Municipal Class Environmental Assessment Study: Water and Wastewater Servicing in the Nobleton Community

Public Consultation Centre 3 Summary Report

July 20, 2021
Zoom Webinar

Prepared for: The Regional Municipality of York

Prepared by: LURA Consulting

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A. Introduction

I. PCC Background

The third and final Public Consultation Centre (PCC) for the Water and Wastewater Servicing Municipal Class Environmental Assessment (EA) for the Nobleton Community was hosted virtually by York Region via Zoom Webinar on Tuesday, July 20, 2021. Participants could choose to join through either the internet or by phone.

The purpose of the PCC was to present the design concepts for the preferred water and wastewater servicing solutions, share the evaluation of these design concepts, present the recommended conceptual design, and obtain public input. The PCC provided participants with an opportunity to learn more about the project and engage with members of the project team through various means, including:

- Participating in the session hosted from 6:30 p.m. – 8:00 p.m., which included a:
    - Recorded presentation providing a brief overview of the project and a summary of the analysis conducted since PCC 2; and a
    - Facilitated question and answer period (informed by questions from the attending public).
- Completing an online survey after attending the PCC;
- Viewing supporting materials posted online; and
- Providing feedback directly to York Region's Project Manager responsible for the EA via email or phone.

The PCC was attended by 19 participants.

II. PCC Briefing

A briefing document was prepared following the PCC that provides a high-level summary of the event. It describes:

- The purpose of the PCC;
- The engagement opportunities available to participants at the event; and
- A high-level synthesis of comments and questions received during event.

A copy of the PCC briefing document is provided in **Appendix A.**

B. Notices & Distribution

I. Notices

A Notice of Open House was first distributed to First Nations communities, local residents and stakeholders on July 7, 2021, through email, mail, and on the York Region website, as appropriate. The Notice was also published on the Region's social media accounts on the following dates:

- York Region's Twitter page on July 15, 18 and 20, 2021
- York Region's Facebook page on July 15 and 18, 2021

The Notice was also published in the local newspaper, *King Connection*¸ on July 12 and 19, 2021. A copy of the Notice is attached in **Appendix B**.

II. Distribution List

Notices were sent via mail or email to: various municipal and provincial governments and agencies; utilities; community associations; private companies; and First Nation communities. Notices were also sent to properties located within the study area (Figure 1). Residents who requested to be added to the mailing list were also sent the Notice. The distribution list is provided in **Appendix C.**

Figure 1: A map illustrating the study area, service area, and existing Regional infrastructure in the Community of Nobleton.

C. Participants

A total of **19 participants** joined the PCC, either virtually or by phone.

D. PCC Summary

PCC 3 was hosted virtually by York Region via Zoom Webinar. The PCC was held on Tuesday July 20, 2021, 6:30 p.m. – 8:00 p.m. Of the 19 participants, most joined virtually via Zoom Webinar, and one joined via telephone. The PCC was attended by municipal staff, consultants, and interested members of the public. All digital materials were made available online on York Region's website, at www.york.ca/nobletonea. The PCC session featured a 24-minute video presentation that provided:

- context on the purpose and steps involved in the EA study
- an overview of the design concepts for the preferred water and wastewater servicing alternatives and the evaluation of these narrowed-down alternatives, as well as the recommended conceptual design resulting from the analysis
- opportunities for residents and stakeholders to stay informed about the project

A copy of the presentation slides is provided in **Appendix D**.

Following the presentation, participants were invited to ask questions of the project team. Questions asked by PCC participants focused on the EA's study boundaries, water and wastewater system growth and capacity, greenhouse gas emissions, hydrological impacts, water conservation, and costs and user fees. Questions asked and responses from the project team are transcribed below in Section I.

Participants and members of the public were also invited to complete an online survey, providing feedback to the project team on both the material presented and the format of the online open house. Four individuals filled out the online survey, which remained open from July 20 to August 11, 2021. Their responses are documented in Sections II and III.

A copy of the survey questions asked is provided in **Appendix E**.

I. Question and Answer Period

A summary of questions asked throughout the PCC meeting are summarized below according to themes. Participants had questions on the EA study boundaries, water and wastewater system growth and capacity, greenhouse gas emissions, potential hydrological impacts, water conservation efforts, and cost and user fee implications of the study. Questions are denoted with a "Q" and answers are denoted with an "A".

Study Boundaries

Q: Will 13755 York Regional Rd 27 be part of the expansion? From the map, I see it right on the edge near Hwy 27 and 15th Sideroad.

- A: This property is outside of both the project's service area and study area, according to the map on the project webpage. Though not guaranteed, future water planning changes or studies may extend to that address however, it is not included in the study today.

Growth and Capacity

Q: What are the population growth projections for Nobleton used in the study?

- A: The current population of Nobleton is just over 4,000 people, and this is based on the 2016 census and the planning that that the Township of King has recently completed. It is expected

that the population will grow to 10,800 people by 2041. That is the projected population that the study is considering.

Q: How many additional homes/buildings will this plan service?

- A: The capacity of both the water and wastewater plants will each be set at 10,800 people (the projected population of Nobleton in 2041). The number of residential homes and commercial or industrial buildings to be serviced within that total capacity of 10,800 people is up to the local municipality (Township of King) to decide, but regardless of this municipal service allocation, the Region will provide sufficient water and wastewater capacity to serve 10,800 people.

Q: Why does there appear to be a discrepancy between the projected capacity increases required for the water and the sewer systems to serve the future population of 10,800?

- A: Both systems are designed to serve 10,800 people. The discrepancy is due to the different needs in technologies and equipment (e.g., wells and attenuation tanks) required for the water and wastewater systems, and what technical capacity and flow rates are required for each system to meet the overall capacity of 10,800 people.

Q: When would the current capacity of the current water and wastewater system be exceeded? What is the maximum capacity to which this system can be expanded?

- A: Right now, the current water and wastewater design capacity for Nobleton set through the previous EA has not been reached. New development under construction in Nobleton was approved by the Township of King because their water and wastewater needs would comfortably be accommodated within the current capacity. Once new development would cause the current capacity to be reached, however, no new development will be able to take place in Nobleton until the expanded capacity figures from this EA (i.e., capacity to serve 10,8000 people) are approved and in force.

Q: If the 2051 population projection for Nobleton currently exceeds the planned growth capacity of the treatment system, can this EA be amended or would a new EA be required?

- A: The current EA assumes a population target of 10,800 by 2041. But if later there are indications that water and wastewater demand would stretch beyond that 10,800, then the Region could either pursue a minor amendment to this EA or conduct a new EA. However, before proceeding with those options the Region would look to explore how it can maximize flow or twin pipes within the existing system to make sure that the system expansion as planned for 2041 is being utilized to its fullest.

Emissions

Q: How can GHG (greenhouse gas) emissions be reduced at the Janet Street Pumping Station rather than be increased? Can energy be provided through renewable sources that do not produce GHG emissions?

- A: While emissions at the Janet Avenue Pumping Station will increase slightly from today's amounts, this is due to the additional water pumping and storage activity required for the additional flow capacity to serve the 10,800-person target. However, this increase in

greenhouse gas emissions is negligible and the Region is looking to recover some of this energy through biological processes that will potentially be introduced later during a secondary expansion after the first round of expansion from this EA. The Region is also taking measures to reduce greenhouse gas emissions and reduce the cost of energy required for pumping, wherever possible.

Q: The Township of King plans to reduce its emissions by 45% in nine years and to net zero by 2050. Will this plan meet these goals?

- A: The Township of King's environment and energy professionals are very active in setting King's municipal goals for emissions reductions, but this is a question to be directed to the Township. Please contact Service King at (905) 833-5321 or at serviceking@king.ca.

Q: Given the international and federal emissions reduction targets and requirements, how can York Region possibly build anything that will not meet them?

- A: York Region is very proactive in pursuing green initiatives and using proven and available green technologies. For example, the Region's Bill Fisch Forest Stewardship and Education Centre in Whitchurch-Stouffville is the only Living Building Challenge-certified building in Canada. We will certainly consider how the Region can incorporate environmentally friendly technologies in this water and wastewater capacity expansion project.

Hydrological Impacts

Q: Would the infiltration be minimized with less pavement, more rain gardens, etc.? Is the high infiltration due to heavy rainfall or snow melt events? Or are there other reasons for the infiltration? Are there plans to reduce the infiltration? This places additional demand on the wastewater recovery facility.

- A: There are certainly permeable technologies used in modern infrastructure planning, like permeable pavers and other permeable surfaces, to promote infiltration. With regards to inflow, it can be difficult and can take a long time to identify sources of inflow, such as groundwater or leaky pipes. While it is outside the scope of this EA, York Region does have an inflow and infiltration project team that works with the Township of King. Their job is to examine this topic and they are actively working on studies and actionable plans to resolve some of the existing inflow problems within the community.

Water Conservation

Q: Is significant water conservation anticipated?

- A: Water conservation is certainly something that we have considered in the selection of the alternatives for this EA and in the estimation of overall water demand long-term. Municipalities across the GTA, including York Region, have implemented changes in building codes (e.g., low-flush toilets) and introduced other educational measures over the past 20 to 25 years to improve water conservation. Water consumption per capita has actually decreased over that time. However, it is important to note that on their own, water conservation measures will not help us sustainably meet the proposed growth targets for water and wastewater capacity.

Costs and User Fees

Q: Will development charges cover the cost of these upgrades?

- A: Development charges from new development in Nobleton are covering the cost of the EA study (approximately $2.25 million), as well as the cost of the growth-related infrastructure that will be built to expand the water and wastewater capacity to the 10,800-person service target. The final capital cost that includes both growth and non-growth components will be determined at a later stage of the project once the recommended solution or alternative has been selected. Regardless, development charges will cover the majority of the total cost.

Q: What are the estimated costs for these suggested changes?

- A: The EA study's cost is approximately $2.25 million. We currently do not yet have an estimate of what the cost will be to expand the water and wastewater capacity to the 10,800-person service target through the alternative selected through the study.

Q: Do you anticipate these changes will increase user fees? If so, by how much?

- A: User fees are set by the Township of King. The Township would be best positioned to answer this question. They may be reached through Service King at (905) 833-5321 or serviceking@king.ca.

II. Feedback on the Material Presented

Participants were asked to share feedback on the material presented in PCC 3 through the online survey. They were asked if they had any questions or comments on the recommended design concept for water and wastewater servicing, and whether there were any comments on the process used to assess the concepts. Minor edits have been made to spelling and grammar. The intent of the comments has not been altered.

Do you have any comments on the recommended design concept for water servicing?

- 2 participants skipped the question.
- 2 participants shared the following feedback:
    - I am pleased you are continuing with a local communal system for water and wastewater.
    - No.

Do you have any comments on the recommended design concept for wastewater servicing?

- 2 participants skipped the question.
- 2 participants shared the following feedback:
    - Excellent idea to move to a new technology. I would have preferred a membrane system, but I understand they are expensive.
    - No.

Do you have any comments on the process used to assess the design concepts?

- 1 participant responded “No”, and 3 skipped the question.

III. Feedback on the Open House Format

Participants were asked to share feedback on the format of PCC 3. They were asked to rate the format of the presentation overall, on a scale of 1 to 5, and to share information about their experience. Minor edits have been made to spelling and grammar. The intent of the comments has not been altered.

Did the Open House (or slide recording) answer your questions about the project?

- 2 participants skipped the question.
- 2 participants shared the following feedback:
    - Yes. Thank you to the excellent project team.
    - Yes.

Do you have any additional thoughts or comments about this project?

- 1 participant responded “No”, and 3 skipped the question.

Did you attend the live online Open House on July 20?

- 2 participants responded “Yes”, and 2 participants responded “No”.

On a scale of 1 (poor) to 5 (excellent), how would you rate the overall Open House experience?

- 1 participant responded “3”, and 3 skipped the question.

What did you like best or find most useful about the Open House?

- 1 participant shared the following feedback:
    - I prefer in person open houses. I am sure you would have better turnout for an in-person open house. Many Nobleton folks are disengaged, others are not internet literate.
- 3 participants skipped the question.

Did you encounter any technical difficulties with the Open House?

- 1 participant responded “No”, and 3 skipped the question.

Do you have any other feedback or comments for us on the consultation process or format?

- 1 participant responded “No”, and 3 skipped the question.

E. Comments and Issues

Participants were invited to provide emailed comments or concerns, and issues related to the proposed project by emailing the Region’s Project Manager. The feedback received generally related to:

- forecasted population growth
- water quality issues in Nobleton

- water sources for Nobleton
- water pressure issues in Nobleton
- extending the survey close date
- sharing presentation materials
- project map design
- the cost of water and wastewater servicing
- additional studies and plans to consider

Table 2 documents the written comments received through email. Minor edits have been made to spelling and grammar. The intent of the comments has not been altered.

Table 2: Comments and issues provided by participants regarding Public Consultation Centre 3.

Submission Type	Comment/Issue
Email	As a resident of Nobleton, I received the notice for the Online Open House #3. At this time, I do not have any questions on the design concept, however I do have concerns on the recommended solutions to support forecasted growth in Nobleton. Over the past four years, since I made Nobleton my home, I have had to make multiple adjustments to my home water treatment system, both for hardness control and iron removal. Although hardness control is lesser of an issue, the ability to remove iron or not is indeed a concern. The excessive iron in the water supply causes staining in all the plumbing fixtures, vanity sinks, toilet bowls, etc. These stains are practically impossible to remove. The water quality may meet the federal/ provincial/ EPA guidelines, however the staining on bathroom sinks is undesirable and eyesore. Below are my questions on the aforementioned context; 1. Considering the current concerns with the water quality from the pumping stations on the aquifers, augmenting the capacity can magnify the problem. Please comment. 2. Is there a plan to connect Nobleton's water supply network to "Ontario Lake Water"? 3. Is the City using sequestering agents in the potable water supply pipes that may be causing these undesirable stains or deposits in residential fixtures?
Email	I moved into the Nobleton "Class EA Study" area about seven months ago and have a few concerns with the water here. Firstly, we have a water softener system, as many households in the neighbourhood do, and we have a very harsh ring stain left behind on all of our toilets. We cannot remove it no matter what we try. How can we find out what is causing this and what is the Nobleton water is being treated with that is causing this problem? Secondly, we seem to have some water pressure issues that started ever since we turned on our irrigation system. Is there a city plumber that can advise of why this would be happening I'm not sure if you can help us with the answers but if you could kindly direct us to someone who may, I would really appreciate it.

Submission Type	Comment/Issue
Email	I notice that the virtual presentation and question period are not yet online. Can we therefore have an extension to the comment period, currently closing on August 4th?
Email	Could you please send us the presentation slides for files?
Email	The map on page 3 is the only map showing both the service area and the study area. It does not show the location of all of the water and wastewater sites discussed later in detail. A complete map would have been helpful.
Email	The evaluation process mentions financial criteria, yet we are advised in the Q and A that there are no capital cost estimates. How could you rank the alternatives without some costs? More on this in my comments on the Q and A.
Email	On the wastewater solution, I couldn't tell from the map provided whether additional land is required for the storage tank. If so, that could slow the project and the pipe storage could be preferred. I have noticed on other EAs that two solutions get carried forward.
Email	The assimilative capacity study for the Humber River was likely a key study to inform the WWRF modifications. Is that study available to the public? I have one from an EA on the Credit River and it was quite informative. It could also be used to determine through future studies if more capacity -beyond 10,800 persons- is possible.
Email	It is my understanding that the 10,800 population is for 2031 and that the King Township recent conformity exercise was also for 2031. Populations for York Region for 2041 and 2051 are the subject of the Region's current MCR and are only in draft form at this time.
Email	Again, I think this date should be 2031 as noted above. When planning for infrastructure of a given demand (like a population of 10,800) it is unlikely that the selection of all the components could hit this number precisely and most components would accommodate a larger demand. At early stage of the design does the Region know what this additional "freeboard' might be? For example, does the assimilative capacity of the Humber exceed the 10,800 persons?
Email	I think it is misleading to say that DCs will cover a majority of the cost. A majority could be 51%. I think it is safe to say DCs will pay for 100% of the growth-related costs. In this instance I think these projects are all growth related
Email	As noted previously, each alternative had a financial test so some costing was undertaken. We also know that King Township was presented with some costs for the project and even one for the lake-based alternatives. I think this should have been provided to the PIC participants.
Email	As a general comment, I am disappointed that the EA work did not consider the buildout of the Nobleton Community Plan and thus ensuring the realization of a 'Complete Community'. For instance it would have been helpful if, from all of the studies undertaken and now in place, the Study would have provided a guidance opinion that adding another 10,000 persons in Nobleton could be achieved with reasonable upgrades. Or wording to that affect that would encourage planning officials and political representatives to look at further allocations.

F. Responses to Comments

The project team will consider all feedback received from Public Consultation Centre 3 as the EA moves into its fourth and final phase, which will entail completing the Environmental Study Report and a 30-day review period for public agencies and other applicable review bodies. Phase 4 is expected to take place from November to December 2021. No further PCCs are scheduled for this EA.

Appendix A – Public Consultation Centre Briefing

Municipal Class Environmental Assessment Study: Water and Wastewater Servicing in the Nobleton Community Public Consultation Centre (PCC) #3, July 20, 2021

Briefing Summary

The third Public Consultation Centre (PCC) for the Water and Wastewater Servicing Municipal Class Environmental Assessment (EA) for the Nobleton Community was held online on Tuesday, July 20, 2021. The PCC was hosted virtually by York Region via Zoom Webinar. The PCC was held as a virtual meeting with a pre-recorded presentation and live Q&A session from 6:30 p.m. – 8:00 p.m. All digital materials will be made available online on York Region's website, at www.york.ca/nobletonea.

This Class EA aims to identify long-term water and wastewater servicing solutions for the Nobleton community. The purpose of this third and final PCC was to present the design concepts for the preferred water and wastewater solutions, share the evaluation process and the recommended conceptual design. The PCC provided attendees with an opportunity to learn more about the project and engage with members of the project team through various means, such as:

- Attending the meeting which included:
    - Watching a recorded presentation on the evaluation of servicing alternatives and recommended servicing solutions
    - Participating in a facilitated question and answer period
- Providing feedback directly to York Region's Project Manager via email
- Completing an online feedback form on the project webpage (open for two weeks following the PCC)
- Viewing presentation boards and materials, also posted online

Twenty participants attended the PCC. Of the 20 participants, most joined virtually via Zoom Webinar, and one joined via telephone. Municipal staff, consultants, and interested members of the public attended the PCC. No identified members of the media were present.

Questions asked by PCC attendees focused on emissions and energy consumption, water servicing, wastewater servicing, development and policy, water infiltration, conservation, project costs, and further engagement opportunities for the project. Participants asked about:

- the boundaries of the service area and whether certain properties would be included;
- the projected future population for Nobleton and how this project will serve this population;
- the overall cost of the EA and construction of the project;
- whether development charges will cover project costs;
- whether the project will cause an increase in user fees;
- water conservation;
- development policies and prioritizing infill;
- infiltration related to causes, potential reductions, and green infrastructure solutions;
- emissions reductions targets and options for incorporating renewable energy.

These questions were responded to in the PCC sessions, and all feedback was logged for consideration by York Region and the project team.

Appendix B – Notice of Open House

NOTICE OF ONLINE OPEN HOUSE #3

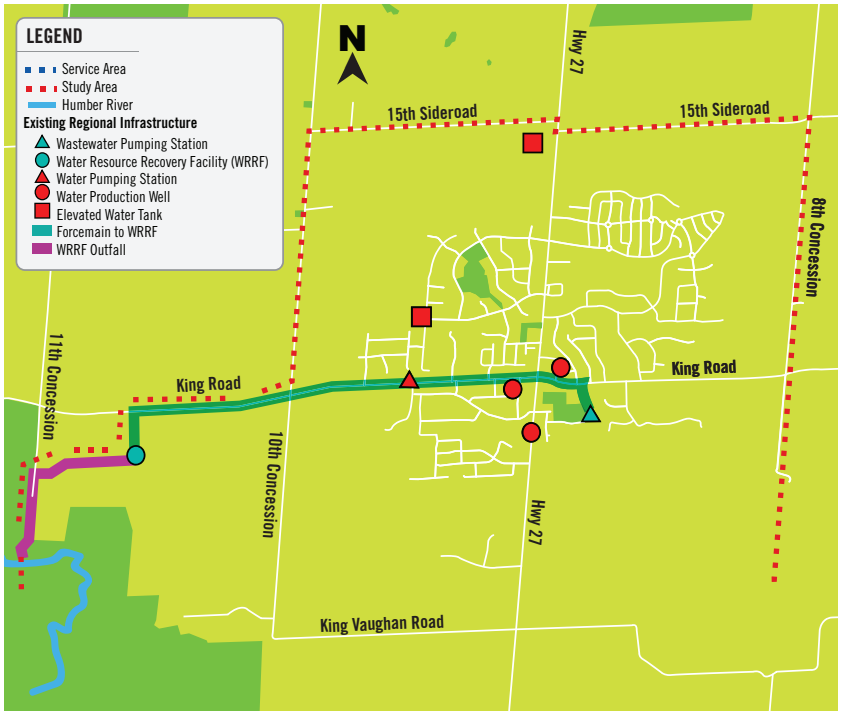
Municipal Class Environmental Assessment Study
Water and Wastewater Servicing in the Nobleton Community

In the Township of King

July 6, 2021

The Regional Municipality of York is identifying long-term water and wastewater servicing options for the Nobleton community through a Schedule C Municipal Class Environmental Assessment (Class EA) Study. The Class EA solutions will support growth in the community and optimize the use of existing Regional infrastructure.

The alternative design options for water and wastewater servicing presented in Open House #2 have been reviewed. Based on results of the technical studies and feedback from the public and stakeholders, preferred design solutions for both water and wastewater servicing in Nobleton have been selected.



WE WANT TO HEAR FROM YOU!

York Region invites you to attend the third open house to review and provide your feedback on:

1. Preferred design concepts for water and wastewater servicing that were considered
2. Recommended solutions to support forecasted growth in Nobleton

ONLINE OPEN HOUSE

Date: Tuesday, July 20, 2021
Time: 6:30 p.m. to 8:00 p.m.

To join the online open house: york.ca/nobletonea

For more information about the study visit york.ca/nobletonea. All materials, including information to join the open house will be provided online. This notice was updated on July 15, 2021.

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY.

If you are unable to join the online open house, you can call 1-647-375-2971 or toll free 1-833-955-1088 and enter the Meeting ID 626 7950 5746 and the Passcode is 967341, to listen to the session. Please let us know if you require additional accommodations to participate. We will arrange for you to take part in another way. Meeting materials and an accessible version of this notice are available upon request.

York Region's number one priority is protecting the health and safety of staff and all our communities. As we monitor the ongoing COVID-19 situation, York Region is committed to effective engagement and consultation with the public and stakeholders in accordance with the Municipal Class Environmental Assessment process.

To submit questions, comments or to be added to the mailing list, please contact:

Afshin Naseri, P.Eng.
Senior Project Manager, Environmental Services
The Regional Municipality of York
17250 Yonge Street Newmarket, ON L3Y 6Z1
afshin.naseri@york.ca
1-877-464-9675 ext. 75062 Fax: 905-830-6927

York Region

Appendix D – Presentation Slides

Water and Wastewater Services in the Community of Nobleton

Municipal Class Environmental Assessment Study

Online Open House No. 3

Tuesday, July 20, 2021
6:30 p.m. to 8 p.m.

York Region

Project Background

Problem/Opportunity Statement for this Municipal Class Environmental Assessment (Class EA) Study

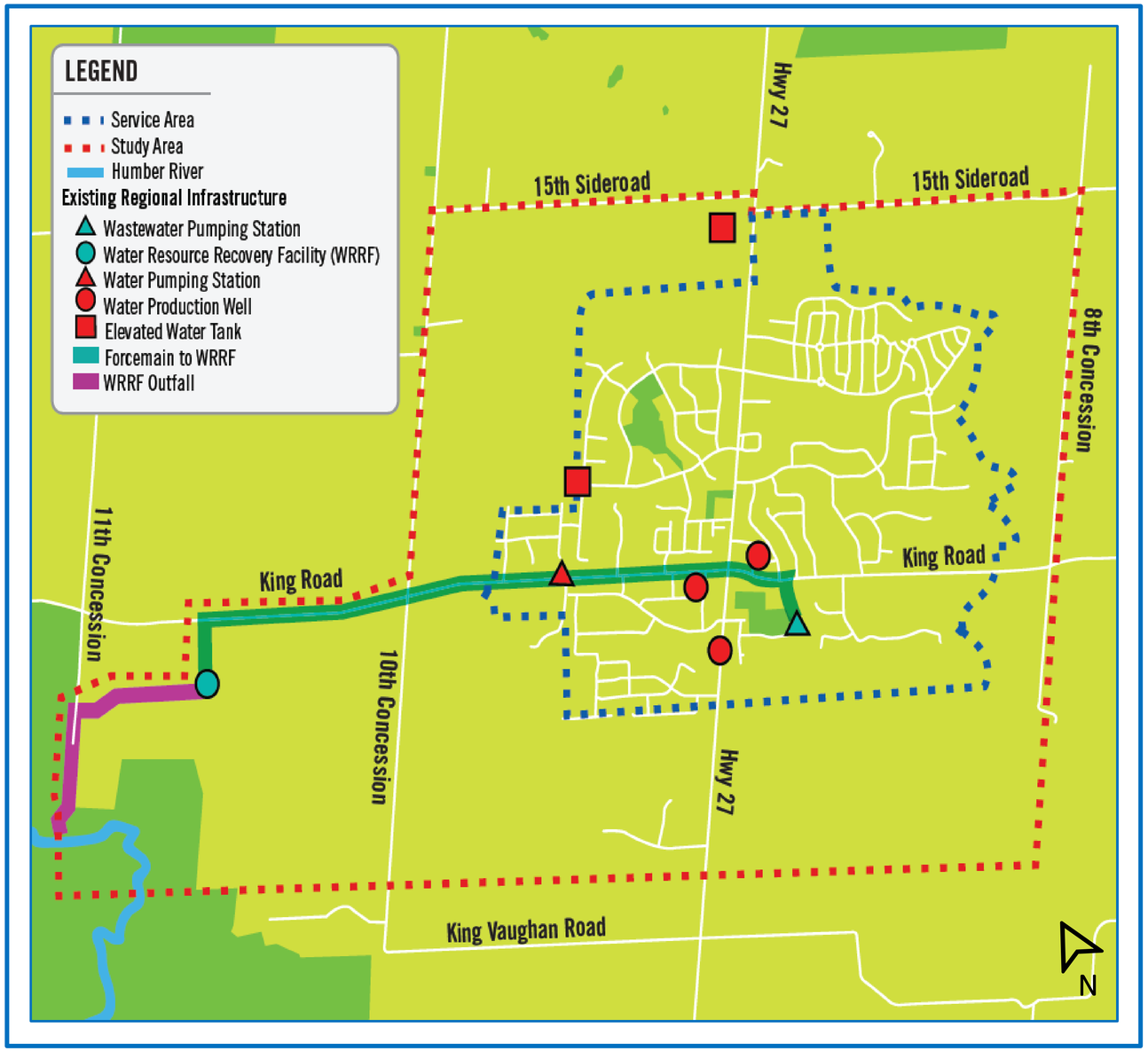
- To identify **long-term water and wastewater servicing solutions** to support forecasted growth in Nobleton to 2041 while **optimizing the use of existing Regional infrastructure.**

Purpose of this Open House

- Present the **design concepts for the preferred water and wastewater solutions**
- Share the **evaluation of design concepts**
- Share the **recommended conceptual design**
- **Obtain your input**

We want to hear from you!

Project Study and Service Area



Service Area

Community of Nobleton boundary including current and planned service areas

Study Area

All serviced area plus an assessment of potentially impacted lands due to new infrastructure requirements

Schedule C Municipal Class Environmental Assessment Study Process

Before EA: Technical Studies

Phase 1: Problem or Opportunity

- Identify the problem or opportunity
- **Conduct public consultation**

Public Open House #1 February 2019

Phase 2: Alternative Solutions

- Identify and evaluate alternative solutions to problem
- **Conduct public consultation**
- Select prefered solution

Online Open House #2 November 2020

Phase 3: Alternative Designs

- Identify and evaluate alternative designs for the recommended solution
- **Conduct public consultation**
- Select preferred solution

Online Open House #3 July 2021

We are here

Phase 4: Environmental Study Report

- Complete Environmental Study Report
- **Post report for 30-day public and agency review period**

Public Review Period October – November 2021

Communication Timeline

Stay informed throughout the study process by visiting the project website (www.york.ca/nobletonea)

November 2018
Notice of Commencement

February 2019
Open House #1

May 2020
Newsletter Release

November 2020
Online Open House #2

We are here

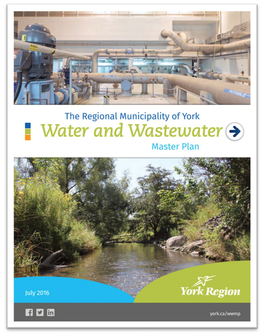
July 2021
Online Open House #3

October 2021
Environmental Study Report & Notice of Study Completion

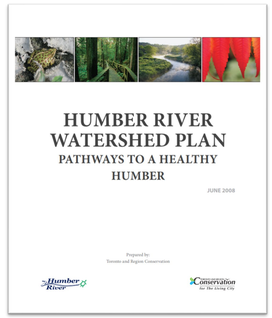
Plans for Consideration

This Class EA must also consider input from various existing documents

Places to Grow

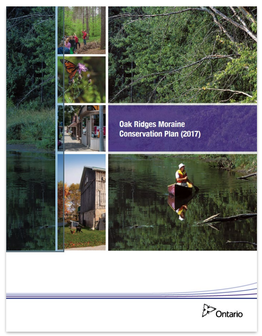


York Region's 2016 Water and Wastewater Master Plan

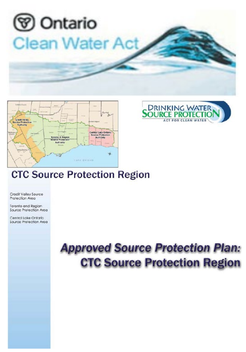


Humber River Watershed Plan

King Township (Our King) Official Plan, 2019

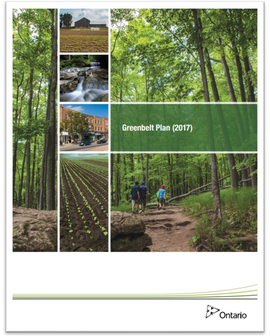


Oak Ridges Moraine Conservation Plan

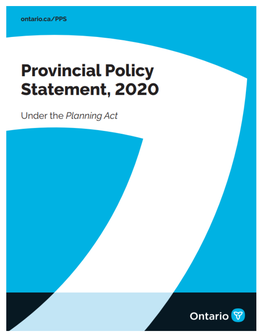


Clean Water Act / Source Protection Plan

York Region's 2010 Official Plan



Greenbelt Plan



Provincial Policy Statement

Technical Studies

Natural Environment Impact Assessment

- Identification of natural features (wetlands, forests, species at risk, etc.)

Hydrogeological Assessment

- Review of groundwater conditions in the Study Area (existing wells, groundwater levels, etc.)

Cultural Heritage Resource Assessment

- Review of cultural heritage resources in the Study Area

Archaeological Assessment

- Review of potential archaeological resources in the Study Area

Geotechnical Assessment

- Assessment of subsurface soil conditions

Air, Noise and Odour Assessment

- Assessment of short-term and long-term impacts related to air contaminants, odour and noise

Assimilative Capacity Study

- Investigate effects of Nobleton Water Resource Recovery Facility (WRRF) discharge and recommend effluent limits

Nobleton Water System

STORAGE

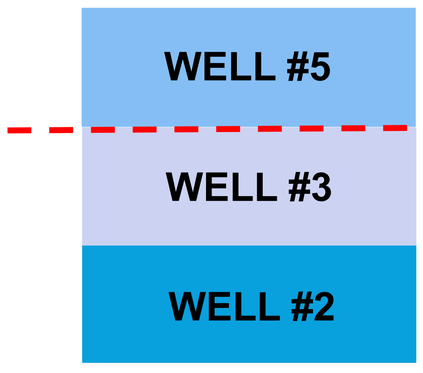
Current:
3,860 m^3

Target:
3,916 m^3

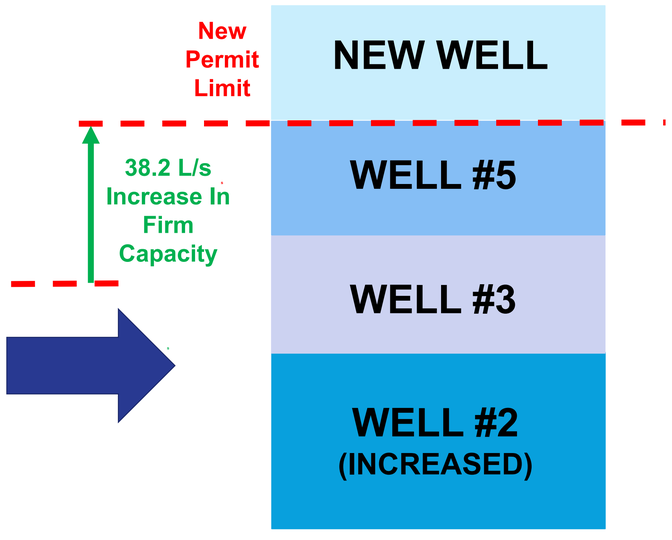
Solution:
Offset storage deficit with additional supply

SUPPLY

Current:
51.6 L/s



Target:
89.8 L/s

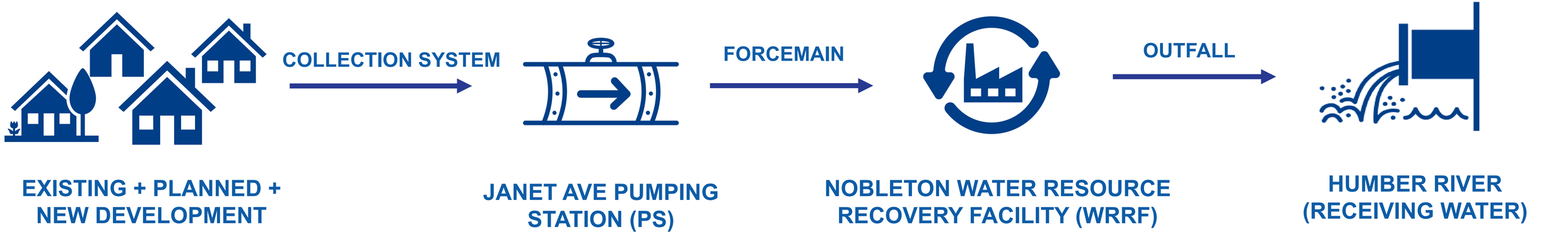


Solution:
Increase Capacity of Well #2 + New Production Well at Site H
(Located on same property as Well #5)

(Permit Limit is calculated assuming largest pump is not in service)

m^3 : cubic meters
L/s: liters per second

Nobleton Wastewater System



Current Flow Rates

Average Daily Flow:
2,925 m^3/d

Peak Flow:
9,177 m^3/d

Target Flow Rates

Average Daily Flow:
3,996 m^3/d

Peak Flow:
25,174 m^3/d

Solution

Some or all of the following servicing facilities will be expanded and/or upgraded:

- **Janet Ave PS**
- **Forcemain**
- **Nobleton WRRF**
- **Outfall**

m^3 /d: cubic meters per day

Design Concepts Evaluation Process

Long-List of Design Concepts

Screening Process

Short-List of Feasible Design Concepts

Detailed Evaluation

Recommended Conceptual Design

Design Concepts Screening Process

Long-list of design concepts were screened under six categories

Compatibility with Existing Servicing Infrastructure

- Integration with existing infrastructure in terms of hydraulics, available space and operations

Proven Technology

- Use of technology proven to be in operation in North America for at least five years

Performance Robustness and Reliability

- Robustness and reliability of performance to meet project objectives, water quality, effluent requirements, and performance requirements

Stakeholder Acceptance

- Mitigation of potential impacts to satisfy local and regulatory stakeholders

Construction Impacts

- Minimal construction impacts to the natural environment and adjacent landowners/users

Cost

- Acceptable capital and operating costs based on high-level assumptions

Design Concepts Evaluation Process

Short-list of design concepts were evaluated against five criteria

Technical

- Evaluation of: Constructability, redundancy of supply/service, resilience to climate change, operation and maintenance requirements, adaptability to existing infrastructure, maximizing use of existing infrastructure

Natural Environment

- Evaluation of: Aquatic vegetation and wildlife, terrestrial vegetation and wildlife, groundwater resources, surface water resources, greenhouse gas emissions

Socio-economic Environment

- Evaluation of: Short-term community impacts, long-term community impacts, archaeological sites, cultural/heritage features

Financial

- Evaluation of: Land acquisition cost, capital cost, lifecycle cost

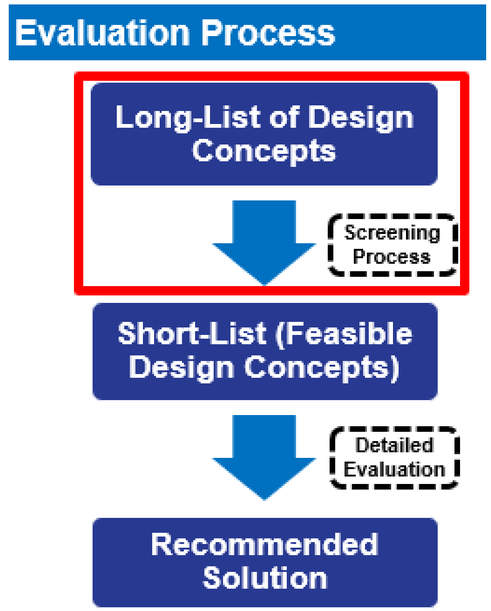
Jurisdictional/Regulatory

- Evaluation of: Land requirements, ability to accommodate potential future regulatory changes, permits and approvals

.

Water Servicing Design Concepts Screening

Solutions Considered to Address Water Supply Needs	Long-List of Water Supply Design Concepts Screening Summary	Screening Status
1. Expand Well Site #2	▪ Facility can handle proposed capacity expansion ▪ No major modifications required besides equipment upgrades	**Pass**
2.A New Well: Expand existing treatment process of Well Site #5 to include water from new Well Site H	▪ Major infrastructure/process adjustments will be needed to treat combined flows from Well Site #5 and Well Site H ▪ Other criteria met by continuing to use existing facility	**Pass**
2.B New Well: Add an independent dedicated treatment train from Well Site H	▪ New treatment train will be similar to the existing facility for Well Site #5; compatibility, proven technology, and performance criteria has been met ▪ Site #5 and Site H are on the same land; stakeholder and constructability impacts would be minimal	**Pass**



Short-List of Design Concepts: Water Servicing Solutions

All design concepts passed the screening process and were selected for detailed evaluation:

Design Concept 1

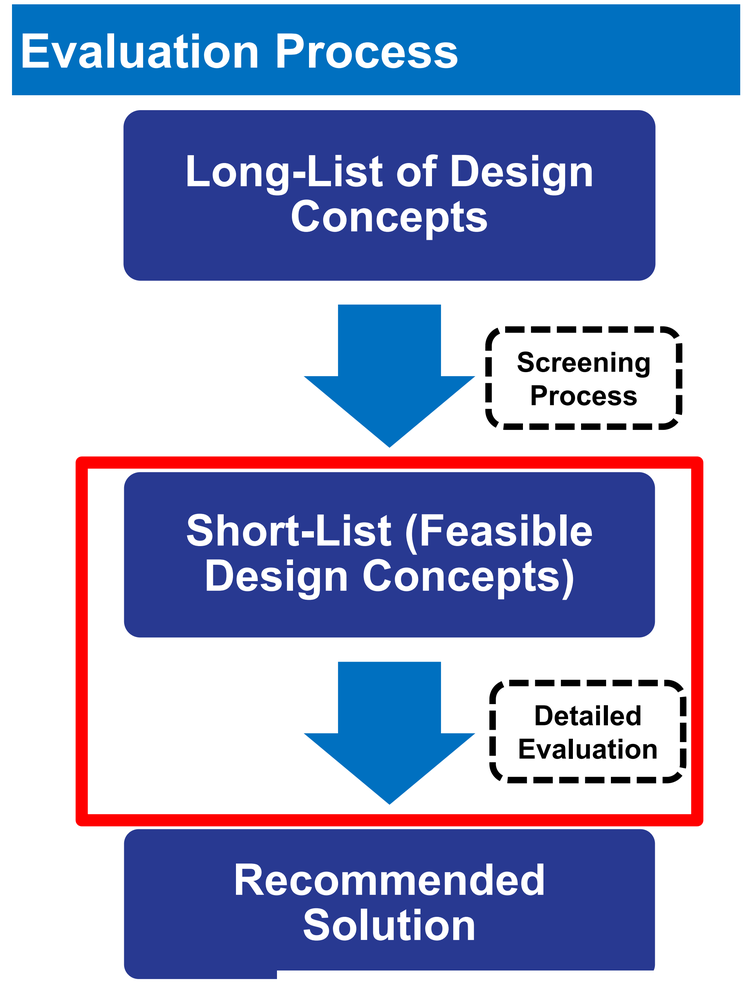
- Expand Well Site #2

Design Concept 2.A

- Expand existing treatment process of Well Site #5 to include water from new Well Site H

Design Concept 2.B

- Add an independent dedicated treatment train from Well Site H



Water Servicing Design Concepts Detailed Evaluation

Design Concept	Design Concept 1: Expand Well Site #2	Design Concept 2.A: Expand Existing Treatment Process of Well Site #5 to include Water from New Well Site H	Design Concept 2.B: Add an Independent Dedicated Treatment Train from Well Site H
Technical	🟢	🔴	🟡
Natural Environment	🟢	🟢	🟢
Socio-economic Environment	🟢	🟡	🟢
Financial	🟢	🟢	🟡
Jurisdictional/ Regulatory	🟢	🟢	🟡

Evaluation Process

Long-List of Design Concepts

↓ Screening Process

Short-List (Feasible Design Concepts)

↓ Detailed Evaluation

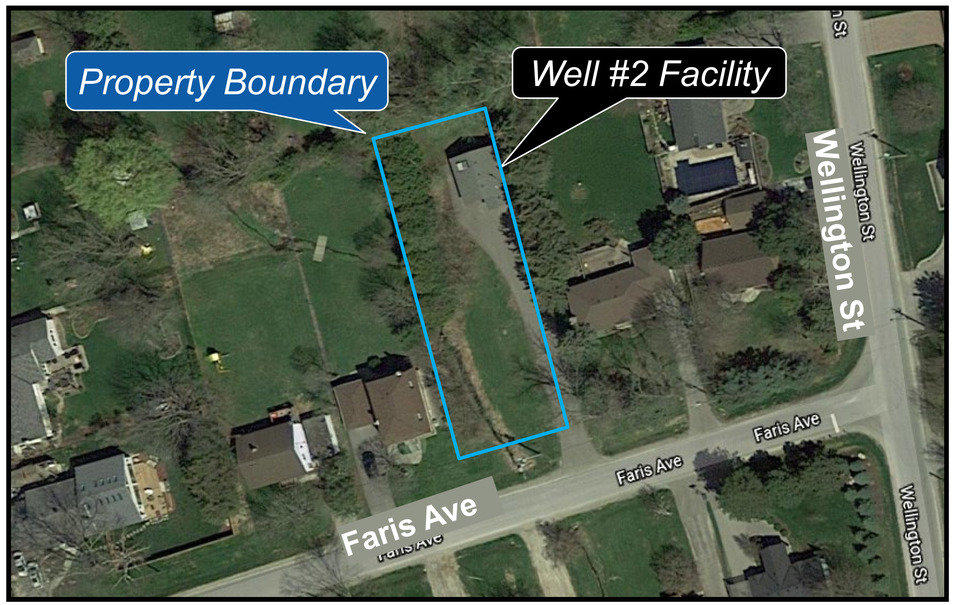
Recommended Solution

Scoring Description

- 🟢 Low Impact/ Most Preferred
- 🟡 Moderate Impact
- 🔴 High Impact

Water Servicing Recommended Design Concept: Expansion of Well #2 and Addition of an Independent Dedicated Treatment Train for Well Site H

Expand Well Site #2



Technical
- No challenges

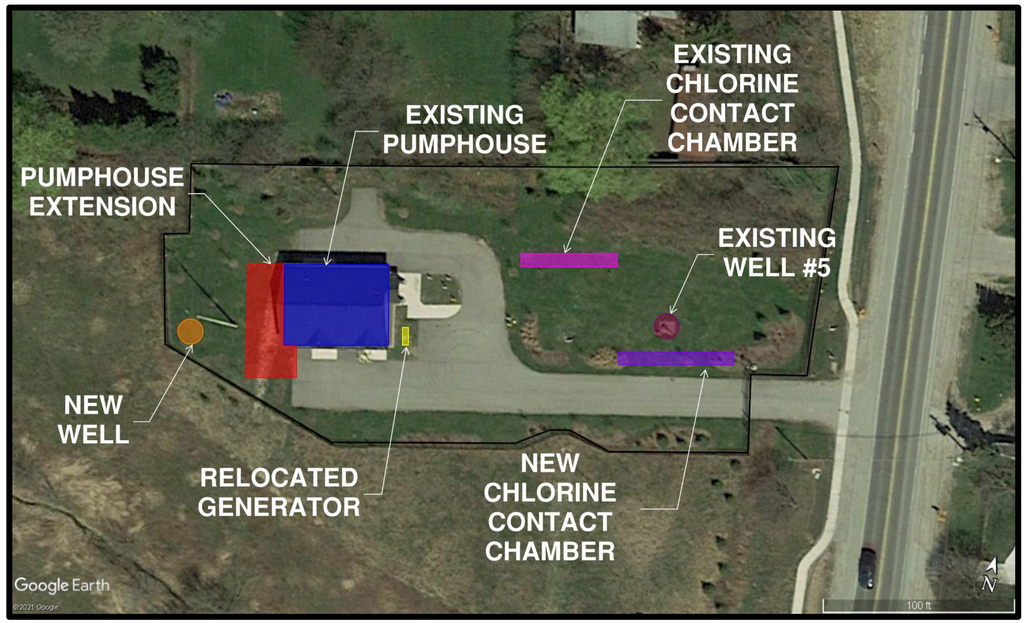
Natural Environment
- No impacts beyond current Well #2 Facility impacts

Socio-Economic
- Minimal community impacts during construction

Financial
- No major cost besides minor equipment upgrades

Jurisdictional/Regulatory
- Minor additional permitting

Add an Independent Dedicated Treatment Train from Well Site H



Technical
- No challenges; no impact on current water supply

Natural Environment
- Minor vegetation impact during construction

Socio-Economic
- Minor impacts during construction and future operation

Financial
- Moderate cost due to new facility construction

Jurisdictional/Regulatory
- Additional permits required

Wastewater Servicing Solutions

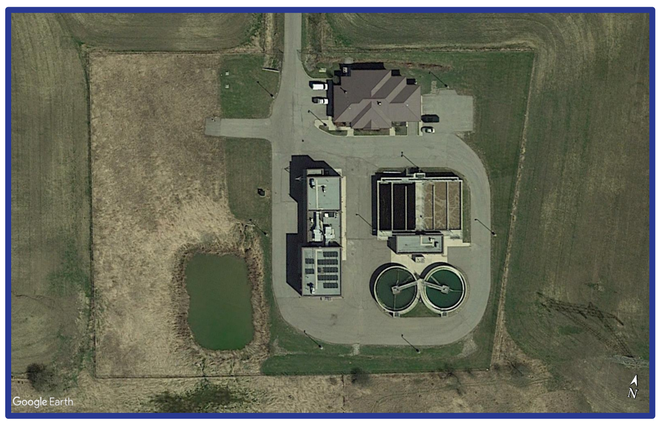
Solutions focused on two different parts of the wastewater system:

Pumping and Flow Attenuation

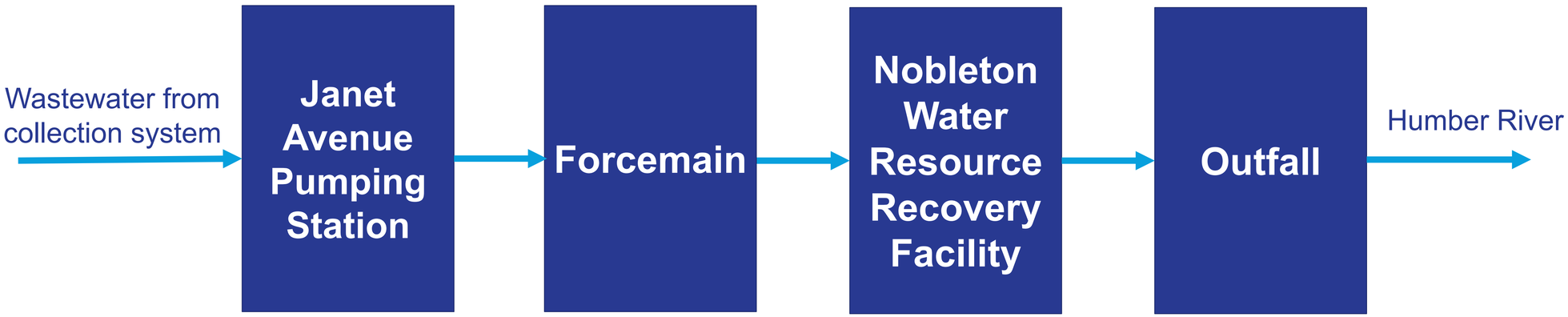
- Design concepts focused on reducing high peak flows through attenuation at Janet Avenue Pumping Station and/or Nobleton Water Resource Recovery Facility

Nobleton Water Resource Recovery Facility (WRRF)

- Design concepts focused on upgrades and expansions in the treatment plant to meet future flows and effluent quality requirements



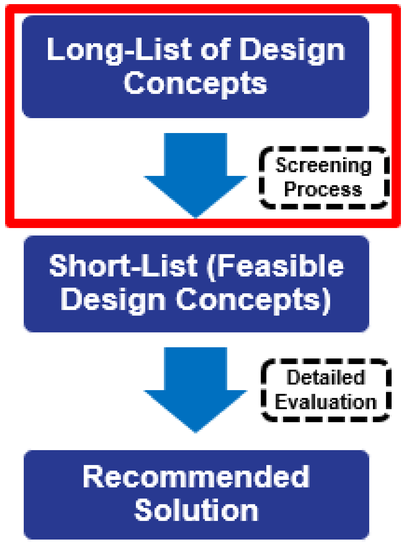
Nobleton Wastewater System



Wastewater Pumping and Attenuation Design Concepts Screening

Design Concepts for Wastewater Pumping and Attenuation	Long-List of Design Concepts Wastewater Pumping and Attenuation Screening Summary	Screening Status
1. No flow attenuation: expand Janet Avenue Pumping Station, twin existing forcemain, expand Nobleton Water Resource Recovery Facility (WRRF), twin outfall	▪ Requires expansion of entire wastewater system ▪ Results in oversized pump station and forcemain that will remain underutilized ▪ Expensive due to major construction required	**Fail**
2. Flow attenuation at Nobleton WRRF: expand Janet Avenue Pumping Station, twin existing forcemain, expand Nobleton WRRF, provide equalization tank at Nobleton WRRF	▪ Expanded pump station, twinned forcemain, and Water Resource Recovery Facility will remain underutilized except during large storm events ▪ High cost due to additional pump station required for equalization tank	**Fail**
3. A Flow attenuation at Janet Avenue Pumping Station with a Below Grade Storage Tank: expand Janet Avenue Pumping Station, provide equalization tank/pipe at pumping station, expand Nobleton WRRF	▪ Alternative eliminates twinning of 4.5 km of forcemain and 670 meters of outfall ▪ Requires the least civil and structural work upgrades	**Pass**
3. B Flow attenuation at Janet Avenue Pumping Station with a Gravity Pipe: expand Janet Avenue Pumping Station, provide equalization tank/pipe at pumping station, expand Nobleton WRRF	▪ Alternative eliminates twinning of 4.5 km of forcemain and 670 meters of outfall ▪ Requires the least civil and structural work upgrades	**Pass**

Evaluation Process



Short-List of Design Concepts: Wastewater Pumping and Attenuation Solutions

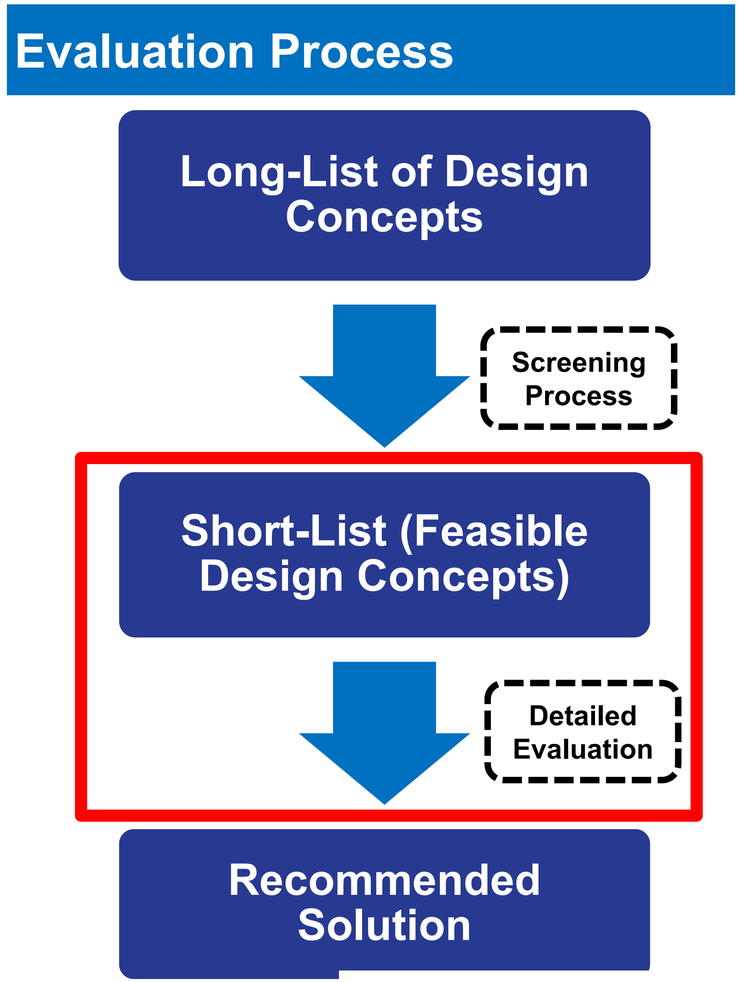
One alternative, with two design concepts, passed the screening process and was selected for detailed evaluation:

Design Concept 3.A

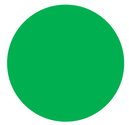
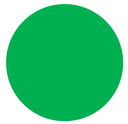
- Flow attenuation at Janet Avenue Pumping Station with a below grade storage tank

Design Concept 3.B

- Flow attenuation at Janet Avenue Pumping Station with a gravity pipe

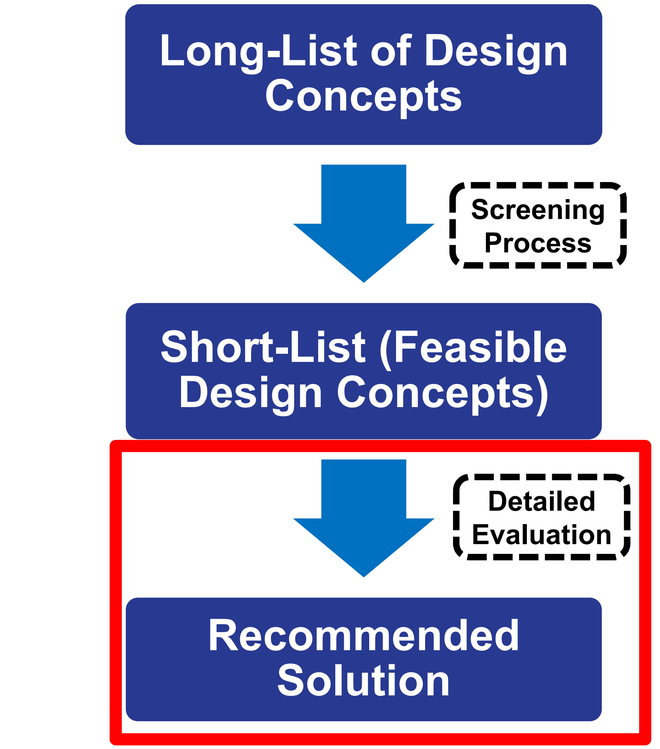


Wastewater Pumping and Attenuation Design Concepts Detailed Evaluation

	Design Concept 3.A: Flow attenuation at Janet Avenue Pumping Station with a below grade storage tank	Design Concept 3.B: Flow attenuation at Janet Avenue Pumping Station with a gravity pipe
Technical		
Natural Environment		
Socio-economic Environment		
Financial		
Jurisdictional/ Regulatory		

Although both design concepts ranked equally during evaluation, design concept 3.B has a higher impact during construction because gravity pipe will be installed within the site access roadway. As a result of this, the access roadway will not be available, and an alternate site entrance will be needed.

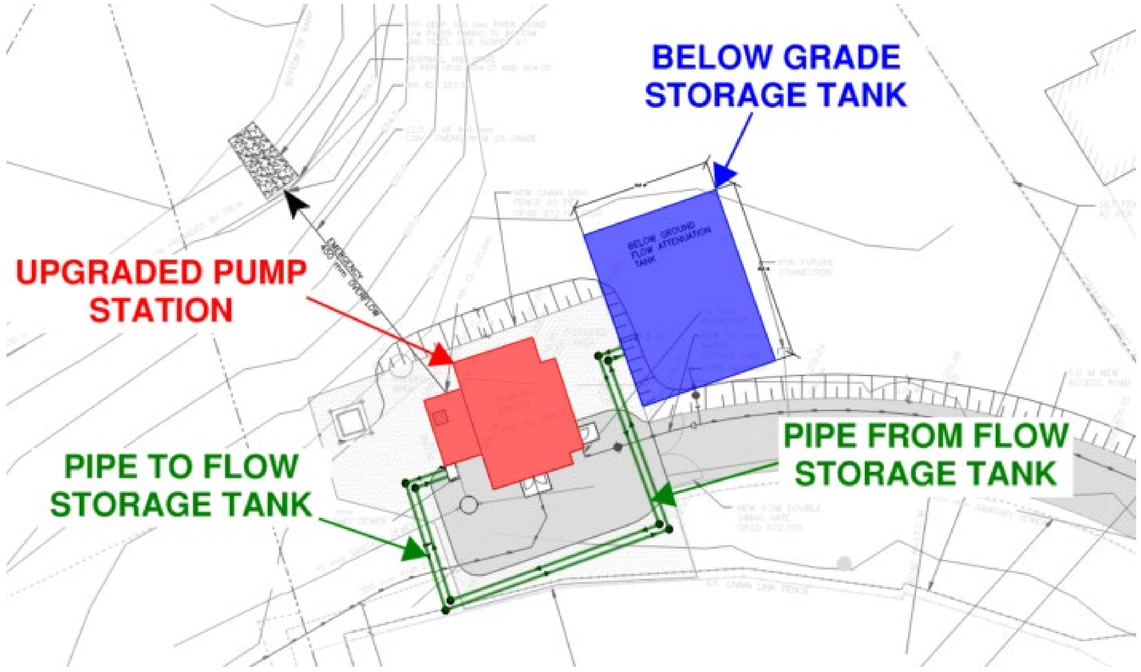
Evaluation Process



Scoring Description

- Low Impact/ Most Preferred
- Moderate Impact
- High Impact

Wastewater Pumping and Attenuation Recommended Design Concept: Storage Tank at Janet Avenue Pumping Station



Technical

- No challenges or impacts during construction
- No interruption to access roadway during construction

Natural Environment

- Minor impact on vegetation, water resources, and wildlife
- Moderate increase in greenhouse gas emissions due to higher energy requirement for pumping

Socio-Economic

- No anticipated community impacts

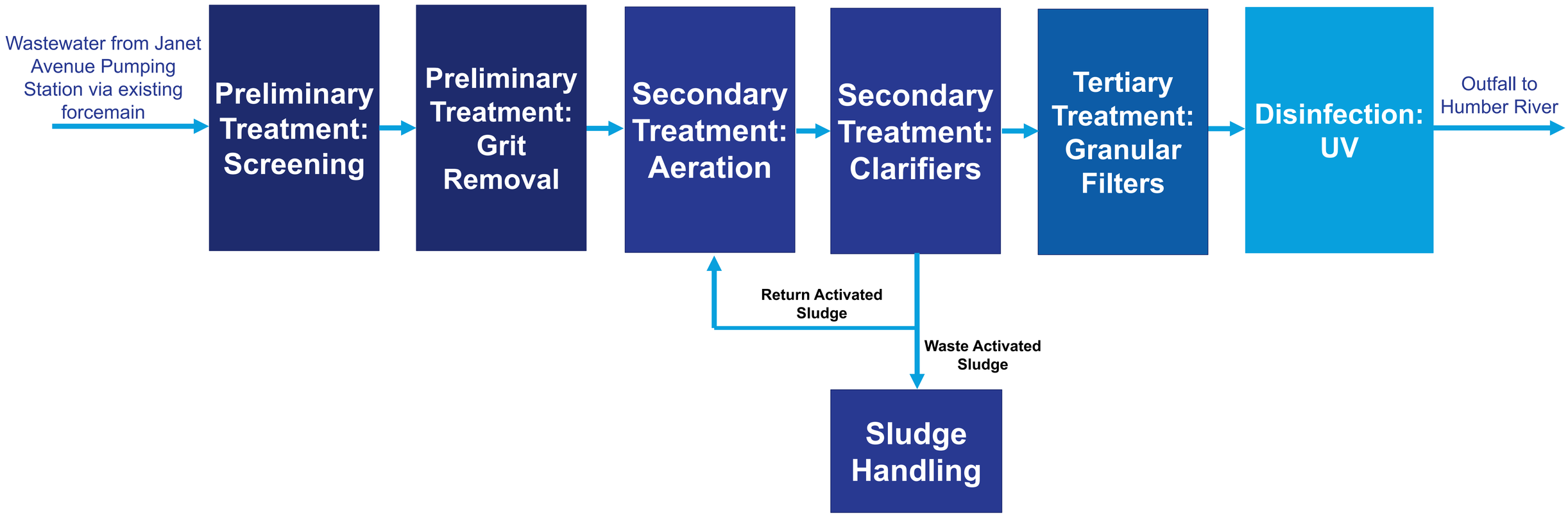
Financial

- Most economical capital investment and lifecycle cost

Jurisdictional/Regulatory

- Amendments to existing permits

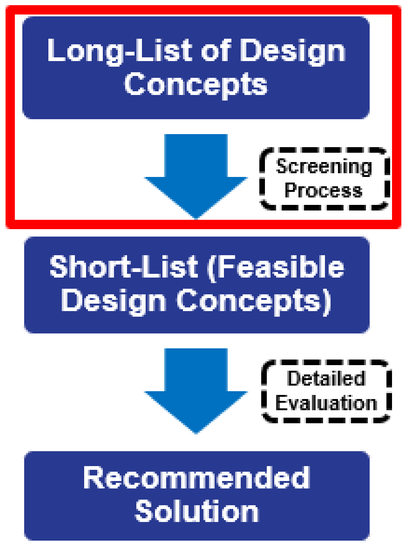
Nobleton Water Resource Recovery Facility (WRRF) Processes Overview



Nobleton WRRF Upgrades Design Concepts Screening

Design Concepts for Wastewater Servicing Solution	Long-List of Design Concepts Wastewater Solutions Screening Summary	Screening Status
0. No Flow Attenuation	▪ With no upstream flow attenuation, there is a significant construction cost and impact in the collection system and Nobleton WRRF	**Fail**
1.A Expand Existing Secondary Biological Treatment: Enlarge Existing Aeration Tanks	▪ Minimal construction impacts and capital/operating costs ▪ Technology is compatible, performs robustly and satisfied stakeholders	**Pass**
1.B Expand Existing Secondary Biological Treatment: Add Primary Treatment	▪ Incompatibility with existing operation and hydraulics ▪ Additional facilities will be required for effluent pumping and sludge handling	**Fail**
2. Intensify Secondary Biological Treatment System: Membrane Aerated Bioreactor	▪ Minimal construction impacts and capital/operating costs ▪ Technology is compatible, performs robustly and satisfied stakeholders	**Pass**
3. Add Secondary Biological Treatment Train	▪ Incompatibility with existing operation and hydraulics ▪ Additional process facilities will be required for effluent pumping and sludge handling	**Fail**
4. Expand Existing Biological Treatment with Equalization Expansion	▪ Requires new process and pumping station ▪ Did not pass resiliency criteria because peak treatment capacity would not be increased	**Fail**

Evaluation Process



Short-List of Design Concepts: Nobleton WRRF Upgrade Solutions

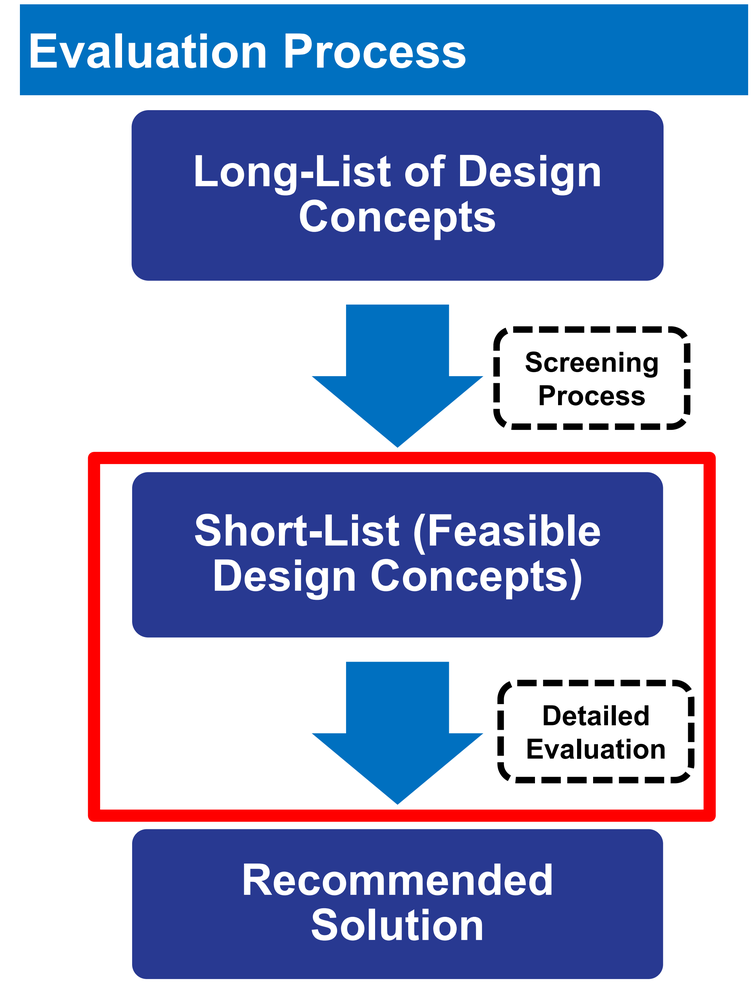
Two alternatives passed the screening process and were selected for detailed evaluation:

Design Concept 1.A

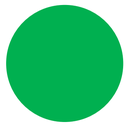
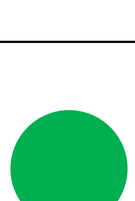
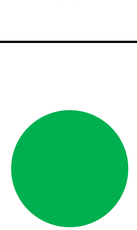
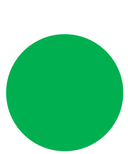
- Expand existing secondary biological treatment: Enlarge existing aeration tanks

Design Concept 2

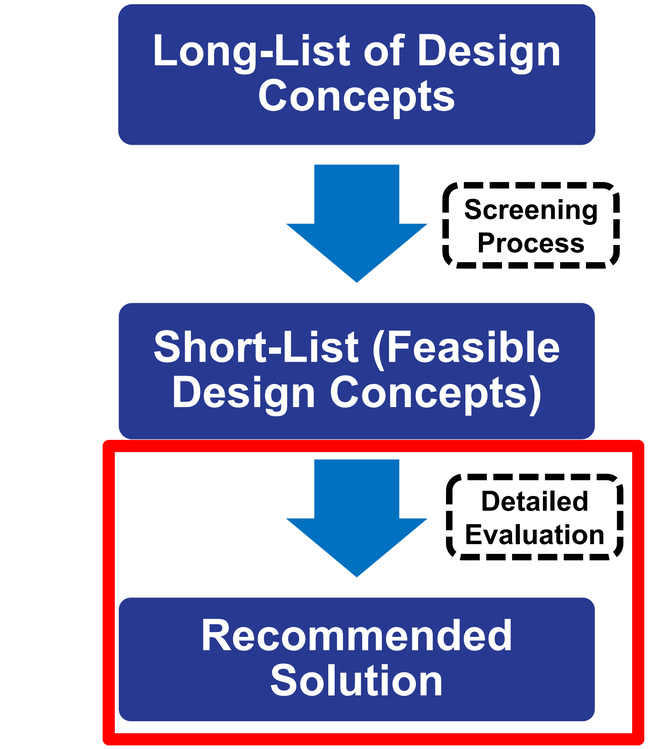
- Intensify secondary biological treatment system: Membrane aerated bioreactor



Nobleton WRRF Upgrade Design Concepts Detailed Evaluation

	Design Concept 1.A: Expand Existing Secondary Biological Treatment: Enlarge Existing Aeration Tanks	Design Concept 2: Intensify Secondary Biological Treatment System: Membrane Aerated Bioreactor
Technical		
Natural Environment		
Socio-economic Environment		
Financial		
Jurisdictional/ Regulatory		

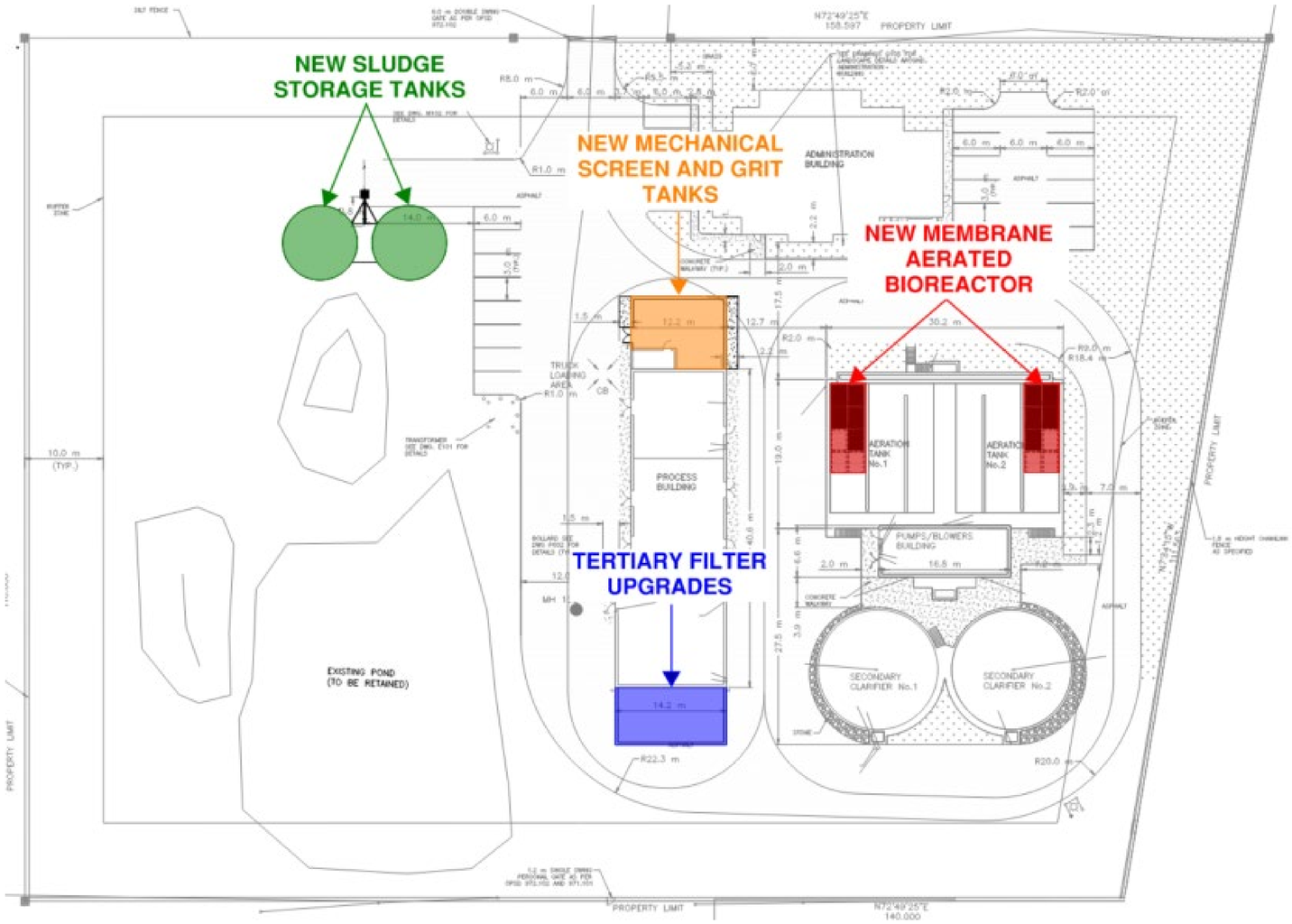
Evaluation Process



Scoring Description

- Low Impact/ Most Preferred
- Moderate Impact
- High Impact

Nobleton WRRF Upgrade Recommended Design Concept: Intensify Secondary Biological System – Membrane Aerated Bioreactor (MABR)



Technical

- Existing facilities will need to be modified to accommodate intensification processes

Natural Environment

- No impact on vegetation, water resources, and wildlife

Socio-Economic

- No anticipated community impacts

Financial

- Lowest cost alternative

Jurisdictional/Regulatory

- Additional permits required due to lack of full-scale Membrane Aerated Bioreactor (MABR) processes

Summary of Recommended Design Concepts

Water Servicing

Expand Well #2 and add an independent dedicated treatment train for Well Site H

Wastewater: Pumping and Flow Attenuation

Expand Janet Avenue Pumping Station and add flow attenuation with an underground storage tank

Wastewater: Nobleton WRRF Upgrades

Intensify secondary biological treatment system with membrane aerated bioreactors

Share your thoughts – we're listening.

Please contact us if you are unable to access the online survey.

- To provide your feedback, complete the survey. Survey can be accessed at **york.ca/nobletonea**
- Please complete the survey by **August 3, 2021**

Afshin Naseri, P. Eng.
Senior Project Manager
Environmental Services
The Regional Municipality of York
17250 Yonge Street
Newmarket, Ontario L3Y 6Z1
afshin.naseri@york.ca
1-877-464-9675 ext. 75062
Fax 905-830-6927

What's Next?

- Document input and compile studies and reports prepared as part of the Class EA process into an **Environmental Study Report**

- Environmental Study Report will be tabled for a mandatory period of 30 days

- You can continue to stay informed about the project, or sign up for updates by visiting the project webpage at **york.ca/nobletonea**

Thank you for joining us!

THANK YOU

Appendix E – Survey Questions

Note – all questions are open-ended unless otherwise noted.

Part 1: Feedback on PCC Content

1. Do you have any comments on the recommended design concept for water servicing?

2. Do you have any comments on the recommended design concept for wastewater servicing?

3. Do you have any comments on the process used to assess the design concepts?

4. Did the Open House (or slide recording) answer your questions about the project?

5. Do you have any additional thoughts or comments about this project?

Part 2: Feedback on PCC Format

1. Did you attend the live online Open House? (Yes or No)

2. On a scale of 1 (poor) to 5 (excellent), how would you rate the overall Open House experience? (Ranking 1-5)

3. What did you like best or find most useful about the Open House?

4. Did you encounter any technical difficulties with the Open House?

5. Do you have any other feedback or comments for us on the consultation process or format?

6. Would you like to sign-up for the project mailing list? (If yes, provide your email address)

Thank you for your feedback!

NOTICE OF COMPLETION

Nobleton Water and Wastewater Servicing - Municipal Class Environmental Assessment Study

In the Township of King

November 4, 2021

The Regional Municipality of York has completed the Schedule C Municipal Class Environmental Assessment Study for Water and Wastewater Servicing in the Community of Nobleton. To accommodate future growth in the community, the Environmental Assessment Study looked at long-term water and wastewater servicing options in the Township of King.

As a result of the study, York Region identified the preferred solution including:

1. Increasing the capacity of Well #2
2. Building an additional well (Well #6) at the existing Well #5 location
3. Expanding the capacity of the Janet Avenue Sewage Pumping Station and providing a below ground flow attenuation tank
4. Expanding the capacity of the existing Nobleton Water Resource Recovery Facility

This notice places the completed Environmental Study Report on public record for a comment period of 32 days from November 4, 2021 to December 6, 2021.

We invite you to review the Environmental Study Report, and interested persons may provide written comments and concerns by December 6, 2021:

Afshin Naseri, P.Eng.,
Senior Project Manager
Environmental Services
York Region
17250 Yonge Street
Newmarket ON L3Y 6Z1
afshin.naseri@york.ca
1-877-464-9675 ext. 75062

For convenience and access during the COVID-19 pandemic, the Environmental Study Report is available to review online at **york.ca/ea**. If a printed copy is required, please contact York Region to coordinate pick-up of a printed copy at the King Township offices, during normal business hours:

King Township
Municipal Centre
2585 King Road
King City, ON L7B 1A1

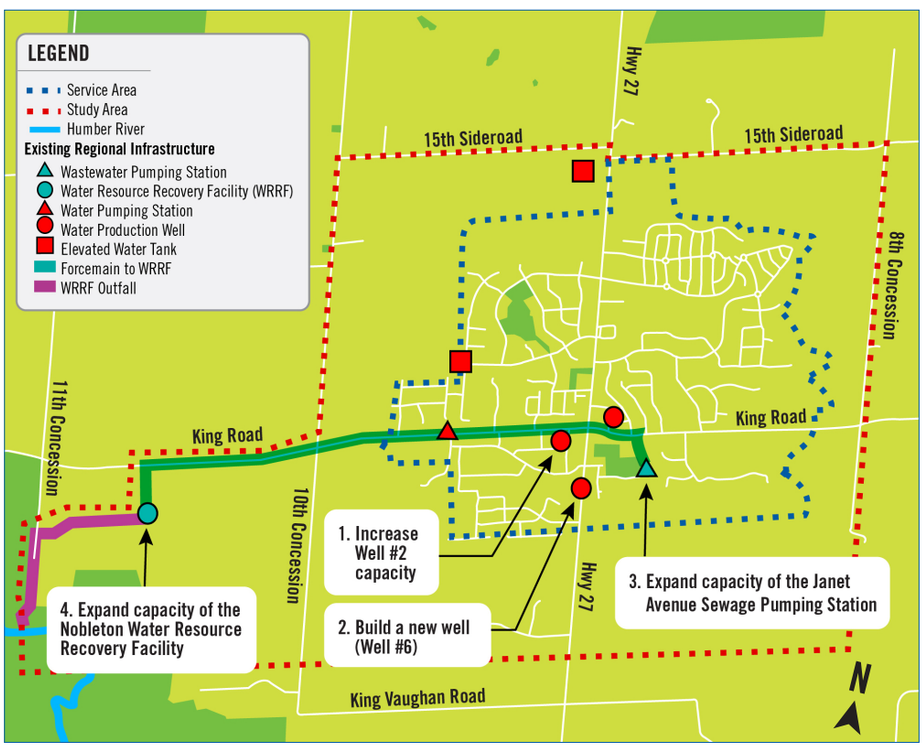
Requests for an order requiring a higher level of study may be made to the Ministry of the Environment, Conservation and Parks only on the grounds that the requested order may prevent, mitigate, or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights.

Requests must be received by the Ministry by December 6, 2021, and should be addressed in writing to:

Minister David Piccini
Ministry of the Environment
Conservation and Parks
777 Bay Street, 5th Floor,
Toronto ON M7A 2J3
minister.mecp@ontario.ca

and

Director,
Environmental Assessment Branch
Ministry of the Environment,
Conservation and Parks
135 St. Clair Ave. W, 1st Floor
Toronto ON M4V 1P5
EABDirector@ontario.ca



Requests should specify the requestor's name and contact information, the kind of order being requested (request for additional conditions or an individual/comprehensive environmental assessment), how an order may prevent, mitigate or remedy potential adverse impacts, and any information in support of the statements in the request. Requests should also be sent to York Region by mail or by e-mail.

For more information on requests for orders under section 16 of the *Environmental Assessment Act* please visit: www.ontario.ca/page/class-environmental-assessments-section-16-order

Thank you for your participation in the study. An accessible version of this notice is available upon request.
This notice was issued on November 4, 2021.

Safety is the Region's top priority. As we monitor the ongoing COVID-19 situation in York Region, we continue to deliver essential services while staying current with all health and safety related information and complying with guidelines related to COVID-19 published by the Ontario Ministry of Health, Ministry of Labour, Training and Skills Development and York Region Public Health.

Personal information submitted (e.g., name, address and phone number) is collected, maintained and disclosed under the authority of the Environmental Assessment Act and the Municipal Freedom of Information and Protection of Privacy Act for the purpose of creating a public record and for consultation purposes. Personal information you submit will become part of a public record that is available to the general public, unless you request that your personal information remain confidential.

York Region