



Haldimand County North Caledonia Employment Lands Feasibility and Servicing Study – Phase 1 Council Presentation

In association with:



September 19, 2023

Introduction



- Watson & Associates Economists Ltd. (Watson), WSP Canada Group Limited (WSP) and GM BluePlan Engineering (GM BluePlan) have been retained to prepare an Employment Lands Feasibility and Servicing Study
- This study will ensure that Haldimand County:
 - Is well-positioned to accommodate a diverse range of employment growth over the coming decades.
 - Will continue to promote economic development within the County by ensuring there is an adequate supply of serviced and developable employment land to attract target employment sectors and businesses.
 - Plan for how these lands should be serviced and financed to attract prospective business to the North Caledonia employment lands

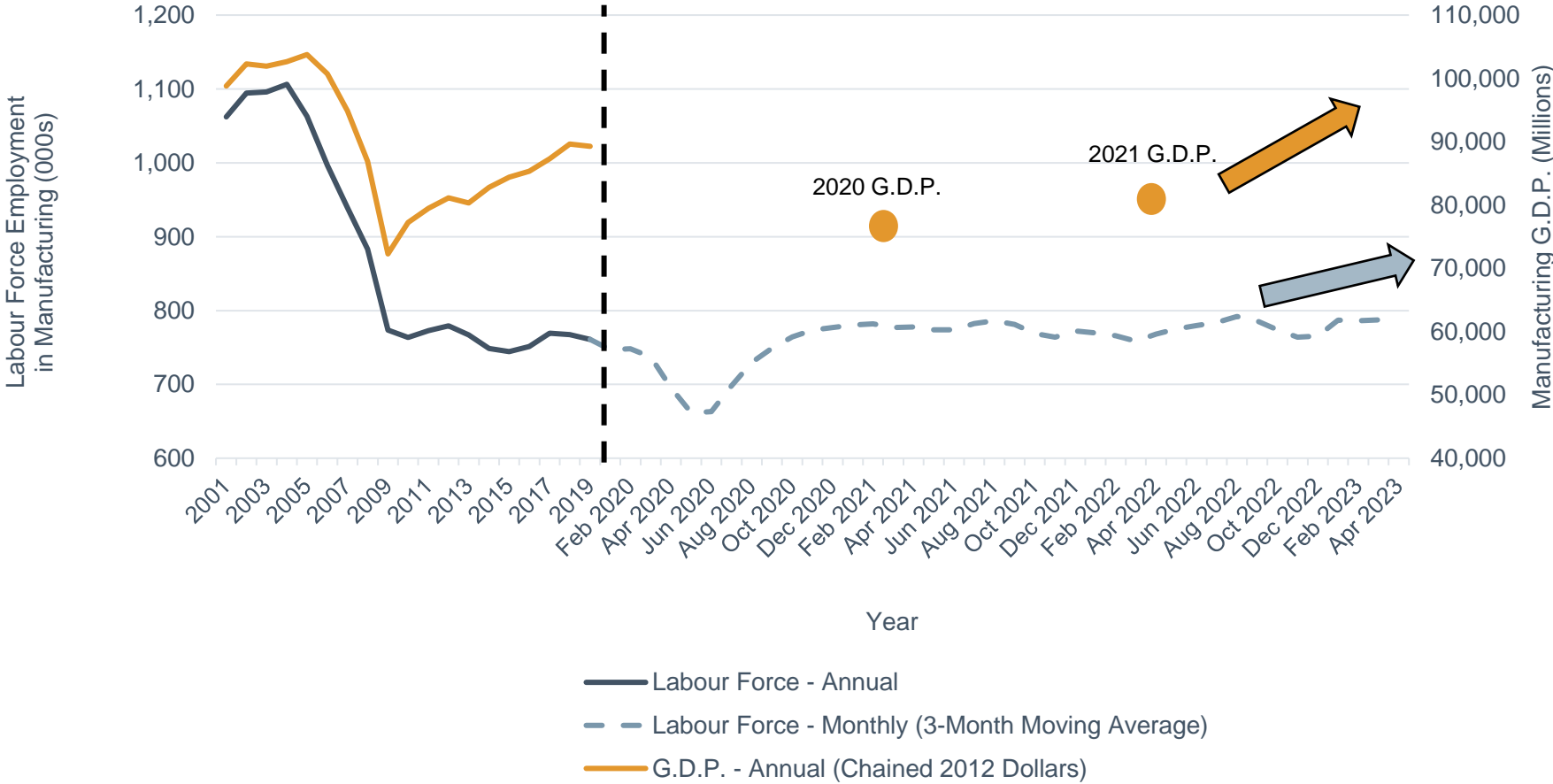
Work Plan and Study Progress



- ✓ Phase 1: Location Analysis, Market Research and Analysis, and Functional Servicing Design
- Phase 2: Financial Analysis and Business Plan
- Phase 3: Property Administration and Management

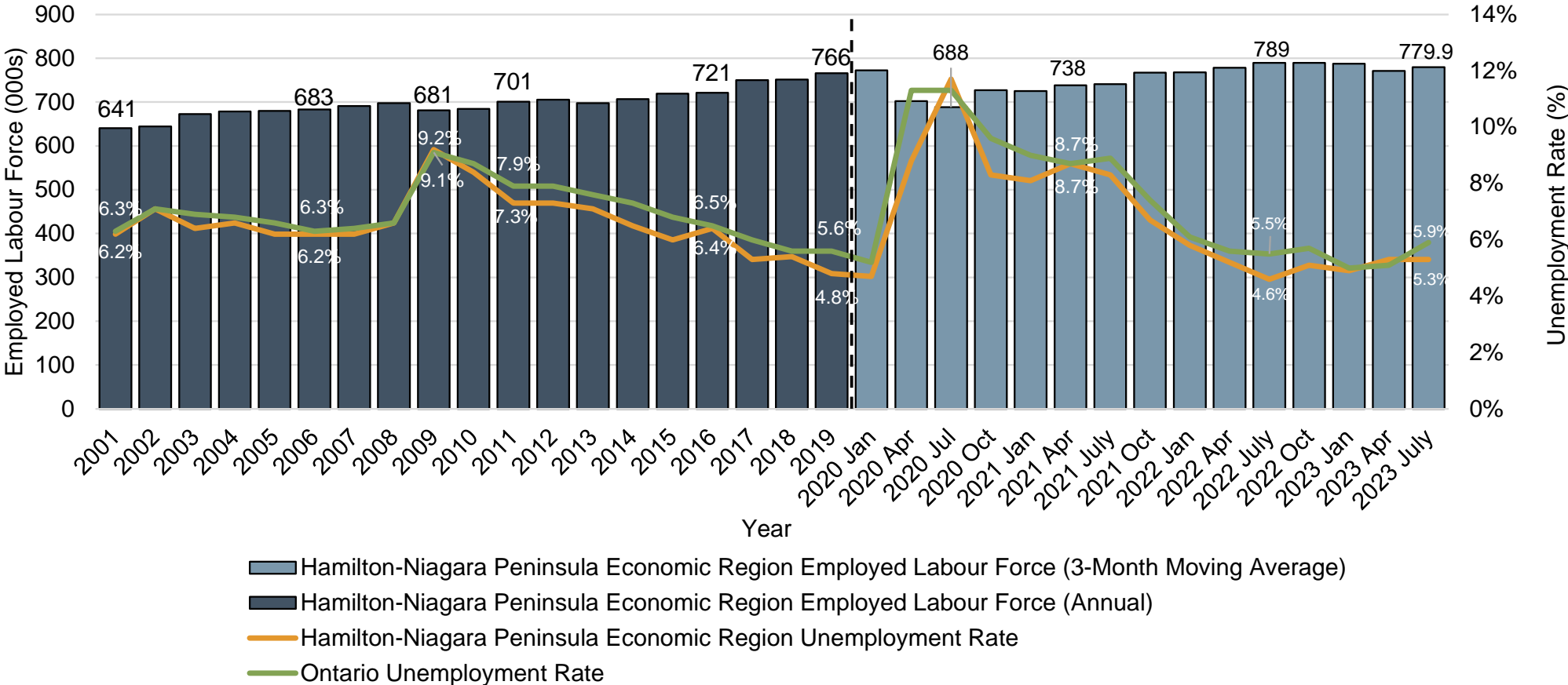
Macro-Economic Trends

Manufacturing Labour Force Trends in Ontario, 2001 to April 2023



Source: Annual labour force data from Statistics Canada Labour Force Survey, Table 282-0125, 2020 monthly data from Table 14-10-0091-01, and 2021 to 2023 monthly data from Table 14-10-0388-01. Annual G.D.P. data from Statistics Canada Table 36-10-0402-01, by Watson & Associates Economists Ltd.

Hamilton Niagara Peninsula Economic Region Labour Force Trends, 2001 to 2023 YTD

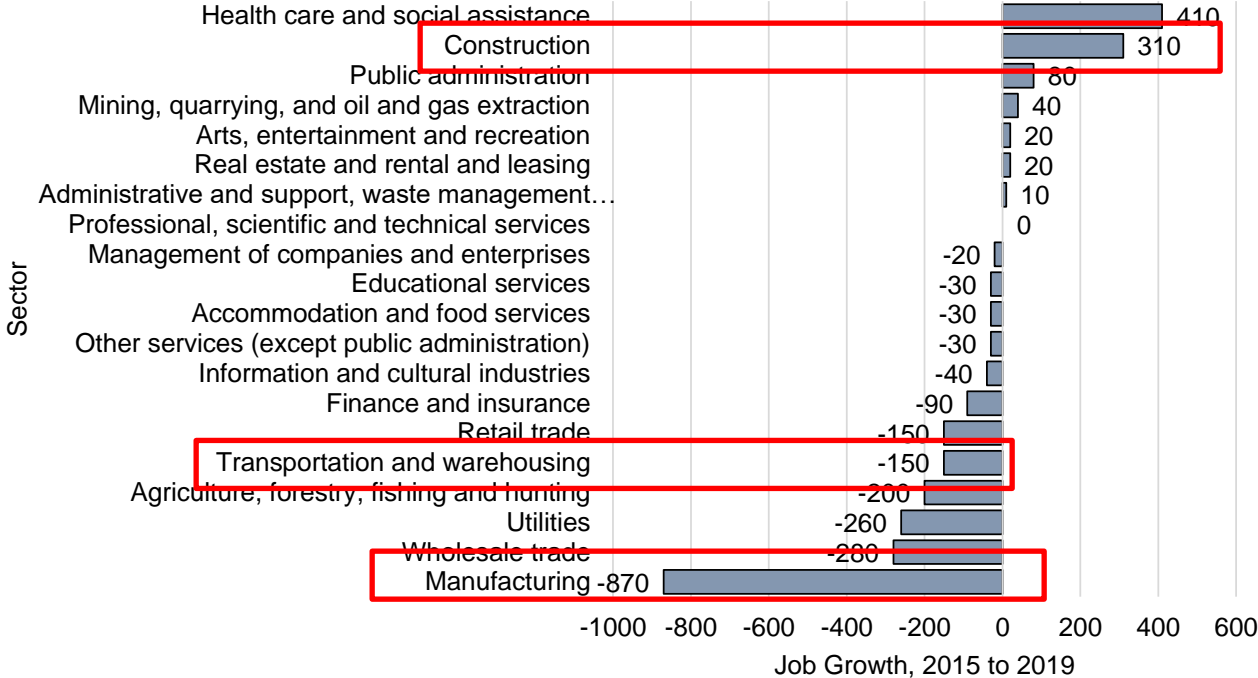


Note: Statistics Canada Labour Force Survey and Census labour force statistics may differ.
 Source: Hamilton-Niagara Peninsula Economic Region employed labour force and unemployment rate from Statistics Canada Table 14-10-0090-01 and 2020 monthly data from Table 14-10-0293-01. Annual Province of Ontario unemployment rate from Statistics Canada Table 14-10-0090-01 and 2020 monthly data from Table 14-10-0295-02. 2021 monthly data from Table 14-10-0387-02. By Watson & Associates Economists Ltd.

Haldimand County Employment Growth by Sector, 2015 to 2023

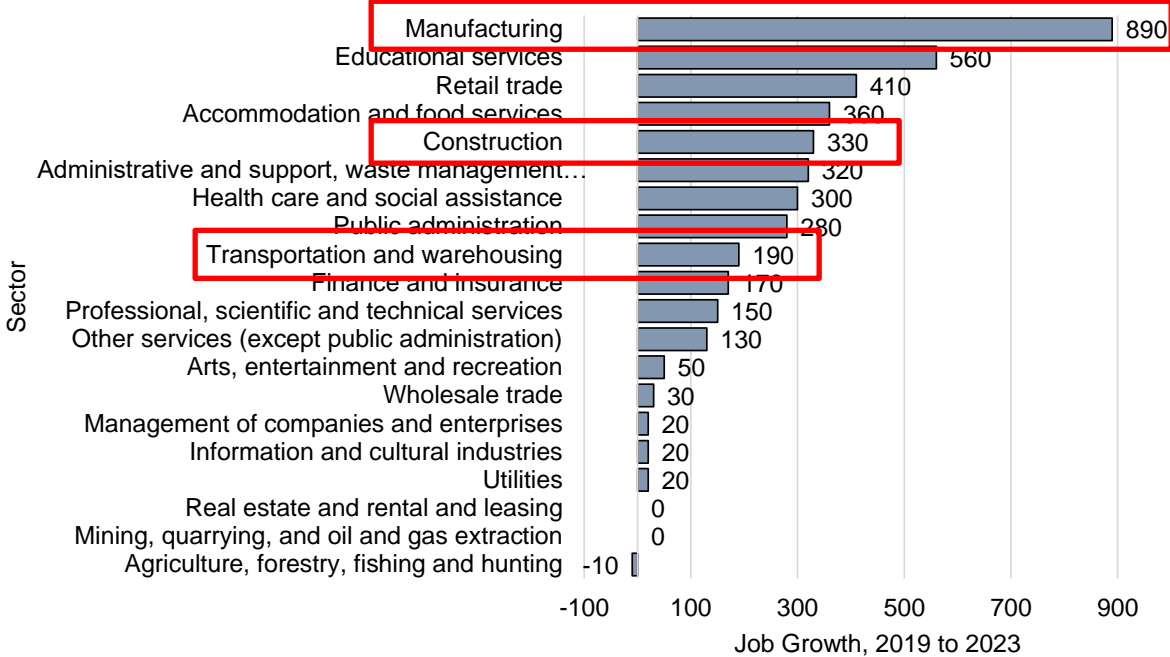


Employment Growth, 2015 to 2019



Source: Lightcast employment data, derived by Watson & Associates Economists Ltd., 2023.

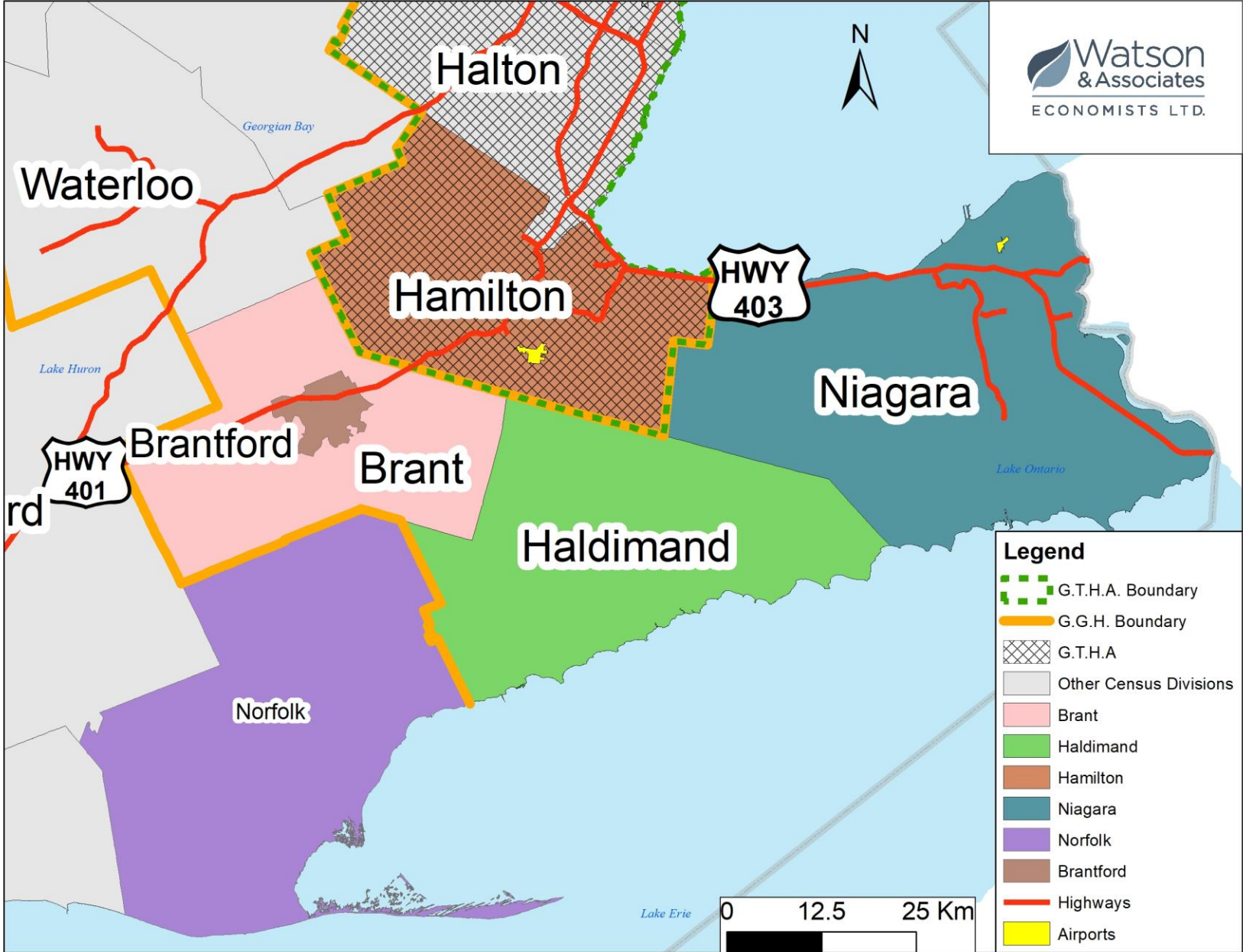
Employment Growth, 2019 to 2023



Source: Lightcast employment data, derived by Watson & Associates Economists Ltd., 2023.

Haldimand County's Competitive Position within the Broader Regional Market Area

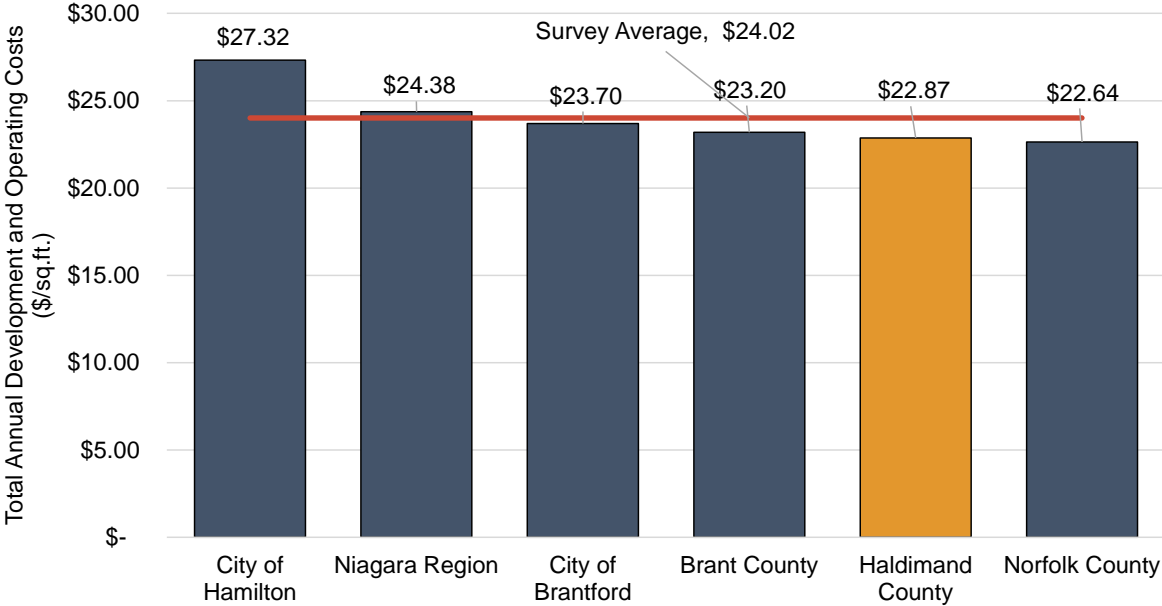
Broader Regional Market Area



Haldimand County Cost Competitive Analysis



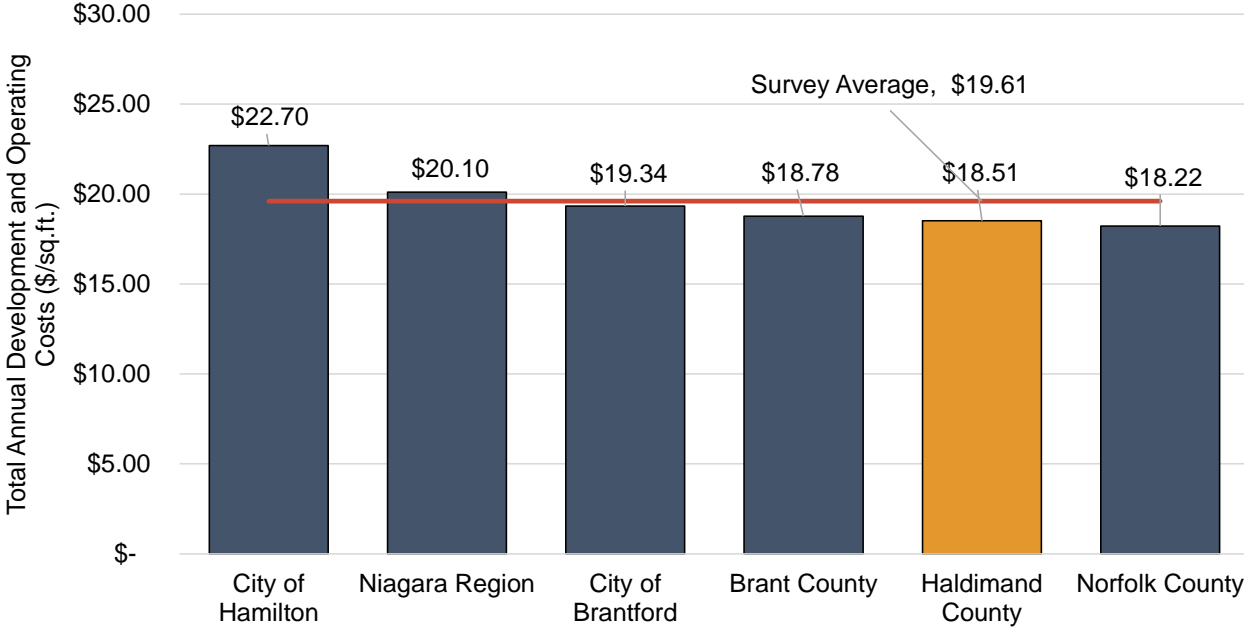
One-Storey Factory Prototypical Development



Source: Watson & Associates Economists Ltd., 2022.



One-Storey Warehouse Prototypical Development

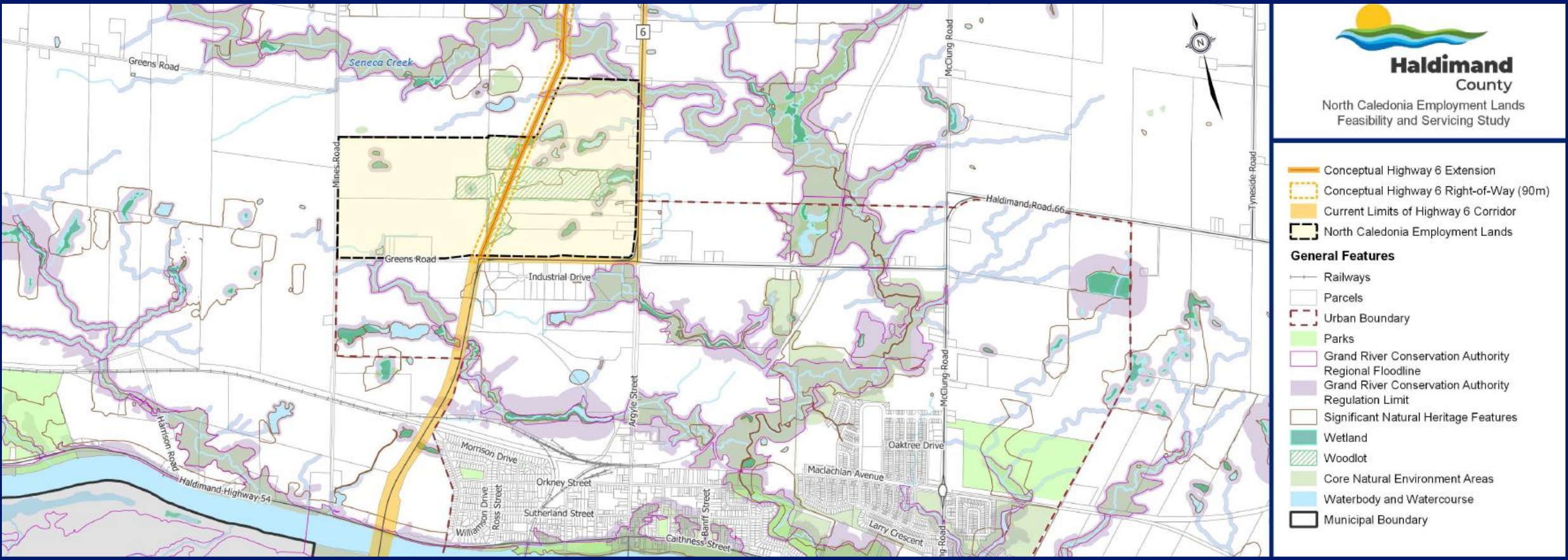


Source: Watson & Associates Economists Ltd., 2022.



Planning for the New North Caledonia Employment Area

North Caledonia Employment Area



Planning for Future Employment Areas



- Consolidation and Blurring of Uses: Integrated Use Campuses and Buildings.
- Market Choice and Opportunities for Employment Supportive Uses.
- Attracting Innovation and Creative Industries.
- Best Practices Towards “Greener” Employment.
- Evolving Goods Movement Sector.



Blum Canada, Mississauga
Supplier of furniture hinges, runners and lift systems.
Retail showroom to demonstrate products.
Office, warehouse (high ceilings, 80 ft'), retail showroom



Flex-Office/Industrial, Hanlon Creek, Guelph

Supporting Employment Diversification in Employment Areas



A Spectrum of Employment Area Designations



Rural Employment Area

- Support uses not requiring services.
- Opportunity to direct truck parking to appropriate areas.
- Open storage and laydown yards.
- Limit employment supportive uses.
- Prohibit major office uses.



Goods Movement District

- Permit a range of Goods Movement uses.
- Maintain large parcels.
- Permit employment supportive Uses that support the cluster.
- Protect goods movement corridor linkages.
- Permit major office uses related to the sector.
- Removed from residential and major retail.



General Employment

- Support a diverse industrial base.
- Reduce the permissions for industrial uses that are goods movement.
- Limit employment supportive uses.
- Prohibit major office uses.
- Removed from residential and major retail.



Prestige Employment

- Support knowledge-base sector and light industrial uses.
- Permit goods movement uses that are part of integrated use.
- Require urban design guidelines.
- Permit employment supportive uses.
- Encourage major office uses.



Innovation District

- Support knowledge-Base Sector.
- No warehousing, storage and trucking terminal uses.
- Urban design guidelines encouraging higher density.
- A wide range of employment supportive uses.
- Proximity to residential uses.
- Major office use a priority.

North Caledonia Target Sectors



Manufacturing / Advanced Manufacturing



Distribution and Logistics



Agri- Business



General Employment

(Parcel sizes typically between 1 to 20 hectares)



Prestige Employment

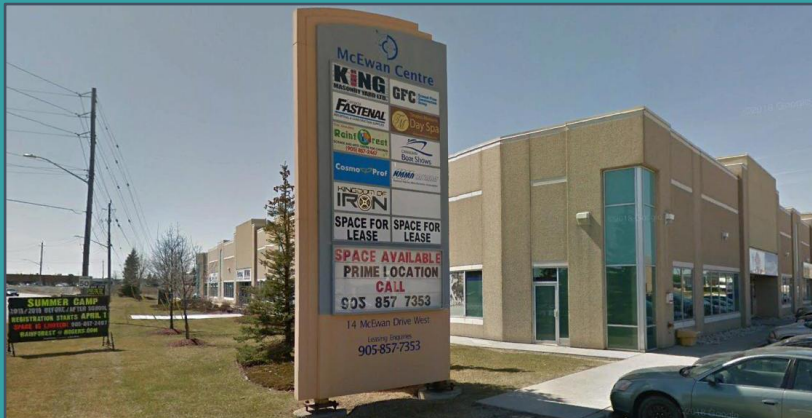
(Parcel sizes typically between 1 to 5 hectares)



North Caledonia Target Sectors



Professional, Scientific, and Technical Services/Business Services



Research and Development/"Knowledge-based" Sectors



Prestige Employment
(Parcel sizes typically between 1 to 5 hectares)

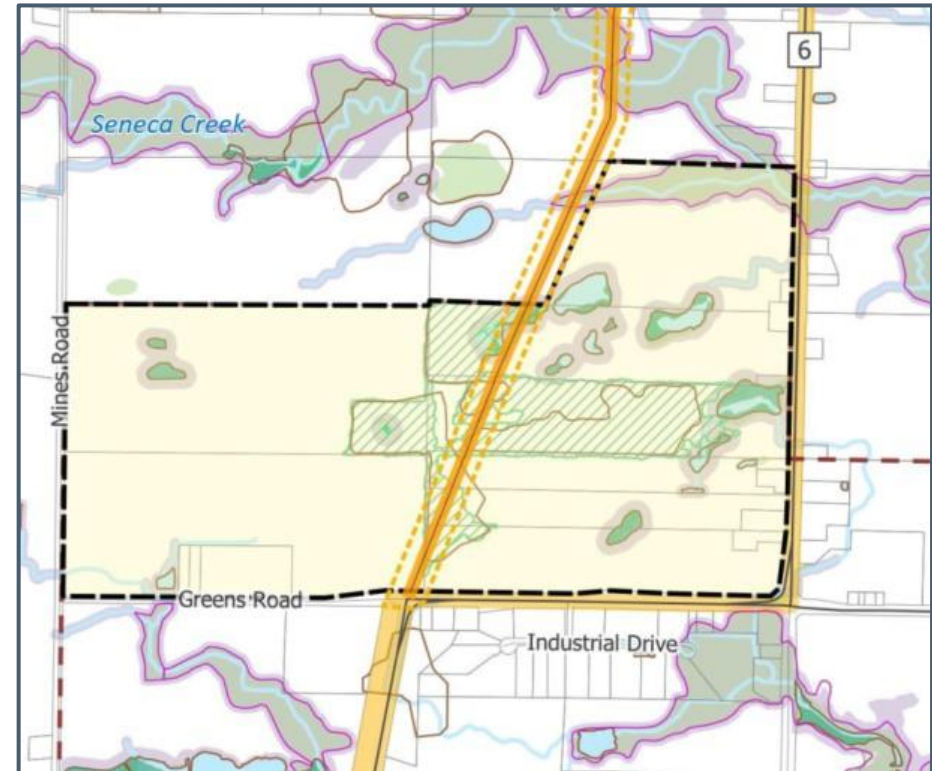


Servicing Study Findings



Goals of the Servicing Study

- Review constraints (environmental, jurisdictional, etc.) to developing the Study Area
- Develop a Concept Plan for the Study Area
- Review existing water & wastewater systems in Caledonia
- Develop water & wastewater strategies to service the Study Area
- Identify road & stormwater infrastructure needs for Study Area
- Identify existing utilities (gas, telecom, etc.) available to Study Area
- Complete high-level infrastructure cost estimate to service the Study Area





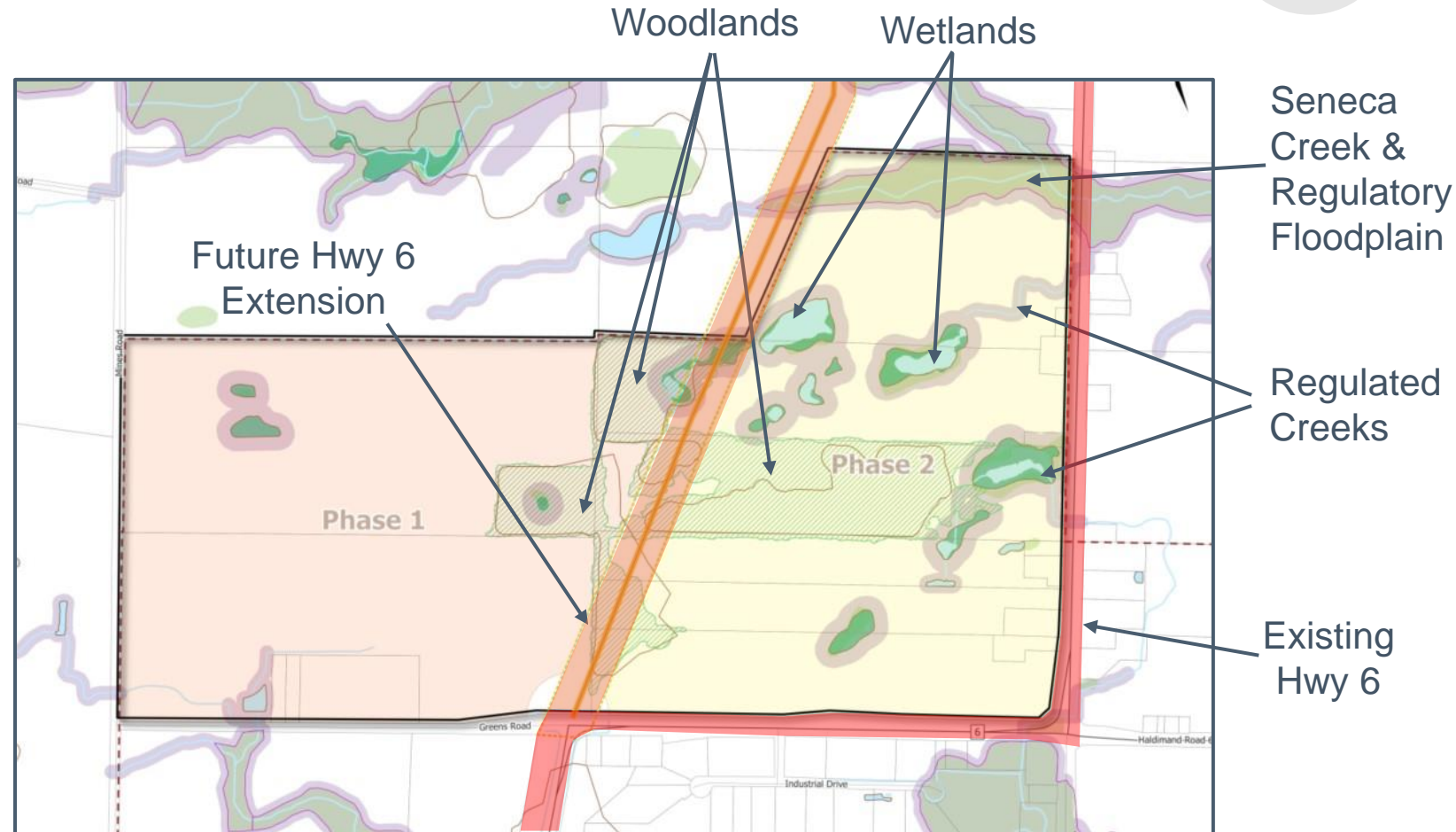
Key Constraints to Study Area & Phasing

Environmental Constraints

- Woodlands (**to be retained**)
 - Minor removals require replanting areas
- Wetlands (**to be retained**)
- Regulated watercourses & floodplain (**to be retained**)

Jurisdictional Constraints

- New road connections to existing Hwy 6 to be limited to 800 metres in distance from existing intersections
- No new road connections to Future Hwy 6 extension
- No service extensions through intersection of Hwy 6/Haldimand Road 66



Given the environmental & jurisdictional challenges in the east half of Study Area, the west half was chosen as Phase 1. Development phasing will ultimately be dictated by owner interest.

Concept Plan

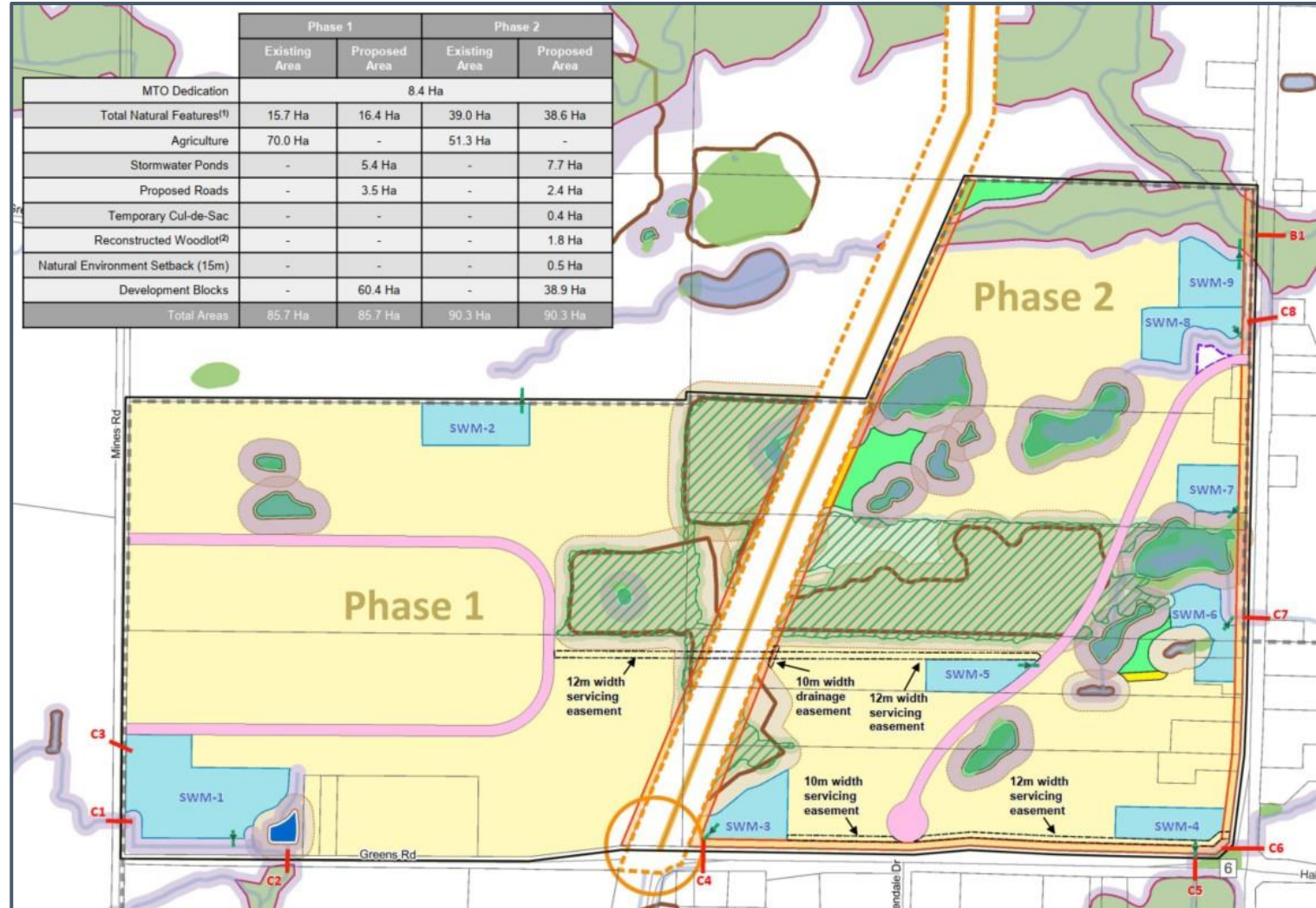


Phase 1

- 60 hectares (ha) of developable land; potentially more efficient parcel layouts
- 16 ha of protected natural areas
- New road for Phase 1 includes two connections to Mines Road
- Water/wastewater service extensions through Phase 2 to Phase 1 is required.

Phase 2

- 39 ha of developable land; less efficient parcel layouts & likely more expensive to develop.
- 39 ha of protected natural areas, including tree replanting areas
- New road for Phase 1 include one intersection with existing Hwy 6 and a permanent cul-de-sac.



Water Infrastructure



External Infrastructure

Treatment: 1.02 Mega litres per day (MLD); supply agreement with Hamilton to be updated.

Storage: 1,500 m³; recommended to be added to in-ground reservoir at Caledonia Reservoir.

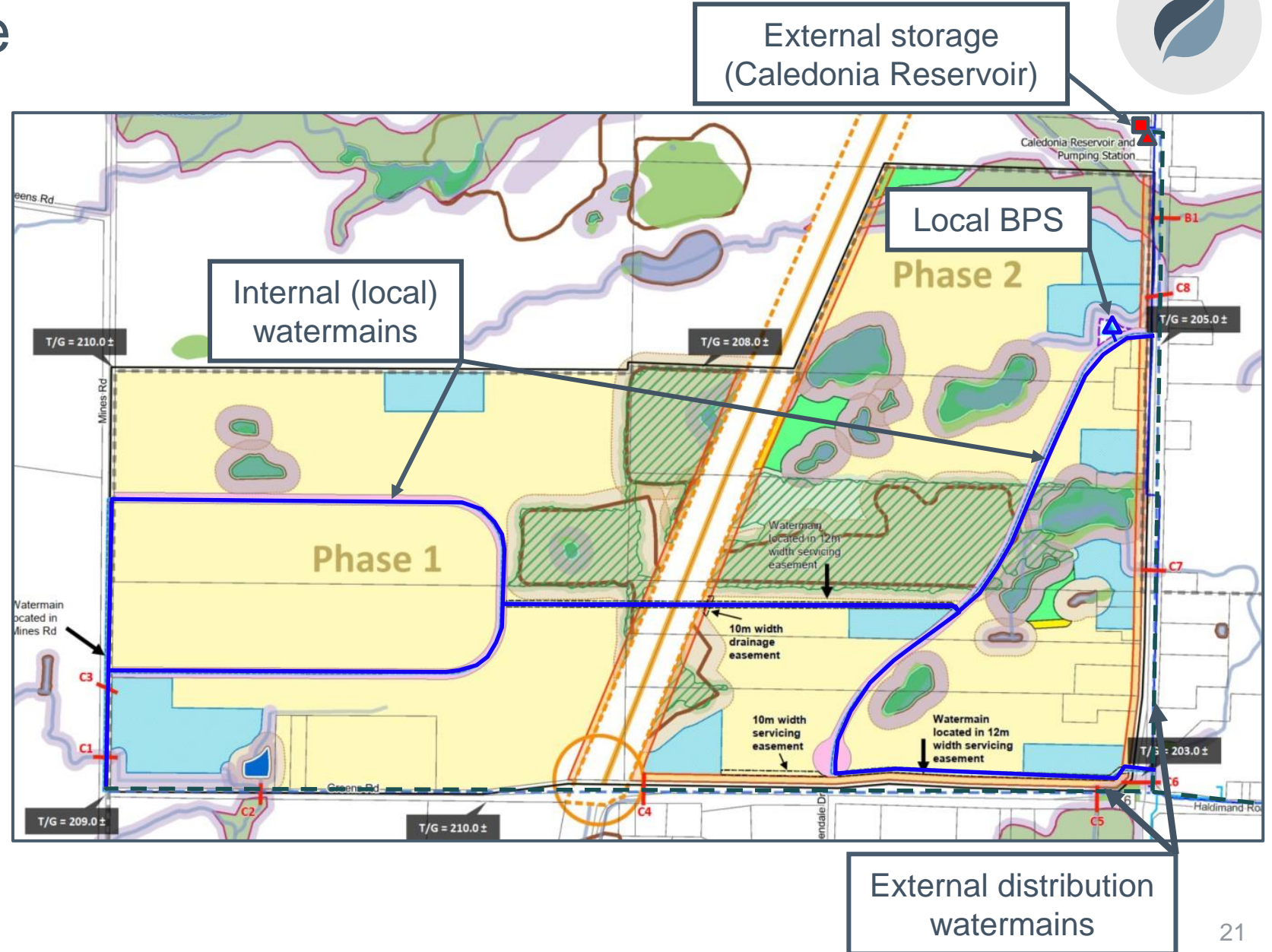
Distribution: watermains identified in 2020 Master Servicing Plan (MSP) Update study are required on Hwy 6, Haldimand Road 66, Greens Road, & McClung Road.

Internal Infrastructure

Pumping: Booster Pump Station (BPS) required for Study Area.

- Existing pressure deficiencies for properties w/ ground elevation exceeding 210 metres above sea level (masl), Study Area ranges from 203 masl to 213 masl.

Distribution: Phases 1 & 2 will be serviced by local watermain extensions within road corridors and/or easements.



Wastewater Infrastructure

External Infrastructure

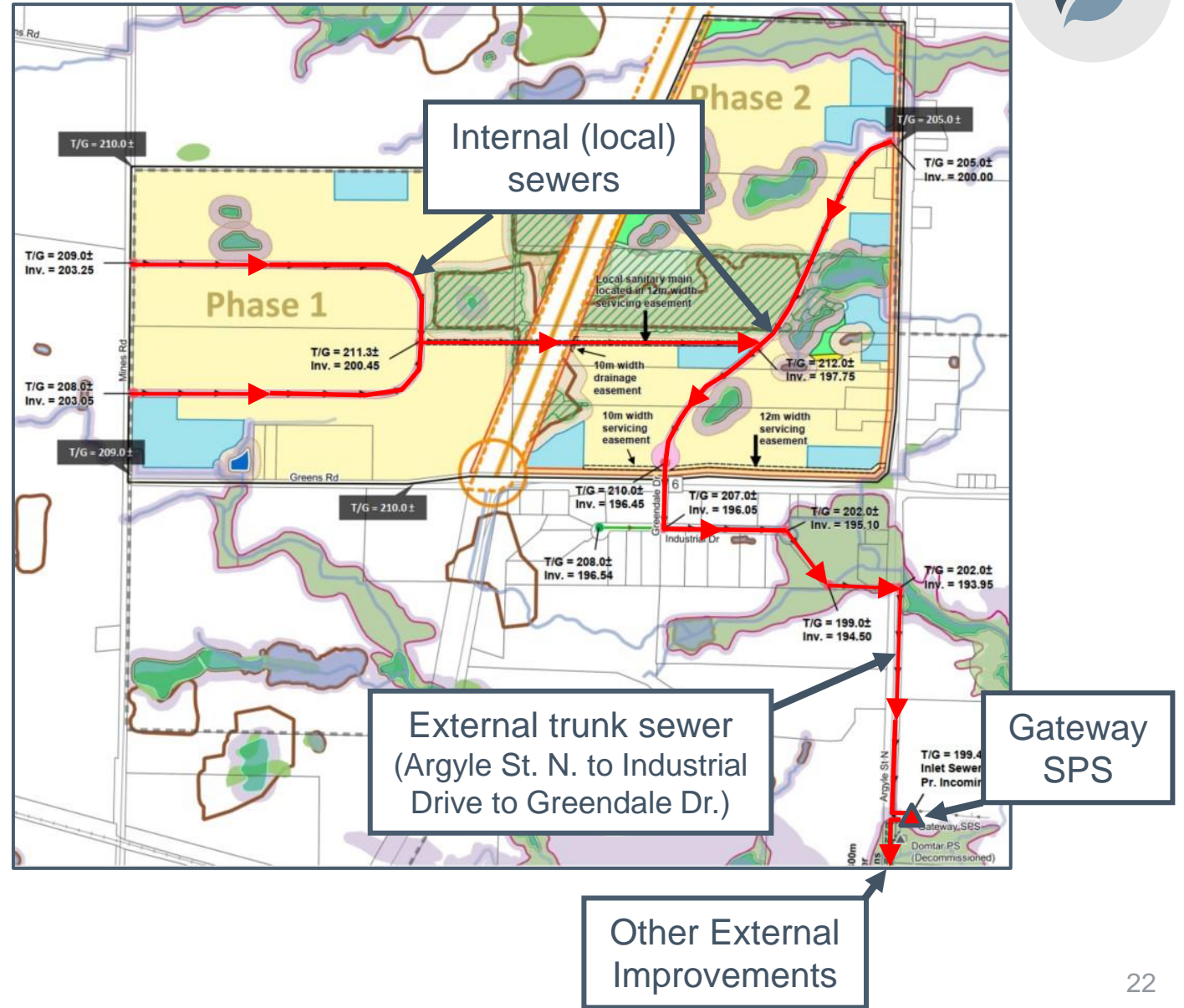
Treatment: Average Daily Flow (ADF) of 0.6 MLD; to be considered in sizing of new WWTP (study underway).

Conveyance:

- Forcemain extension from new WWTP to Nairne SPS (WWTP study underway to confirm requirements)
- Nairne SPS upgrades
- Sewer upgrades upstream of Nairne SPS & forcemain to Gateway SPS (currently under construction)
- Gateway SPS (no expansion required)
- Trunk sewer from Gateway SPS to Study Area

Internal Infrastructure

Collection: Phases 1 & 2 will be serviced by local sewer extensions within road corridors and/or easements.





Stormwater Infrastructure & Other Utilities

Stormwater Infrastructure

Treatment: End-of-pipe wet ponds sized to provide quantity control and quality treatment prior to discharge to the receiving watercourses.

- Two (2) ponds required for Phase 1
- Seven (7) ponds required for Phase 2
- Ultimately the strategy to provide stormwater management controls for private blocks will be subject to approval at the development application stage.

Collection: Phases 1 & 2 will be serviced by storm sewer extensions within road corridors and/or easements.

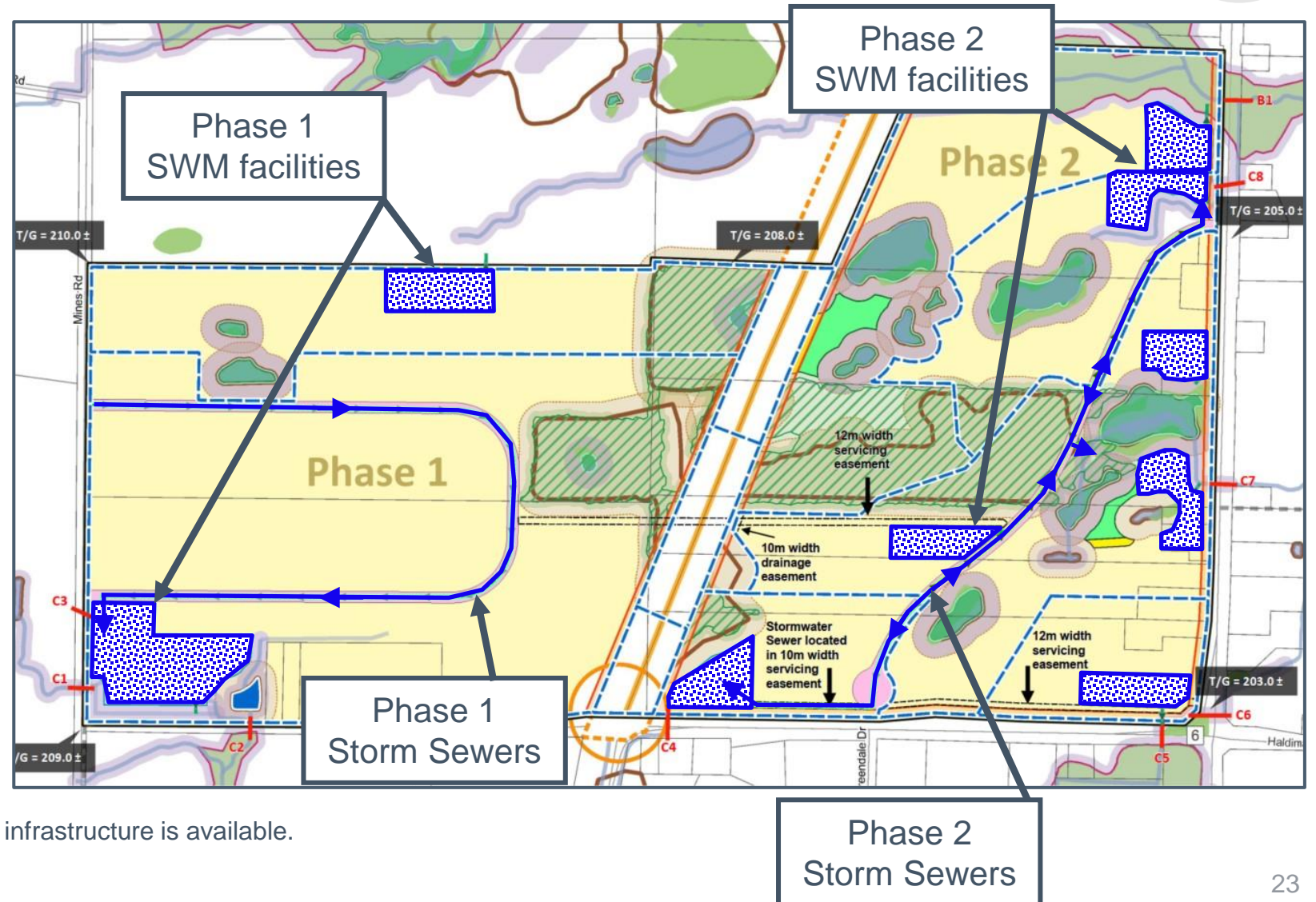
Other Utilities

Electrical: Hydro One infrastructure is available.

Natural Gas: Enbridge infrastructure is available.

Telecom / Cellular: Bell Canada and Rogers Communications infrastructure is available.

Broadband: Metro Loop/Xplore Internet fiber optic infrastructure is available.





Road Infrastructure

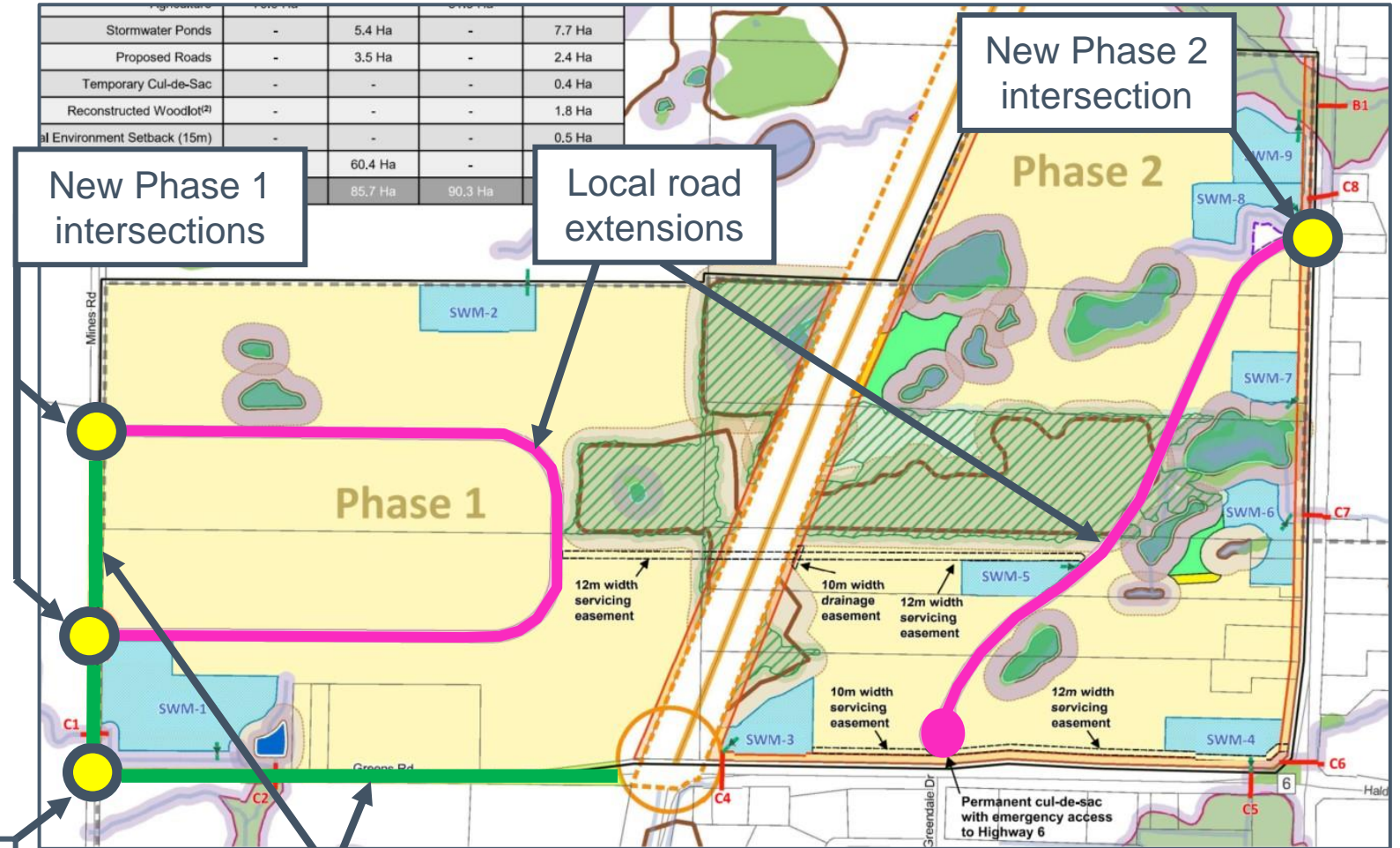
External Infrastructure

- Three (3) new signalized 3-leg intersections; two (2) on Mines Road for Phase 1 & one (1) on Hwy 6 for Phase 2
- Upgrade existing 3-leg stop-control intersection at Mines Road & Greens Road to 3-leg signalized intersection
- Upgrade Mines Road & Greens Road to 4-lane urban cross-section

Internal Infrastructure

- Access to Phases 1 and 2 development blocks will be from 20 metre width local industrial road extensions (Haldimand STD. G2).
- Phase 2 will include a permanent cul-de-sac with access to Hwy 6 for emergency vehicles.

Infrastructure	Phase 1	Phase 2	Total
Stormwater Ponds	-	5.4 Ha	7.7 Ha
Proposed Roads	-	3.5 Ha	2.4 Ha
Temporary Cul-de-Sac	-	-	0.4 Ha
Reconstructed Woodlot ⁽²⁾	-	-	1.8 Ha
Local Environment Setback (15m)	-	-	0.5 Ha
	60.4 Ha	-	
	85.7 Ha	90.3 Ha	



Upgrade Mines Road & Greens Road intersection

Upgrade Mines Road & Greens Road



Cost Estimates

Infrastructure	External Projects	Internal Projects	Total
Water	\$32.7M	\$14.9M	\$47.6M
Wastewater	\$131.1M	\$15.4M	\$146.5M
Stormwater	-	\$23.2M	\$23.2M
Roads	\$11.6M	\$10.2M	\$21.8M
Total	\$175.4M	\$63.7M	\$239.1M

- Internal project costing is based on the theoretical concept plan which is subject to change based on updates to the road network, lot sizing, etc. that will be refined through subsequent studies.
- External projects include the costing related to other projects that benefit Caledonia as a whole, as identified in previous background studies.
- Stormwater cost estimate is a comprehensive estimate of the SWM infrastructure needs for the Study Area as a whole. It includes the cost of private ponds (~\$12.2M) which will be borne by the landowner.

Next Steps

Next Steps



- Completion of the Phase 2 Financial Analysis and Business Plan
- Phase 2 Engagement
- Phase 2 Council Presentation (TBD)
- Phase 3 Property Administration and Management Plan, Engagement, Final Report, and Final Presentation to Council

Additional Slides

North Caledonia Employment Area Target Sectors



Employment Sector/Land Use	Location	Parcel Sizes	Transportation	Labour Force	Surrounding Context	Development Characteristics
Manufacturing / Advanced Manufacturing	General or prestige setting	1 to 4 ha and greater	<ul style="list-style-type: none"> • Access to 400 series/controlled access highways • Proximity to markets and related industries 	Access to skilled and unskilled labour	<ul style="list-style-type: none"> • Expansion potential • Buffers from surrounding non-industrial uses. • Emphasis on integrated operations (logistics and office), landscaping and enclosed storage 	<ul style="list-style-type: none"> • Low to high design quality • 10,000 to 250,000 sq.ft. • High building coverage and on-site employment density • Range of building types, including small, large single-tenant and multi-tenant buildings • Loading/unloading areas
Distribution and Logistics	General or prestige setting	5 to 20 ha Flexibility in parcel configuration to accommodate large-scale users	<ul style="list-style-type: none"> • Access to 400 series/controlled access Hwy • Excellent access/traffic circulation for heavy truck traffic ; Truck access, loading/unloading requirements • Proximity to markets, customer base and related industries 	Mobile labour force	<ul style="list-style-type: none"> • Need for open storage or enclosed vertical storage • Compatible surrounding land uses/ buffers from surrounding non-industrial uses • Access to on-site and proximity to off-site services • Expansion potential 	<ul style="list-style-type: none"> • Low to moderate design quality • 10,000-1,000,000 sq. ft. • Ceiling height - 30 ft.+ • Large parcels with flat topography • Low to high building coverage and low on-site employment density • Loading/unloading areas

North Caledonia Employment Area Target Sectors



Employment Sector/Land Use	Location Criteria	Parcel Sizes	Transportation	Labour Force	Surrounding Context	Development Characteristics
Professional, Scientific, and Technical Services/Business Services	Prestige Industrial or Business Parks	Type of buildings: flexible leasing structures and market choice (multi-tenant vs. free standing office, Class A vs. B office space)	<ul style="list-style-type: none"> Proximity to transit or within walkable environments 	Access to skilled labour force	<ul style="list-style-type: none"> Access to on-site amenities and proximity to off-site services Prestige setting 	<ul style="list-style-type: none"> Low to high design quality 2,000 to 10,000 sq.ft. <1 to 2 ha lots Storefront entrance for general public High building coverage and on-site employment density Small multi-tenant and flex office space Street lighting
Research and Development/"Knowledge-based" Sectors	Prestige Industrial or Business Parks	<p>1 to 2 ha</p> <p>For stand-alone building or facility</p>	<ul style="list-style-type: none"> Proximity to transit or within walkable environments 	Access to skilled labour force	<ul style="list-style-type: none"> Proximity to related industry cluster (companies and public institutions) Prestige "campus-like" setting Access to on-site amenities and proximity to off-site services 	<ul style="list-style-type: none"> Low to high design quality 2,000 to 10,000 sq.ft. 1-2 ha lots High building coverage and on-site employment density Space for manufacturing / research as well as multi-tenant or flex office space

North Caledonia Employment Area Target Sectors



Employment Sector/Land Use	Location Requirements	Parcel Sizes	Transportation	Labour Force	Surrounding Context	Development Characteristics
Agri- Business	General or Light Industrial Setting	1 to 4 ha and greater	<ul style="list-style-type: none"> • Access to highways and multi modal facilities • Access to warehousing, markets and distribution centers 	Access to both skilled and semi-skilled labour force	<ul style="list-style-type: none"> • Access to upstream & downstream industries • Storage space for material and equipment • Loading / unloading requirements 	<ul style="list-style-type: none"> • Low to high design quality • High building coverage and on-site employment density • Range of building types, including small, large single-tenant and multi-tenant buildings • Loading/unloading areas
Food and Accommodation Services / and other Employment Supportive Uses	Prestige Industrial or General Industrial	1 to 5 ha lots	<ul style="list-style-type: none"> • High traffic exposure from major road and surrounding employment and commercial uses 	Access to skilled and semi-skilled labour force	<ul style="list-style-type: none"> • Prestige and general industrial setting • Surrounding a large employment base • Clustering of retail uses in a retail court or at high traffic areas (e.g. major intersections, gateway entrances to Employment Area) 	<ul style="list-style-type: none"> • High design quality • 2,000 (fast food restaurant) to 50,000 sq.ft. (hotel/convention centre) • Commercial floor space per acre ratio of 200 to 400 sq.ft. of retail/service space per acre of developed Employment Area • High building coverage and on-site employment density • Street lighting