Malvern to Cambrian) Class EA and addenda;
- Southwest Transitway Extension (Strandherd to Cambrian) Individual EA and addenda;
- Re-aligned Greenbank Road & Southwest Transitway Extension - Cambrian to Barnsdale, EA Study;
- Greenbank Watermain EA;
- Chapman Mills Drive Extension (Longfields to Strandherd) and Bus Rapid Transit Corridor (Greenbank to Borrisokane) EA Study.
- Updated City Design Guidelines;



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Project Overview

The updated functional design for the Greenbank Road Realignment and Southwest Transitway Extension corridor includes the following key design elements:

- Widened Greenbank Road, from Marketplace Avenue to St Joseph's High School, to four traffic lanes and two median bus rapid transit lanes;
- New/Realigned Greenbank Road corridor, from St Joseph's High School to Barnsdale Road, with four traffic lanes and two median bus rapid transit lanes. Bus lanes end at the Park and Ride facility;
- Segregated cycling and sidewalk facilities provided throughout, including protected intersections;
- A new Park and Ride facility on the south side of Kilbirnie Avenue, west of the new Greenbank Road;
- A new bridge over the Jock River;
- A new trunk watermain crossing under the Jock River;
- Sewers and stormwater management to support roadway drainage;





Design Elements

Greenbank Road will be designed as a suburban arterial road with the Southwest Transitway in the median, as follows:

- Southwest Transitway: a bus rapid transitway with two-lane cross-section. Transit stations are located on medians, similar to at Chapman Mills Drive at Beatrice Drive;
- Road: a four-lane arterial with turn lanes as required to accommodate transit, trucks and traffic. Uses minimum lane widths appropriate for traffic volumes and design speeds;
- Cycling: One lane in each direction, located in the boulevard, separated from the road and sidewalk;
- Pedestrian: Sidewalks throughout the corridor linking residential areas to transit stations, commercial areas, adjacent streets, paths and parks;
- Streetscaping: provided in boulevards and open spaces coordinated with utilities and development plans;



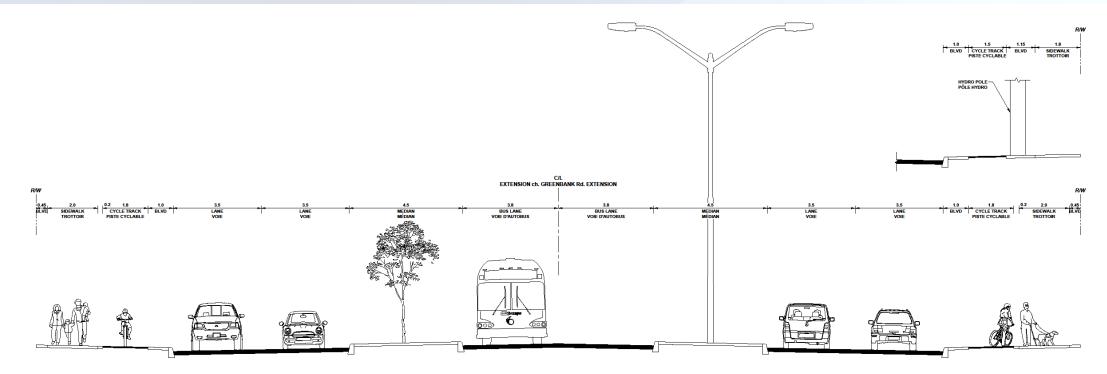
Example of a Median Transit Station (Chapman Mills at Beatrice)







Greenbank Road Typical Section:

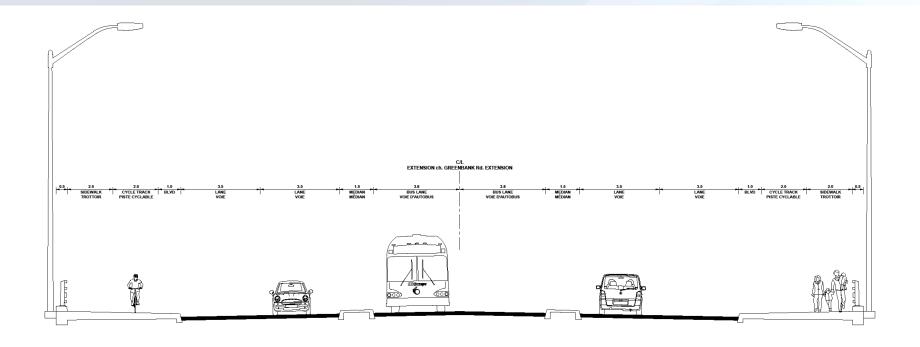


TYPICAL SECTION / COUPE TYPIQUE EXTENSION ch. GREENBANK Rd. EXTENSION 41.5m RW N.T.S.





Greenbank Road Bridge Typical Section:

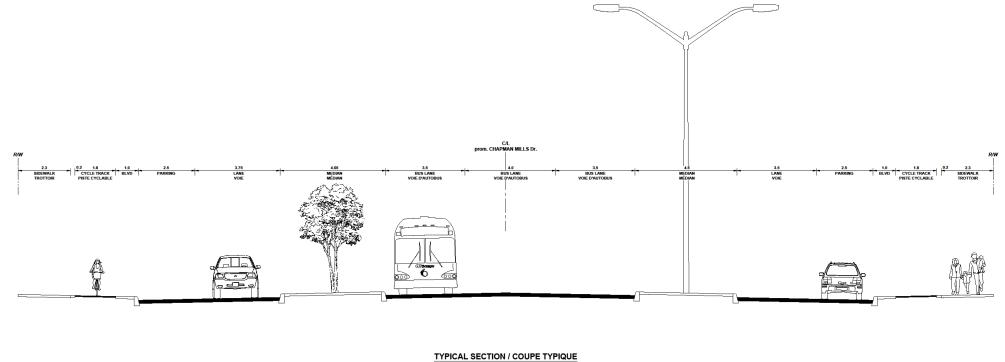


TYPICAL SECTION / COUPE TYPIQUE EXTENSION ch. GREENBANK Rd. EXTENSION BRIDGE / PONT





Chapman Mills Drive Typical Section:



prom. CHAPMAN MILLS Dr. 43.0m R/W N.T.S.





Design Elements

Greenbank Road will be designed to include protected intersections.

- Protected Intersections are traffic signal-controlled intersections that provide dedicated space for motor vehicles, cyclists and pedestrians.
- This design improves safety and comfort while minimizing potential conflicts by incorporating the following key principles:
 - o corner safety islands
 - o forward stop bar locations for cyclists and pedestrians
 - \circ $\,$ setbacks for cross-rides and crosswalks
 - Dedicated signals for motorists, cyclists and pedestrians
- Find out more by watching this protected intersections video: <u>https://www.youtube.com/watch?v=Cf4kWI5L1v4</u>
- Additional information can be found at:
 <u>Completed Projects | City of Ottawa</u>

Protected Intersection Chapman Mills Drive at Longfields Drive



Street view of Chapman Mills Drive at Longfields Drive protected Intersection





Additional Design Elements

- Chapman Mills Drive will be extended to connect Greenbank Road to the existing Transitway.
- Darjeeling Street will be extended east to Jockvale Road.
- A new bridge crossing of the Jock River along the realigned Greenbank Road will be designed. The bridge cross-section will be minimized to reduce impacts to the river corridor and natural environment. The design will provide a wide opening for the river and seasonal flooding.
- A new trunk watermain is planned to be installed beneath the Jock River using trenchless installation methods to provide additional water supply to Barrhaven South.
- New storm sewers and facilities to manage runoff and overland flows will be designed to avoid flooding and satisfy Provincial and City standards.



Example of a bridge crossing a small river



Example of a stormwater pond and infrastructure plan





Greenbank - Marketplace to Jock River

Board 01 / Aerial 01:

- Greenbank Road will be widened from the existing cross-section at Marketplace Avenue to a full section at Chapman Mills Drive including two median bus lanes, four traffic lanes, cycle tracks and sidewalks;
- The reconfiguration of Jockvale Road is required to accommodate Greenbank Road, Chapman Mills Drive and anticipated development along east side of Greenbank Road;
- Realignment of Greenbank Road reconfigures the existing Greenbank Road at the high school;
- Protected intersections will be provided at new street, Chapman Mills Drive, Darjeeling Street and Jockvale Road/Bending Way.
- A median transit station will be provided at Darjeeling Street;
- Coordination with ongoing development is required for intersections, municipal servicing and grading;
- Storm sewers and stormwater facilities will manage corridor drainage prior to outlet to the Jock River;
- Coordination/protection/relocation of utilities will be required;





Greenbank - Jock River Crossing

Board 02 / Aerial 02:

- The new Realigned Greenbank Road will cross the Jock River with one bridge where the previous functional design identified three parallel bridges. One bridge will reduce the structural footprint, environmental impacts and costs;
- The bridge design will allow for the Jock River, future pathways (on both sides of the river), infrastructure and wildlife to pass under the bridge;
- The design will include protection and/or enhancement of the river and habitat affected by construction to satisfy Approval Agencies;
- Road geometry and approach embankment fills are being coordinated with adjacent development;
- A large diameter watermain will be installed by trenchless methods under the Jock River to help meet development needs in Barrhaven South;
- Storm sewers and facilities will capture and treat drainage before discharging to Jock River;
- Coordination/protection/relocation of utilities will be required;





Greenbank - Jock River to Watercolours

Board 03 / Aerial 03:

- Realigned Greenbank Road from the Jock River to Watercolours will include two median bus rapid transit lanes, four traffic lanes, cycle tracks and sidewalks;
- Protected intersections are planned at Riverboat Heights and River Run Avenue, along with median transit stations;
- Gaps in medians are provided to allow transit access to/from local transit routes at Watercolours and Cambrian;
- Coordination with ongoing development is required for intersections, municipal servicing and grading;
- Storm sewers will collect corridor drainage and outlet to existing storm sewers;
- Coordination/protection/relocation of utilities will be required;





Greenbank - Watercolours to Dundonald

Board 04 / Aerial 04:

- Realigned Greenbank Road from Watercolours to Dundonald includes two median bus rapid transit lanes, four traffic lanes, cycle tracks and sidewalks within planned corridor;
- Protected intersections are planned at Watercolours Way, Cambrian Road, Jackdaw Avenue and Dundonald Drive;
- Transit stations are provided at Cambrian Road and Dundonald Drive;
- Gaps in medians are provided allow transit access to/from local transit routes at Cambrian;
- Coordination with ongoing development is required for intersections, municipal servicing and grading;
- Storm sewers will collect corridor drainage and outlet to existing storm sewers;
- Coordination/protection/relocation of utilities will be required;





Greenbank – Dundonald to Barnsdale

Board 05 / Aerial 05:

- Realigned Greenbank Road from Dundonald to Barnsdale includes two median bus rapid transit lanes, four traffic lanes, cycle tracks and sidewalks within planned corridor;
- The transitway lanes end at the proposed access to the new Park and Ride Facility at Kilbirnie Drive. South of the Park and Ride, transit will use traffic lanes for local service.
- Protected Intersections will be provided at Kilbirnie Drive, Transit Access, Cappamore Street and Barnsdale Road.
- Coordination with ongoing development is required for intersections, municipal servicing and grading;
- Storm sewers will collect corridor drainage and outlet to existing storm sewers;
- Coordination/protection/relocation of utilities will be required;





Chapman Mills - Greenbank to Transitway

Board 06 / Aerial 06:

- The Chapman Mills Drive Extension includes two bus rapid transit lanes in the median, two road lanes, two parking lanes, cycle tracks, sidewalks;
- The reconfiguration of Jockvale Road is required to accommodate Greenbank Road, Chapman Mills Drive and anticipated development along Chapman Mills Drive;
- A median transit station is planned at the Southwest Transitway intersection (Barrhaven Centre).
- Coordination with ongoing development is required for extension of Chapman Mills Drive, intersections, municipal servicing and grading;
- Storm sewers will collect corridor drainage and outlet to existing storm sewers;
- Coordination/protection/relocation of utilities will be required;





Barnsdale at Greenbank

Board 07 / Aerial 07:

- Existing Barnsdale Road will be widened from a rural two-lane road to include turn lanes and an urban protected intersection with Greenbank Road;
- The widening of Barnsdale Road is being coordinated with adjacent development to minimize impacts on rural lands on south side of Barnsdale Road;
- The Realigned Greenbank Road intersection with Barnsdale Road avoids direct connection to Viewbank Road, with the existing Viewbank Road intersection being maintained approximately 150m west of Realigned Greenbank Road.
- Coordination with ongoing development is required for intersections, municipal servicing and grading;
- Coordination/protection/relocation of Utilities will be required;





Park and Ride

Board 08 / Aerial 08:

- The proposed Park and Ride facility will include a transit station, bus queuing area, bicycle parking, operators' facilities, and parking for approximately 400 vehicles;
- A separate transit access from Greenbank Road will provide a higher level of service for transit and reduce traffic impacts to Kilbirnie Drive;
- Public access to the parking lot and transit station will be provided from Kilbirnie Drive, with cycling and pedestrian links to adjacent streets;
- Storm water management facilities will control/treat water on site prior to release to existing sewers;
- Coordination with ongoing development is required for intersections, municipal servicing and grading;







Project Challenges

The functional design presents the overall framework for the project. Challenges the design will address in the preliminary and detailed design stages include:

- Accommodating new/updated City of Ottawa standards within the available right-of-way;
- Coordinating with private development through planning and construction phases;
- Designing stormwater management within roadway corridor to provide proper drainage and safe outlet;
- Protecting the Jock River and natural habitat;
- Mitigating Noise and vibration from future traffic and construction;
- Coordinating, protecting, relocating existing and planned utilities;
- Acquiring property required for right-of-way, where not previously provided by development;
- Managing costs/budget for design, approvals, property acquisition and construction;
- Scheduling to meet traffic and transit demands of ongoing development;





Schedule and Next Steps

A virtual public information session is being held on **Thursday**, **June 24**, **2021 at 5 pm.** If you wish to participate, please use the following link to register: <u>https://zoom.us/j/92222890475</u>. Please provide your questions and comments by Thursday, **July 8**, **2021**. The project team will review, and address comments received during this engagement process and provide a summary on the project's website.

- The project team will finalize the Functional Design Update in Summer 2021.
- Preliminary Design will extend over a year with completion in Winter 2022/23.
- Detail Design completion is planned for Winter 2023/24.
- Property acquisition (for lands not acquired through development approvals) would be completed following the detail design phase, Winter 2023/24 to Winter 2025/26.

The construction timelines are yet to be determined and will be dependent on future budget approval and coordination with other infrastructure projects across the City. Currently, construction is planned to start in 2030 or later and will depend on future budget deliberations. The construction phase of this project will occur over multiple years.





FAQs and Feedback

Please refer to some frequently asked questions (FAQs) attached separately.

We encourage and welcome your feedback on the Functional Design plans and information provided.

All information/comments received will be maintained on file for reference during the design and construction phases. The information collected will only be used for the purposes for which it was collected and may be shared with Ward Councillor for consistent purpose.

With the exception of personal information, all comments will become part of the public record.

Please email your comments to the address below by **Thursday July 8, 2021**.

City Project Manager:

Erin S. O'Neill, P. Eng. Senior Engineer, Infrastructure Project 100 Constellation Drive, Ottawa ON K2G 6J8 Email: <u>ErinS.ONeill@ottawa.ca</u> Tel: 613-580-2424 x. 16008





Thank You

Thank you for participating in the project's online engagement.

Additional opportunities for participation in the project will be available as the project progresses through the design process.

Accessible formats and communications supports are available, upon request, at the following link: Accessible format or communication support request | City of Ottawa



