



Report Presented To:	Township of Southgate Council Meeting
Meeting Date:	2024-09-18
Report Number	PW2024-035
Title:	Holstein Sand Dome Options
Open/Closed Session:	Open Session
Prepared By:	Jim Ellis
Approved By:	Jim Ellis Public Works Manager
Approved By:	Dina Lundy Chief Administrative Officer

Executive Summary:

Having received Council direction to investigate alternative options to address the 91-foot diameter Holstein Sand Dome infrastructure issues, staff have researched the availability of the Grey County Egremont Sand Shed, in addition to the demolition and replacement of the structure.

Recommendation:

Be it resolved that Staff report PW2024-035 be received for information; and
That Council direct staff on the preferred option, and
That Council consider the preferred option in the 2025 Capital Budget process.

Background:

At the August 7, 2024 Council Meeting staff presented Staff Report PW 2024-031 Holstein Sand Shed Roofing Replacement Quote Recommendation. The following Council Resolution was passed:

9.6 Public Works Manager Jim Ellis

9.6.1PW2024-031 Holstein Sand Shed Roofing Replacement Quote Recommendation

Moved By Councillor John

Seconded By Councillor Ferguson

Be it resolved that Council receive Staff Report PW2024- 031 for information; and
That Council award the Holstein Sand Shed Roofing Replacement project to VanPelt Construction Inc for 11 sections; and

That Council approve the estimated work costs of \$53,600.00 plus HST to be funded through the General Taxation Reserve.

Councillor Ferguson moved the following motion.

No. 2024-386

Moved By Councillor Ferguson

Seconded By Councillor John

Be it resolved that Staff Report 2024-031 be referred back to staff for further explorations of other options; and

That staff present a report at a future meeting of Council with the findings.

Carried

Analysis

Public Works Foreman/Fleet Manager John Watson and Public Works Manager Jim Ellis met with Grey County Operations Manager Jim Nicol and Senior Supervisor -Operations Shaun Anthony at the Grey County Egremont Sand Shed on Southgate Road 12 to discuss purchase or rental of the facility. The County wishes to retain ownership of the sand shed but would allow Southgate to have shared use of the facility for winter sand & salt storage. A general agreement would be executed with Southgate providing a Certificate of Insurance naming Grey County for additional coverage. Southgate would have to deploy the Holstein pay loader to this location for loading truck materials, as it would not be efficient to drive the loader each early morning call-out and shuttling operators back & forth 2 kilometres. This could also add to some delays of operations deployment, sending a grader to open the driveway if empty trucks could not punch through when not loaded at this location.

The Holstein sand dome replacement for a new rectangular building, like the Grey County Egremont Sand Shed, would be challenged to have the required storage capacity of 3,500 tonnes with the footprint area that is available due to property line setbacks and the communication tower infrastructure.

Staff received a quote from Britespan Building Systems of Ontario, for an Apex Series Sand/Salt Storage Facility, these structures can be built with concrete lock blocks, structural steel, and fabric cladding. These facilities have a 15- or 20-year prorated warranty for the steel and fabric cladding. The recommendations for building sizes are 60'x144' and 70'x120' to have a storage capacity of 3,500 to 4,000 tonnes. The footprint of these structures is challenging to accommodate with the space limitations of the Holstein site as well. (Attachment # 1&2)

Southgate staff met with VanPelt Construction staff at the Holstein Sand Dome to obtain budget pricing for the demolition of the 1991 sand dome and how their VP Stora Dome replacement build solution on the existing pre-loaded footprint could be a viable solution. This building would have a storage capacity of 3,500 tonnes, meeting our current needs.

Vanpelt Construction quotation is for a 76-foot diameter VP Stora Dome that fits on the existing footprint including excavation, foundation/cement work, galvanized steel superstructure, interior framing/plywood liner and steel cladding & roofing. The asset life cycle expectancy is between 50 to 70 years. (Attachment # 3&4)

Staff are planning to fill the Holstein Sand Dome for the 2024/2025 winter season and some storage of materials at the Grey County Egremont Sand Shed. With another winter of roofing materials damage and deterioration, it will be recommended to have the Holstein Sand Dome demolished in the spring/summer 2025.

The following are the Holstein Sand Dome options for Council consideration:

1. Rental agreement for the use of the Grey County Egremont Sand Shed short or long term.
2. Include in the 2025 Capital Budget, to set aside a building reserve for a future replacement.
3. Staff recommendation to demolish the existing sand dome in 2025.
4. Tender for a new build for all structural style options, and target year for construction.
5. Tender for a new build for specific style structure, and target year for construction.

Internal Policy and Legislated Requirements:

The Holstein Sand Dome is one of the Township's infrastructure building assets and the storage and use of winter control materials, sand/salt are required to maintain Southgate roadway sections to meet Ontario Regulation 239/02 Minimum Maintenance Standards for Municipal Highways.

Financial and Resource Implications:

The Grey County Sand Shed shared use agreement would be a minimal financial impact, some hydro usage and possible rental fee. This arrangement has some uncertainty on Grey County's future operations plans for this facility. The Township could also use this arrangement for a number of years and put money in reserves for a few years towards the replacement build.

The Britespan structure quotes are in the range of \$355,000.00 with options for poured concrete walls & floor, and fabric cladding upgrade. This quote does not include site loading engineering, excavation, granular materials, compaction, electrical and final floor. To be noted, concrete floors are not ideal for sand/salt storage as the concrete will become spalled and pitted.

VanPelt Construction's quote is based on pricing for a 2025 season build at a cost of \$598,925.00 plus HST. The quote also has additional pricing for granular materials if required, new floor asphalt and electrical works. This proposal could be used for budget purpose considerations, however VanPelt indicated that price increases would be indexed a minimum \$50,000.00 annually for these builds.

VanPelt demolition and removal of the existing dome option is \$46,700.00 plus HST.

Staff will bring preferred recommendations into the 2025 Capital Budget process discussions.

Strategic Priorities:

Priority: Operational Excellence

Goal: Goal 12: Ensure Diligent Maintenance and Long-Term Sustainability of Township Assets and Infrastructure

Attachments:

Attachment 1: PW2024-035 Britespan Quotations

Attachment 2: Britespan Structure

Attachment 3: PW2024-035 VanPelt Construction Inc Quotation

Attachment 4: VP Stora Dome 3D Model