



INFRASTRUCTURE SERVICES *Staff Report*

REPORT NO: IS-2025-04

TO: Committee of the Whole

SUBMITTED BY: Jeff Molenhuis, P.Eng., Director of Infrastructure Services

PREPARED BY: Chad Woodhouse, C.E.T., Manager of Public Works

REVIEWED BY: Greg Clark, Acting CAO

DATE: 2025-04-07

SUBJECT: **PWOC Master Plan Report**

RECOMMENDATION:

THAT Report IS-2025-04 - PWOC Master Plan be received for information.

SUMMARY:

The Public Works Operation Centre (PWOC) Master Plan outlines a phased approach to meet the Township's current and future operational needs at the Operations Centre location. Following a 2023 Space Needs Study and the purchase of an adjacent 29.8-acre parcel, the expanded PWOC site now spans 38 acres, allowing for current and future facility upgrades. Phase 1 involves replacing the deteriorating salt dome to ensure reliable winter maintenance storage, with design work set for 2025 and construction in 2026, subject to Council budget approval. Future phases will address needs for fleet, material management operational movement efficiencies and staffing space needs. In the initial phases, staff are reviewing opportunities to incorporate sustainability features, like solar power and geothermal.

BACKGROUND:

Space Needs Study 2023

In 2023, Stirling Rothesay Consulting Inc. completed a Space Needs Study for the PWOC at Sandhills Road to evaluate current and future space, safety, and operational needs. The study identified the current and growing demands for vehicle operations and administrative space.

The Council endorsed a study recommended that at least 34 acres will be needed over the next 60 years to accommodate the Township's needs and ensure the facility supports long-term growth while meeting modern best practices. The Space Needs Study was presented to Council in March 2023 with the following motion:

THAT staff be directed to pursue recommendations outlined in the Public Works Operations Space Needs Analysis Report, to:

- i. purchase land so as to significantly expand the size of the operations area to meet a 30-60 year growth horizon; and*
- ii. following land purchase, plan a phased construction of Public Works Operations Centre to meet space needs, adjacency, environmental and growth requirements for modern Municipal Operations through release of a design RFP; and*
- iii. through the course of design, include the phased approach to site development needs within the 10-year capital plan.*

Land Acquisition

Following approval in March 2023, staff evaluated land opportunities and recommended purchasing 1065 Gingerich Road in Baden. This 29.8-acre parcel provides planned space for phased development and long-term expansion of the Public Works Operations Centre (PWOC). Located next to the current site, the property was selected for its reasonable land value, future growth potential and ease of incorporation with the existing site layout.

On May 29, 2023, Council authorized the purchase of the property with a budget upset limit of \$1.2million, with the following motion:

THAT the Mayor and Chief Administrative Officer be authorized to execute all necessary agreements and documents required to complete the transaction for the purchase of 1065 Gingerich Road, Baden.

In 2023, staff undertook due diligence activities on the land. On February 16, 2024 the land purchase closed after clearing due diligence. With the acquisition, the total site area now spans 38 acres, supporting long-term growth and operational needs.

Due Diligence in Site Selection - Archeological Study

During the purchase of 1065 Gingerich Road, the Township undertook an Archaeological Study to clear up to Stage 2, following the Ministry of Tourism, Culture, and Sport (MTCS) process for such activities on private lands. On-site investigations, involving Township staff, the Township's consultant, and local First Nations groups, concluded on September 3, 2024.. Detritus Consulting coordinated field monitoring with three First Nations groups and the MTCS. The investigation concluded with no significant archaeological finds. The consultant completed all necessary requirements, including a final report, which was submitted to the MTCS for review and final approval.

Staffing Space Needs

With the on-going space needs analysis at other Township facilities, the PWOC Master Plan has reviewed opportunities to accommodate Engineering and field staffing and prioritize the growth of Public Works administration and departmental functions. The PWOC Master Plan considers the potential for consolidating administrative functions of the Infrastructure Services department within a new facility at the expanded PWOC site. However, by receiving this report, this potential will need further review and direction at a later date.

The base-line projected staff growth aligning with community growth needs in Infrastructure Services over the next 20 years considers the following positional needs:

- **Public Works:** An administrative support role, three additional roads operators, three water/wastewater operators, and an increased number of part-time employees and summer students.
- **Engineering:** Positions related to Engineering field services, such as contract administration, construction inspection, and Underground Locate roles, along with part-time employees and summer students.

These staffing projections are in concept only, and new roles would need to be approved through the standard staff growth approvals process through budget.

REPORT:

Township staff have been working with a+LiNK Architecture Inc., a firm experienced in municipal operations facilities design, to develop a master site plan for the PWOC. This report follows up on the commitment to phase plans to address growth and space needs over time. This report serves as an update to that commitment. In addition, with more recent budget discussions, this report seeks to clarify what has been discussed at Town Hall's.

This development plan includes phased development to address both current operational needs and future growth and is positioned so that Council can decide on implementation over time as they see fit. The architects have also updated the 2023 space needs analysis to create a conceptual site plan that meet the long-term requirements for the site.

Phase 1 - Salt Dome Replacement

Phase 1 of the master site plan involves replacing the existing salt dome. The current salt dome has structural cracks, identified in the 2020 Building Condition Assessment (BCA), that were recommended for further study and repair works. The study was estimated to cost \$35,000 in 2020, with repair costs remaining unknown. The fabric roof panels are frequently damaged by wind and other storm events, with each panel falling under our self-insured value, and costing in the range of \$30,000 per panel to repair. Some panels have been repaired or replaced multiple times in the last 5 years.

In addition to the asset life cycle activities, the salt dome needs expansion to accommodate growth over the next 10-20 years, with an estimated requirement for an additional 2,000

tonnes of indoor material storage. This 20% increase would provide space for salt, sand, cold mix asphalt, and clear stone materials, addressing the demands of growth associated with more material required for higher class roadways due to more road users as well as more urban roadways in anticipated new subdivisions.

Replacing the salt dome is critical for protecting materials essential for winter operations and ensuring compliance with the Township's salt management practices. The project supports the long-term growth outlined in the PWOC master plan. A capital project for design work was approved in Budget 2025, with the demolition of the current dome and construction of the new structure in planned for 2026.

Future Phases

The future phases of the PWOC expansion will include several phases over a number of years. To accommodate the planned upgrades, the existing administration building, roads facility, and sign storage buildings will be demolished or repurposed, and the fueling and water stations will be relocated closer to the road to improve access, efficiency and site security.

These concept changes will provide opportunity for construction of a new facility, which will include administration office space, indoor fleet vehicle storage, a fleet services shop, and parts and tool storage. Both indoor and outdoor wash bays would be added, while indoor storage will be provided for road and water/wastewater materials such as sanitary and storm pipes and water appurtenances, currently stored outdoors. Additionally, a designated outdoor area will be developed for bulk granular material storage, along with some space for snow storage and decanting.

Additional infrastructure improvements will include new parking areas and access roads to separate operational vehicles and equipment from staff parking, enhancing safety. Stormwater treatment systems and utility services for water and sanitary needs will also be integrated into the site.

Earth-moving operations will be required to address the slope and elevation changes on the newly acquired land. These operations will ensure a level base for constructing the new facilities and seamless integration with the overall site layout. The primary earth works will take place as part of the initial phase for the salt dome works, with future final grading as required when detailed design of the shop building moves forward.

The full expansion is expected to be delivered in the 5-10 year window, with Council providing further direction at the next appropriate milestone to consider planning and delivery new facility or programming needs. For additional concept details, please refer to *Attachment 1: PWOC Expansion Master Site Plan Concept*.

Energy Improvements

Staff are meeting with representatives from Grand River Energy and Enova Power on a monthly basis to discuss energy-efficiency opportunities for the PWOC expansion. The focus is

on integrating sustainable options such as solar and geothermal technologies to reduce costs and environmental impacts. Both energy authorities are collaborating with the Township to identify and implement energy-saving measures, aiming to lower utility costs, minimize the carbon footprint, and align the new facility with the Township's sustainability initiatives for long-term financial and environmental benefits.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

This initiative supports the goals and strategies of enhancing Responsible Governance through Active Communications, Fiscal Responsibility, and Infrastructure Investments.

FINANCIAL CONSIDERATIONS:

The 2023 budget allocated \$1.2 million for PWOC facility improvements and land acquisition, with the land purchased for \$900,000. The total costs assigned to this portion to date are: \$960,000 with some due diligence costs related to First Nation consultation and geotechnical works still to be applied to this project. For the 2025 budget, \$70,000 has been approved for Phase 1 design work of the salt dome, including surveys, engineering, and site studies. The salt dome replacement, estimated at \$680,000, is planned for 2026. A provision of \$13,000,000 is budgeted for future PWOC expansion phases within a 5–10-year timeframe and can be adjusted when staging to be adequately timed with community growth is better known.

ATTACHMENTS:

Attachment 1: PWOC Expansion Master Site Plan Concept