

Fergus Golf Club Redevelopment Environmental Assessment Study



Public Information Centre #1

June 1, 2023, 6 p.m. - 8 p.m.

Belwood Hall, Township of Centre Wellington



Welcome

to Public Information Centre #1 for the Fergus Golf Club Redevelopment Environmental Assessment Study

Please Sign In

Meet with Study Team Members

Review the display materials and discuss your questions and ideas with the Study Team

Listen to the **short presentation at 6:30pm** and participate in the Question & Answer Period

Please fill out a comment sheet and return it to the comment box today or

FergusGolfEA@rjburnside.com by

June 30, 2023



Purpose of Public Information Centre #1

PIC #1 is the first of three mandatory public contact points under the 2023 Municipal Class Environmental Assessment process for Schedule C Projects.

The purpose of PIC #1 is to:

- Introduce the Study to the public
- Provide an opportunity to participate and give input in the planning and decision-making process
- Discuss the proposed servicing option



PIC # 1 will present:

- Project Opportunity Statement
- Results of studies completed to date
- Alternative solutions considered
- Next steps



Consultant Team



Environmental Assessment
Lead, Civil Engineering



Transportation



Land Use Planning,
Landscaping Architecture,
Urban Design



Acoustic Engineering



Water Treatment
Design



Hydrogeology,
Geotechnical,
Archaeology
Environmental



Natural Heritage



Legal



Legal

Project Description

The Fergus Golf Club lands are located along the western side of 3rd Line, on both the northern side (“NW Site”) and southern side (“SE Site”) of Wellington Road 19.

The proposed Fergus Golf Club redevelopment will consist of:

- The existing northwestern golf course (the “NW Site”)
- Redeveloping the southeast golf course (the “SE Site”) into a private condominium development with 118 single family dwellings.

A Schedule C Municipal Class Environmental Assessment (MCEA) Study is being undertaken for the proposed water and wastewater servicing for the proposed redevelopment. **The MCEA does not affect Planning Act approvals.**



Study Area Map

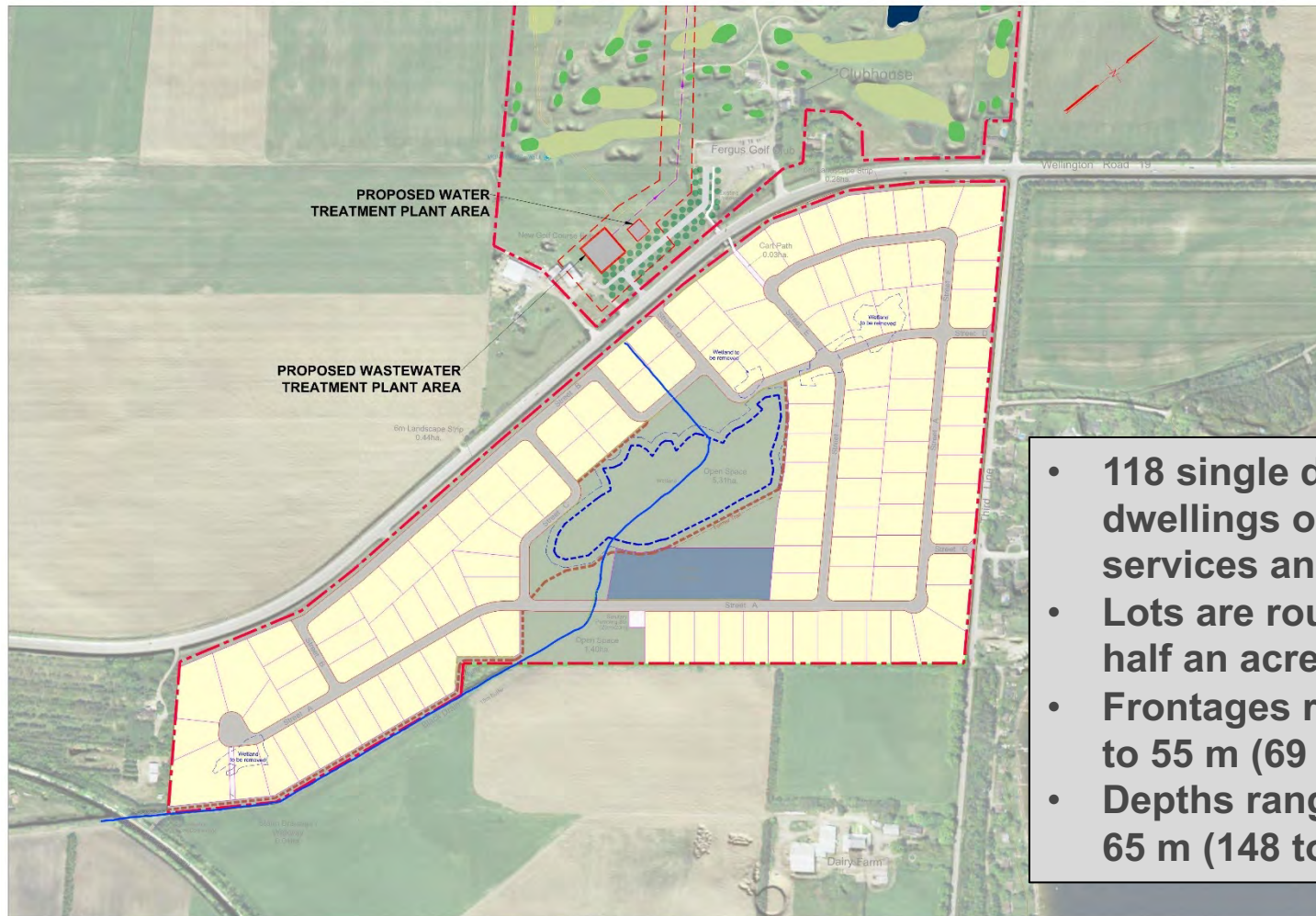
A Brief Chronology

Planning Approvals

MCEA Process

1977	Fairview Golf Course constructed on SE parcel	May 2023	Notice of Study Commencement and Public Information Centre #1
1996	Residential development approved on Fairview Golf Course Lands	June 2023	EA Public Information Centre #1
2000	Newly constructed Lake Belwood Golf Course opens on NW parcel		
Feb 2022	Applications filed for SE and NW parcels		
April 2022	Applications Deemed Complete		
June 2022	Community Information Meeting at Belwood Hall		
April 2023	Statutory Planning Act Public Meeting		
June 2023	Targeted Planning Application Consideration by Council		

Proposed Redevelopment



- 118 single detached dwellings on private services and roads
- Lots are roughly half an acre in size
- Frontages range 21 to 55 m (69 to 180 ft)
- Depths range 45 to 65 m (148 to 213 ft)

Project Opportunity Statement

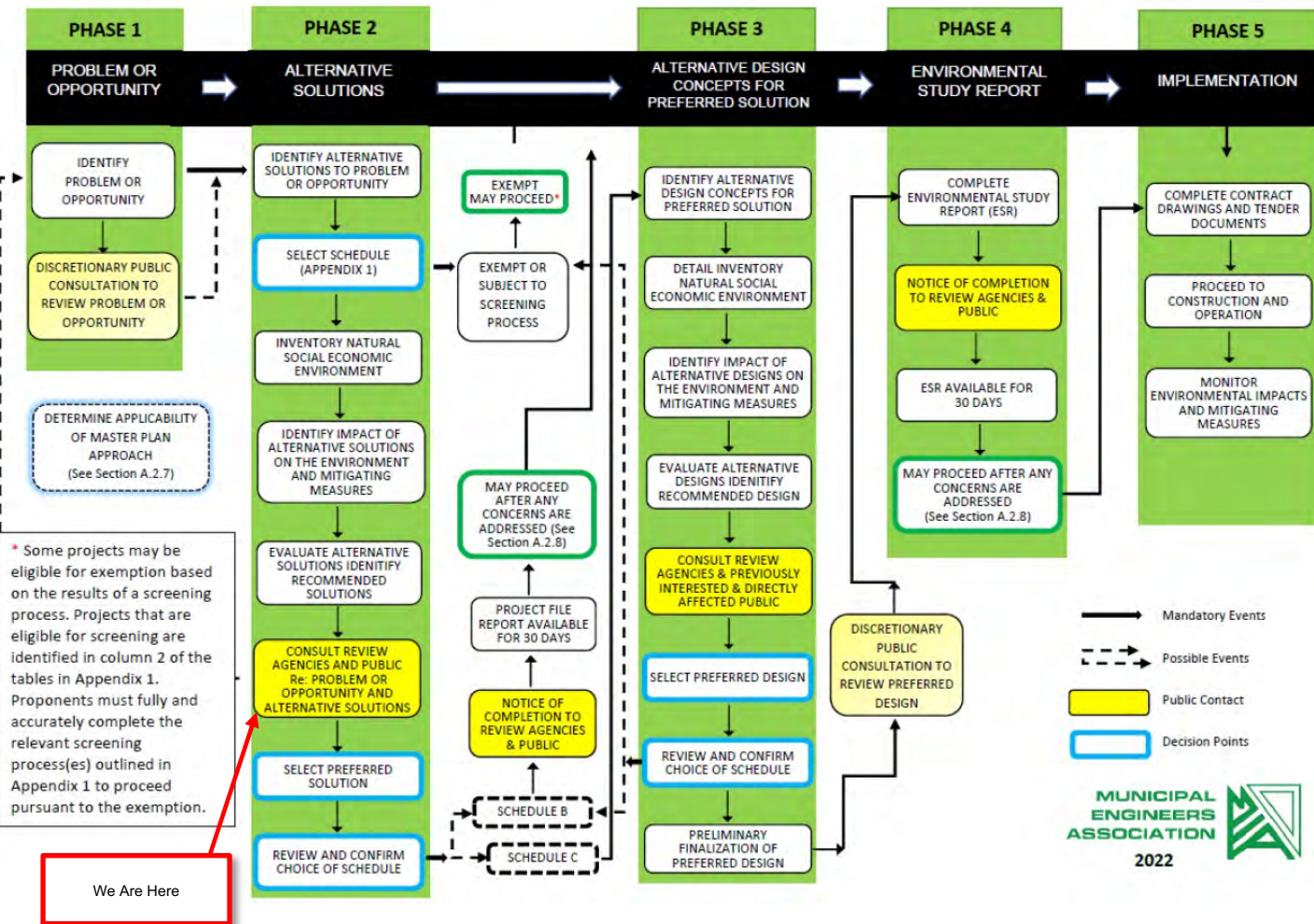
The project opportunity statement defines the principal starting point in the undertaking of the MCEA Study and assists in defining the scope of the project. The Project Opportunity for this MCEA Study is defined as follows:

Fergus Development Inc. is undertaking the redevelopment of a part of the Fergus Golf Club lands, which will provide single detached rural recreational-based housing, based on the findings of a servicing study, on the SE Site. This redevelopment will contribute to satisfying the need and market demand for recreational focused housing in the Township of Centre Wellington and the County of Wellington. In order to service the new housing units, Fergus Development Inc. needs to identify and consider options to provide cost-effective and environmentally sound means of providing a potable water supply and wastewater servicing. Alternatives will be examined as part of the MCEA Study including the impacts of alternatives on the natural, socio-cultural, technical and financial environment.

The project opportunity statement is a requirement of the MCEA process.

The EA Process

The Study is being carried out in accordance with the planning and design process for Schedule C projects as outlined in the 2023 Municipal Class Environmental Assessment, which is approved under the **Ontario Environmental Assessment Act**. Upon completion of the study, an Environmental Study Report (ESR) will be prepared and made available for public review and comment.





Technical Studies

The following studies were completed in conjunction with the Planning Act applications, which also inform the EA Study:

- Planning Justification Report by GSP Group
- Community Design Guidelines by GSP Group
- Functional Servicing Report by R.J. Burnside & Associates Limited (Burnside)
- Stormwater Management Report by Burnside
- Water Servicing Study by TYLIN
- Environmental Impact Assessment by Beacon Environmental
- Environmental Noise Report by Jade Acoustics
- Transportation Report by BA Group
- Stage 1 and 2 Archaeological Assessment by WSP (Golder)
- Preliminary Geotechnical Investigation by WSP (Golder)
- Hydrogeological Investigation by WSP (Golder)
- Water Supply Investigation by WSP (Golder)

Natural Heritage Resources

Designated Areas

- Living Springs Provincially Significant Wetland (PSW) Complex associated with Irving Creek Valley corridor north of Study Area.
- Watercourse and fish habitat associated with the Black Drain and tributary crossings.
- Significant Valleyland and Woodland, fish habitat, potential Significant Wildlife Habitat (SWH) and endangered species habitat at Grand River.

Terrestrial Habitat

- Habitat for threatened Bobolink and Eastern Meadowlark within golf course lands in Study Area.
- Potential SWH (Colonial Nesting Birds) in Grand River Valley.

Aquatic Habitat

- Fish habitat at Black Drain and tributary crossings.
- Fish habitat and potential habitat for Silver Shiner (federally endangered) at Grand River.

**All significant habitat and natural heritage areas being preserved / protected from development.
Enhancements are provided in other areas.**



Archaeological Resources

- Stage 1 Archaeological Assessment and Stage 2 Archaeological Assessment completed for NW and SE Sites.
- Stage 1 Archaeological Assessment identified that both the NW and SE Sites had archaeological potential.
- Stage 2 Archaeological Assessment cleared both the entire SE Site and the NW Site as described of archaeological resources.
- First Nations communities participated in field work and pre-consultation.



Hydrogeological Conditions

Water Taking Requirement

- average day 128 m³/d (1.48 L/s)
- maximum day 435 m³/d (5.03 L/s)

Existing bedrock aquifer suitable for water supply

- thick glacial till (29.9 m) overlies the bedrock
- Test Well PW21-1 constructed to 84.1 m in the bedrock aquifer

Water Quantity

- tested yield of 8.8 L/s and can meet the demand of 5.03 L/s
- no unacceptable interference with private wells
- no anticipated impacts to surface water features

Water Quality

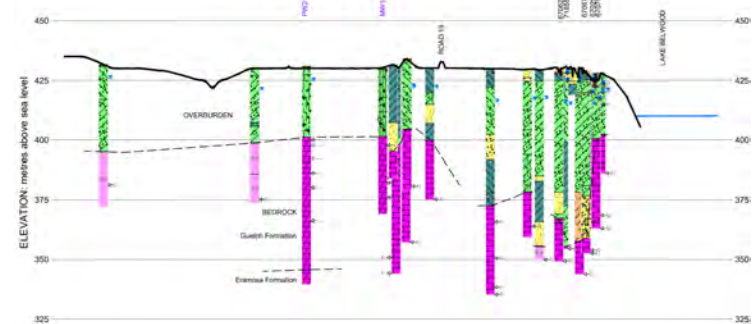
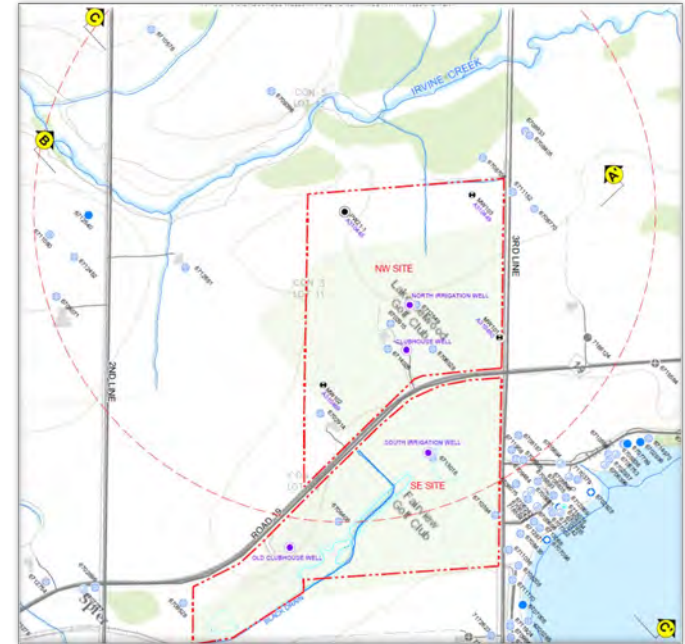
- meets the Ontario Drinking Water Quality Standards except for total dissolved solids and hardness, which will be addressed by proven treatment methods

GUDI Assessment

- risk of surface contamination is low (MPA analysis) and well is not considered GUDI

Source Protection

- in a low vulnerability zone
- no significant threats to Township wells
- located outside of the Township water quantity protection zone



Section C-C'



Existing Conditions – Hydrogeology, Water Supply & Wastewater Management

- Existing subsurface hydrogeological conditions have been documented by WSP (Golder).
- The site is characterized by low permeability surficial soils.
- The existing golf course is serviced by groundwater wells and an onsite sewage (septic) system.
- Existing golf course wells draw water from the deep bedrock aquifer.
- The deep bedrock aquifer is separated from shallow wells by the low permeability soil overburden that extend 20m to 30m below grade.
- There is no identified interaction between shallow water wells and the deep bedrock wells on the site.



Alternative Solutions - Water

1. Do Nothing

- No improvements or changes to address the project opportunity statement.
- **Mandatory alternative that must be considered in accordance with the 2023 MCEA Process.**

2. Connect to an Existing Municipal Water Supply System

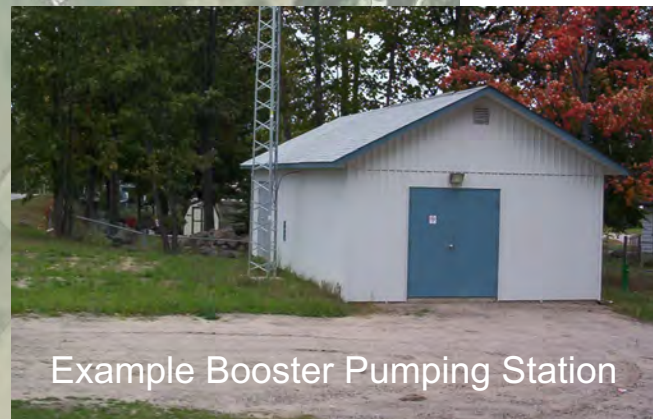
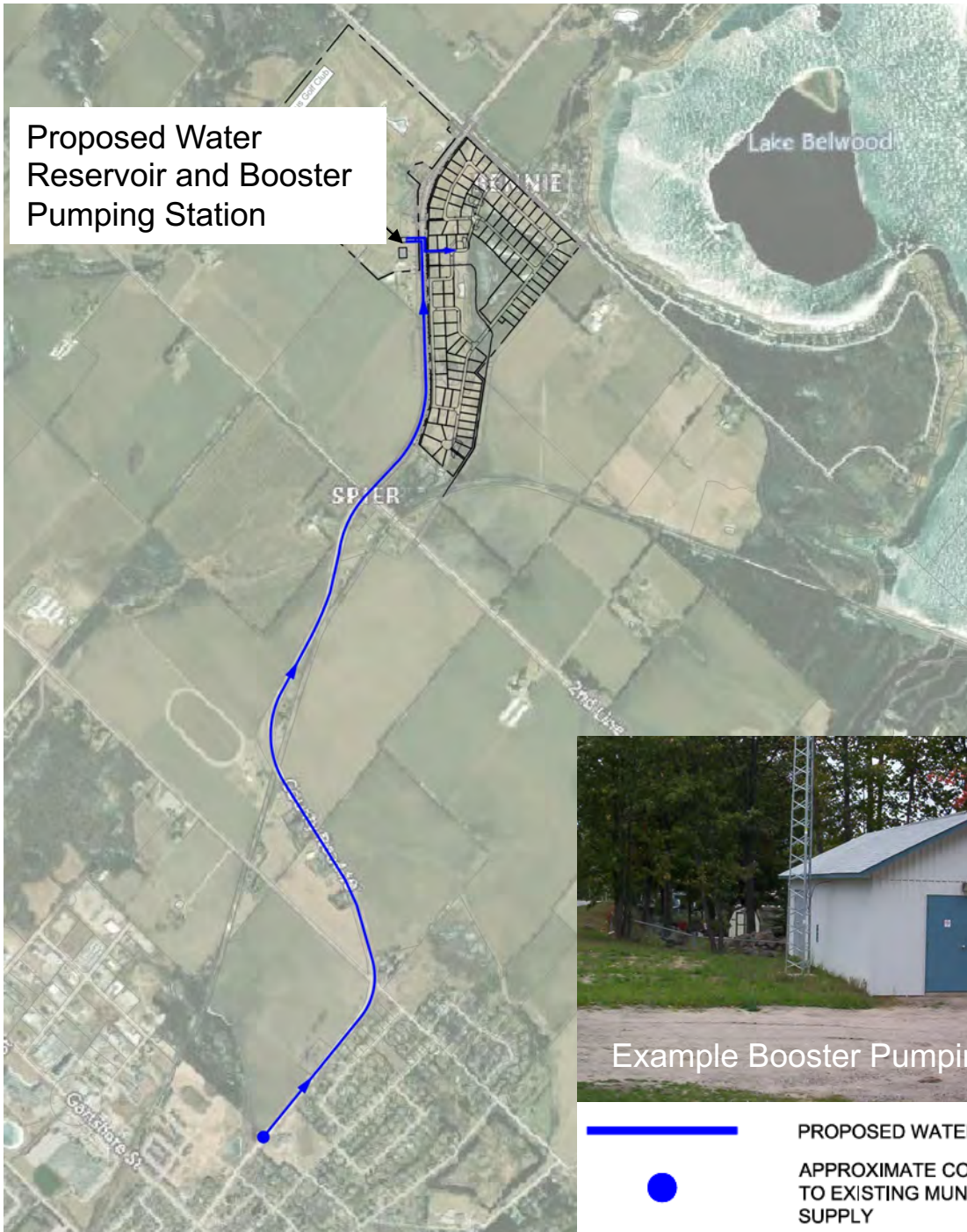
- Requires new watermain from existing system in Fergus along Wellington Road 19 to development site.
- Requires reservoir, booster pumping station, re-chlorination and backup power on NW Site.

3. New Onsite Communal Water Supply and Treatment System

- Commissioning of new onsite wells.
- Requires raw water supply main.
- Requires new onsite water treatment plant (WTP), reservoir and backup power.
- Requires water distribution system via feedermain from WTP.

Alternative Solution 2 – Water

Connect to an Existing Municipal Water Supply System



Example Booster Pumping Station

- PROPOSED WATERMAIN
- APPROXIMATE CONNECTION POINT TO EXISTING MUNICIPAL WATER SUPPLY

Alternative Solution 3 – Water

New Onsite Communal Water Supply and Treatment System





Alternative Solutions - Wastewater

1. Do Nothing

- No improvements or changes to address the project opportunity statement.
- **Mandatory alternative that must be considered in accordance with the 2023 MCEA Process.**

2. Connect to Existing Municipal Wastewater System

- Conveyance of untreated wastewater via sewage pumping station and new forcemain from development within Wellington County Road 19 right-of-way (ROW) and within local road ROWs to the existing wastewater treatment plant (WWTP) in Fergus.

3. New Communal WWTP and Subsurface Discharge

- Wastewater treated on-site and discharged to dispersal beds within the NW Site; No off-site works.

4. New Communal WWTP and Discharge Treated Sewage Effluent to a surface receiving waterbody

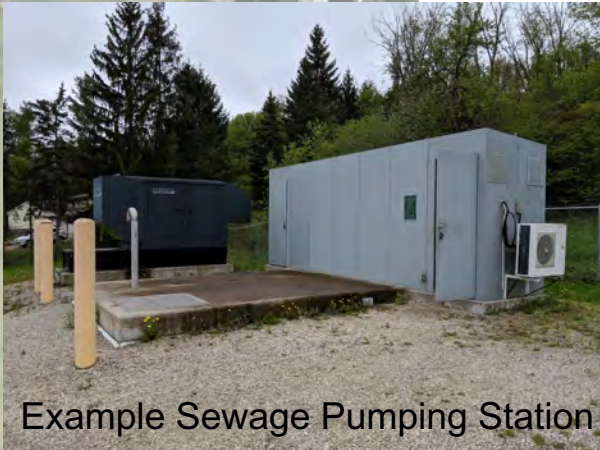
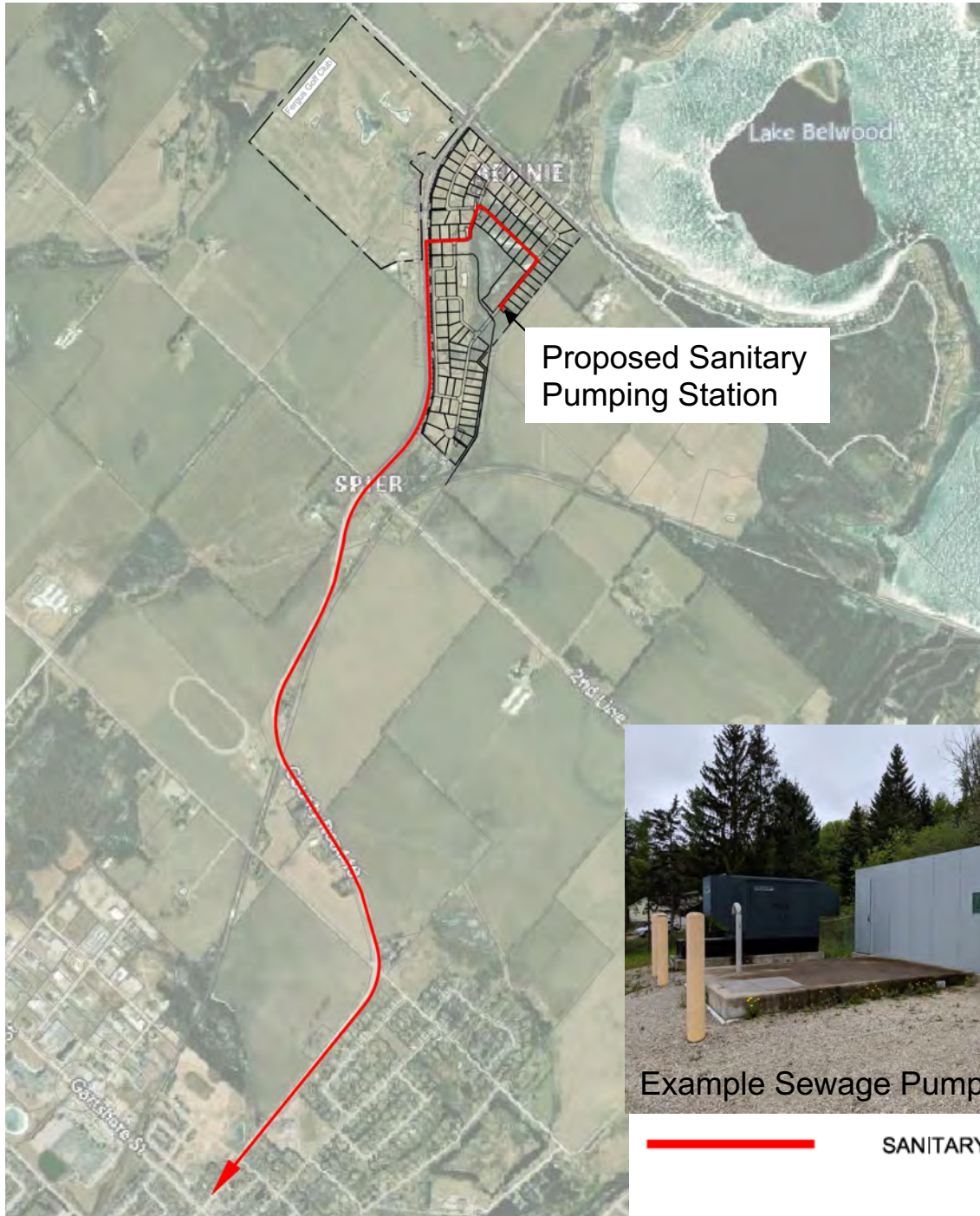
- Wastewater treated on-site and then conveyed by piping within existing municipal ROWs (Wellington County Rd 19, 2nd Line) to discharge outfall.
- Discharge outfall location is Grand River.

5. New Communal Wastewater Treatment Plant and Discharge to Existing Irrigation Ponds followed by Beneficial Reuse for Golf Course Irrigation

- Wastewater treated on-site and discharged to irrigation ponds within the NW Site; No off-site works.

Alternative Solution 2 – Wastewater

Connect to Existing Municipal Wastewater System



Example Sewage Pumping Station

————— SANITARY FORCEMAIN

Alternative Solution 3 – Wastewater

New Communal WWTP and Subsurface Discharge





Alternative Solution 4 – Wastewater

New Communal WWTP and Discharge Treated Sewage Effluent to a surface receiving waterbody



Alternative Solution 5 – Wastewater

New Onsite Communal Wastewater Treatment Plant with Discharge to Irrigation Ponds





Evaluation Criteria - Water

- **Natural Environment**
 - Impacts to Designated Site / Species
 - Impacts to Surface Water Quality
 - Impacts to Groundwater Quality and Quantity
 - Impacts to Hazard Lands
 - Impacts to Vegetation and Terrestrial Habitat
 - Impacts to Aquatic Habitat
 - Source Water Protection
- **Socio-Cultural Environment**
 - Compatibility with Official Plan and Provincial Growth Plans
 - Heritage Resources (archaeological features, built heritage, and cultural landscapes)
 - Noise impacts
 - Nuisance impacts
 - Impact to existing private wells
- **Technical Environment**
 - Ability to service proposed development
 - Approvals / permitting requirements
 - Site considerations and construction requirements
 - Operation and maintenance requirements and complexity
 - Conformity with applicable guidelines and standards
- **Financial**
 - Capital costs
 - Operation and Maintenance costs



Evaluation Criteria - Wastewater

- **Natural Environment**
 - Impacts to Designated Site / Species
 - Impacts to Surface Water Quality
 - Impacts to Groundwater Quality and Quantity
 - Impacts to Hazard Lands
 - Impacts to Vegetation and Terrestrial Habitat
 - Impacts to Aquatic Habitat
 - Source Water Protection
- **Socio-Cultural Environment**
 - Compatibility with Official Plan and Provincial Growth Plans
 - Heritage Resources (archaeological features, built heritage, and cultural landscapes)
 - Noise impacts
 - Nuisance impacts
- **Technical Environment**
 - Ability to service proposed development
 - Approvals / permitting requirements
 - Construction complexity
 - Operation and maintenance requirements and complexity
 - Conformity with applicable guidelines and standards
- **Financial**
 - Capital costs
 - Operation and Maintenance costs

Evaluation of Alternative Solutions – Water

Criteria	1: Do Nothing	2: Connect to Existing Municipal Water Supply System	3: New Onsite Communal Water Supply System
Natural Environment	No impact over existing conditions.	Higher impact due to length of watermain / impact footprint.	Lower impact associated with Water Treatment Plant (WTP) footprint.
<i>Ranking</i>	<i>Most Preferred</i>	<i>Least Preferred</i>	<i>Less Preferred</i>
Socio-Cultural Environment	Not consistent with Official Plan (OP). Does not contribute to housing per Bill 23. Continuation of golf course operations on SE Site may have potential impacts to shallow groundwater.	Consistent with OP. Contributes to housing per Bill 23. Potential for impact to archaeological resources. Construction noise and traffic impacts greater due to length of watermain.	Compatible with OP. Contributes to housing per Bill 23. No known archaeological impacts. Noise from onsite WWTP operation can be mitigated. No traffic impacts anticipated. Visual impacts can be screened.
<i>Ranking</i>	<i>Less Preferred</i>	<i>Least Preferred</i>	<i>Most Preferred</i>
Technical Criteria	No services to lands designated for development. No construction or operations and maintenance (O&M) requirements. Does not necessarily mean that no further development in the community would occur.	Requires an increase in water taking from existing municipal water supply – capacity to be confirmed. Requires approvals. Moderate complexity in O&M.	Can adequately service development. Requires approvals. Moderate complexity in O&M.
<i>Ranking</i>	<i>Least Preferred</i>	<i>Less Preferred</i>	<i>Most Preferred</i>
Financial Criteria	No capital or O&M costs.	Capital Costs ~ \$10M (Developer responsibility). Moderate O&M costs (Developer responsibility). Capital costs for upgrades to existing water supply system unknown (Developer responsibility).	Capital Costs ~ \$10M (Developer responsibility). Moderate O&M costs (Developer responsibility).
<i>Ranking</i>	<i>Most Preferred</i>	<i>Least Preferred</i>	<i>Less Preferred</i>
Overall Ranking	<i>Less Preferred</i>	<i>Least Preferred</i>	<i>Most Preferred</i>
Meets Project Opportunity (PO) Statement	No. Does not meet Project Opportunity Statement. Not a viable alternative.	Yes. Meets Project Opportunity Statement.	Yes. Meets Project Opportunity Statement.
Recommendation	Not Carried Forward	Not Carried Forward	Carried Forward

Evaluation of Alternative Solutions – Wastewater

Criteria	1: Do Nothing	2: Connect to Existing Municipal Wastewater System	3: New Onsite Water System with Subsurface Discharge	4: New Onsite Water System with Discharge to Waterbody	5: New Onsite Water System with Discharge to Irrigation Pond
Natural Environment	No impact over existing conditions.	Higher impact due to length of forcemain / impact footprint.	Moderate impact associated with dispersal beds footprint.	Higher impact due to discharge within Grand River floodplain.	Lower impact associated with only onsite discharge piping to the pond.
<i>Ranking</i>	<i>Most Preferred</i>	<i>Least Preferred</i>	<i>Somewhat Preferred</i>	<i>Least Preferred</i>	<i>More Preferred</i>
Socio-Cultural Environment	Not consistent with Official Plan (OP). Does not contribute to housing per Bill 23.	Consistent with OP. Contributes to housing per Bill 23. Potential for impact to archaeological resources. Construction noise and traffic impacts greater due to work in urban area.	Consistent with OP. Contributes to housing per Bill 23. Potential for archaeological resources in dispersal bed areas. Noise from onsite WWTP operation can be mitigated. No traffic impacts anticipated. Visual impacts can be screened.	Consistent with OP. Contributes to housing per Bill 23. Potential for archaeological resources along discharge route and outfall. Noise associated discharge route construction. Noise from onsite WWTP operation can be mitigated. Traffic impacts associated with discharge route. Visual impacts can be screened.	Consistent with OP. Contributes to housing per Bill 23. No known archaeological impacts. Noise from onsite WWTP operation can be mitigated. No traffic impacts anticipated. Visual impacts can be screened.
<i>Ranking</i>	<i>Somewhat Preferred</i>	<i>Least Preferred</i>	<i>Somewhat Preferred</i>	<i>Less Preferred</i>	<i>Most Preferred</i>
Technical Criteria	No services to lands designated for development. No construction or O&M requirements. Does not necessarily mean that no further development in the community would occur.	Insufficient treatment capacity at existing WWTP to accommodate development. Would require upgrades to existing WWTP. Requires long forcemain. Less O&M.	Can adequately service development. Requires approvals.	Can adequately service development. Requires more complex approvals due to outfall. More complex equipment compared to Alternatives 3 and 5. More operator attention.	Can adequately service development. Requires approvals.
<i>Ranking</i>	<i>Least Preferred</i>	<i>Less Preferred</i>	<i>More Preferred</i>	<i>Somewhat Preferred</i>	<i>Most Preferred</i>
Financial Criteria	No capital or O&M costs.	Capital Cost for forcemain ~ \$5M (Developer responsibility). Capital costs for existing WWTP upgrades unknown. Lowest O&M costs (Developer responsibility).	Capital Costs ~ \$5M (Developer responsibility). Moderate O&M costs (Developer responsibility).	Capital Costs ~ \$7.5M (Developer responsibility). Highest O&M costs (Developer responsibility).	Capital Costs ~ \$2.5M (Developer responsibility). Additional O&M costs associated with management of irrigation of effluent (Developer responsibility).
<i>Ranking</i>	<i>Most Preferred</i>	<i>Somewhat Preferred</i>	<i>Less Preferred</i>	<i>Least Preferred</i>	<i>Somewhat Preferred</i>
Overall Ranking	<i>More Preferred</i>	<i>Less Preferred</i>	<i>Somewhat Preferred</i>	<i>Least Preferred</i>	<i>Most Preferred</i>
Meets PO Statement	No. Does not meet Project Opportunity Statement. Not a viable alternative.	Yes. Meets Project Opportunity Statement.	Yes. Meets Project Opportunity Statement.	Yes. Meets Project Opportunity Statement.	Yes. Meets Project Opportunity Statement.
Recommendation	Not Carried Forward	Not Carried Forward	Not Carried Forward	Not Carried Forward	Carried Forward



Next Steps

MCEA
Phase 2
Completion

- Comment Period to June 30, 2023
- Review Feedback from PIC #1 (July 2023)
- Confirm Preferred Solution (July 2023)

MCEA
Phase 3

- Identify and Evaluate Alternative Design Concepts (July – September 2023)
- PIC #2 (late September 2023)

MCEA
Phase 4

- Draft Environmental Study Report (October 2023)
- Agency Review of Draft ESR (November 2023)
- File EA (December 2023)
- Public Review Period (December 2023 – January 2024)



Invitation for Participation

Thanks for participating in this PIC.

Public input is an important component of the decision-making process.

You are invited to provide comments by completing the comment sheet and submitting to the comment box today or FergusGolfEA@rjburnside.com by June 30, 2023.

**Theyonas Manoharan, P.Eng.
Project Manager**

Fergus Development Inc. / Geranium
3190 Steeles Avenue East, Suite 300
Markham, ON L3R 1G9
Tel: 905-477-1177 ext. 257

**Jennifer Vandermeer, P. Eng.
Consultant Project Manager**

R. J. Burnside and Associates Limited
292 Speedvale Avenue West, Unit 20
Guelph, ON N1H 1C4
Tel: 226-486-1559

Email: FergusGolfEA@rjburnside.com