

**Melancthon Quarry
Proposal**

Community Meeting

October 2021

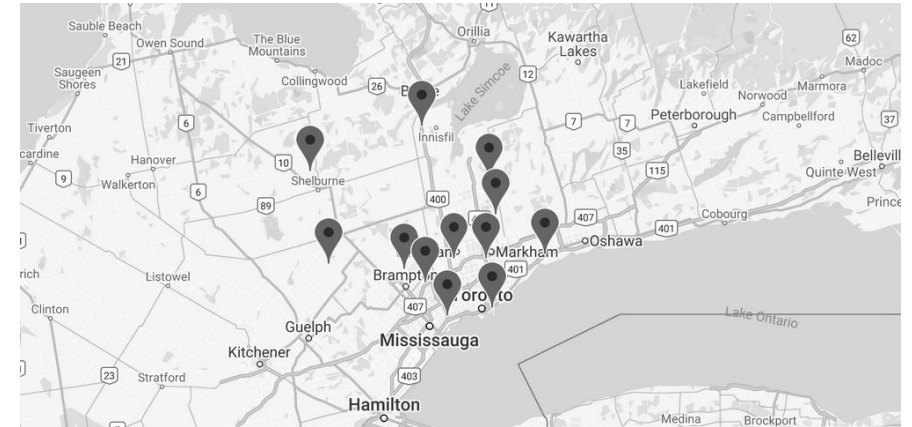


- Strada will make a 15-minute presentation. The slide deck will be available at stradaquarry.com
- During the presentation and after, attendees are welcome to leave questions in the chat window.
- You can access the chat window by hitting the “More” button on the bottom right hand side of your screen. A dialogue box will pop up. You can type your question.
- All of the questions will be answered following the presentation, in the order they appear
- Please note that this meeting is being recorded

Who is Strada Aggregates?

Strada Aggregates

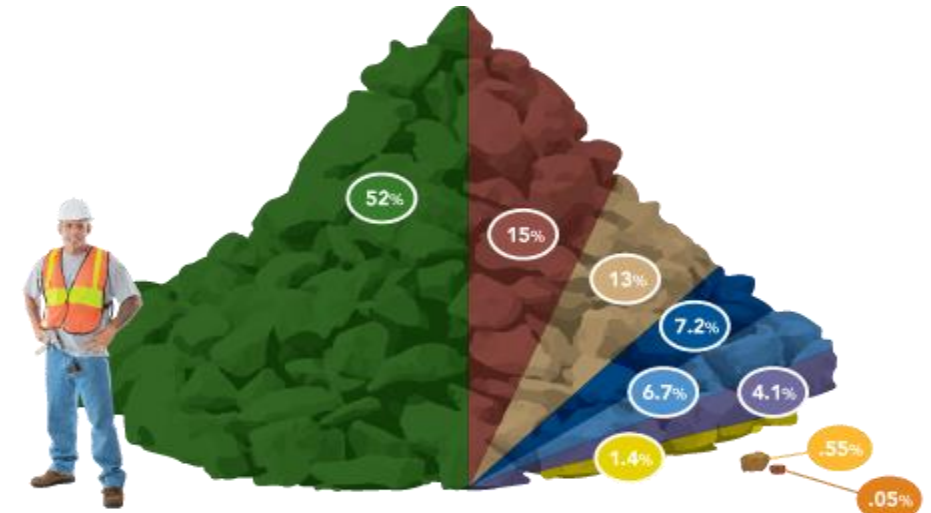
- Ontario-based
- Leading supplier of aggregate and recycled aggregate products in Ontario
- We safely operate 3 pits and 12 depots in Ontario
- We work closely with our communities to minimize and manage the environmental effects of our operations



Strada sites across southern Ontario

What Is Aggregate?

- Aggregate is the foundation of our economy
- It is used in everything from roads and buildings to water filtration and toothpaste
- Virtually every home and job in Ontario relies in some way on an available supply of aggregate
- The average Ontarian uses approximately 1 truckload of aggregate annually
- Pits are located in areas where glaciers left deposits of sand and gravel
- Quarries are when solid rock is extracted from an area



52%

ROADS

Sands, gravel and crushed stone used for the base of roads and highways.

15%

CONCRETE AGGREGATE

Sands, gravel and crushed stone used in the manufacture of concrete.

13%

CONSTRUCTION FILL

Sands, gravel and crushed stone used as fill in construction applications.

7.2%

CHEMICAL USE

Sands, gravel and crushed stone used in industrial or manufacturing processes, including sand for glass manufacturing, dolime used in steelmaking, and kiln feed for portland cement.

6.7%

ASPHALT AGGREGATE

Sands, gravel and crushed stone used in the manufacture of asphalt for roads.

4.1%

OTHER CONSTRUCTION & MANUFACTURING USES

Any uses not covered in other categories, including grinding abrasives and mould stands for foundry castings, etc.

1.4%

MORTAR SAND

Sand used in the manufacture of mortar.

0.55%

PULVERIZED STONE

Used as mineral fillers for cosmetics, paints, rubber products, some food additives, etc.

0.05%

DIMENSIONAL STONE

Rock and quarried stone used in architectural applications including stone cladding, paving stones, retaining walls, floor tiles, cemetery monuments, landscaping, and interior limestone, marble and slate.

Existing Gravel Pit



- Located in the area of 4th Line and County Rd. 17 in Melancthon
- Active gravel extraction
- In operation since 2004
- Approximately 360 acres
- Excavation 1.5 meters above the water table

What is Strada Proposing?

Proposed Aggregate Quarry

Located within the footprint of the existing gravel pit

The area contains the highest quality limestone used for aggregate in the province.

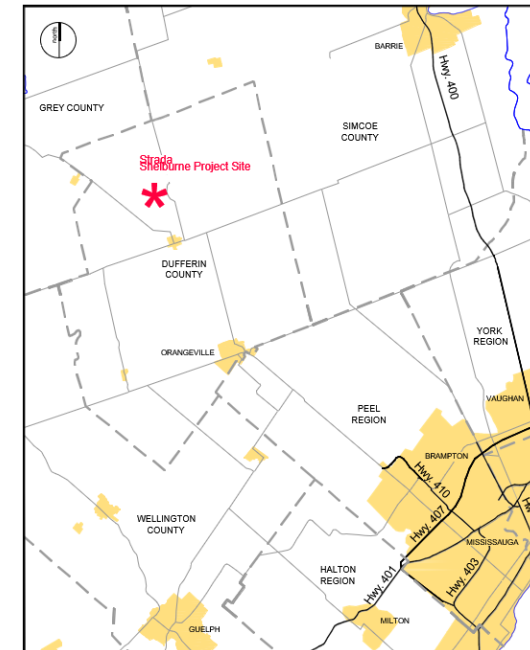
Project is in the early stages – more than a dozen technical studies are underway

Technical Studies initiated in 2020 and currently on-going to understand potential for bedrock extraction below existing gravel pit

If found to be feasible and a licence is granted, aggregate extraction would be completed in stages.

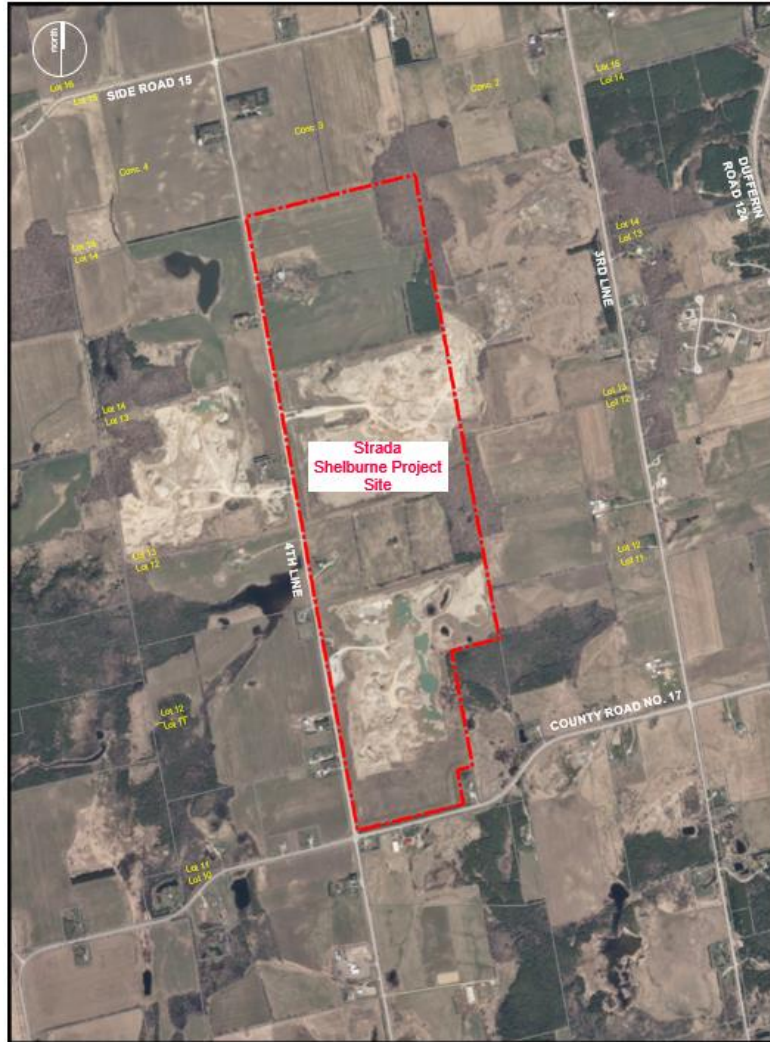
Areas that are extracted are then rehabilitated.

The proposed quarry will require approvals under the *Aggregate Resources Act*



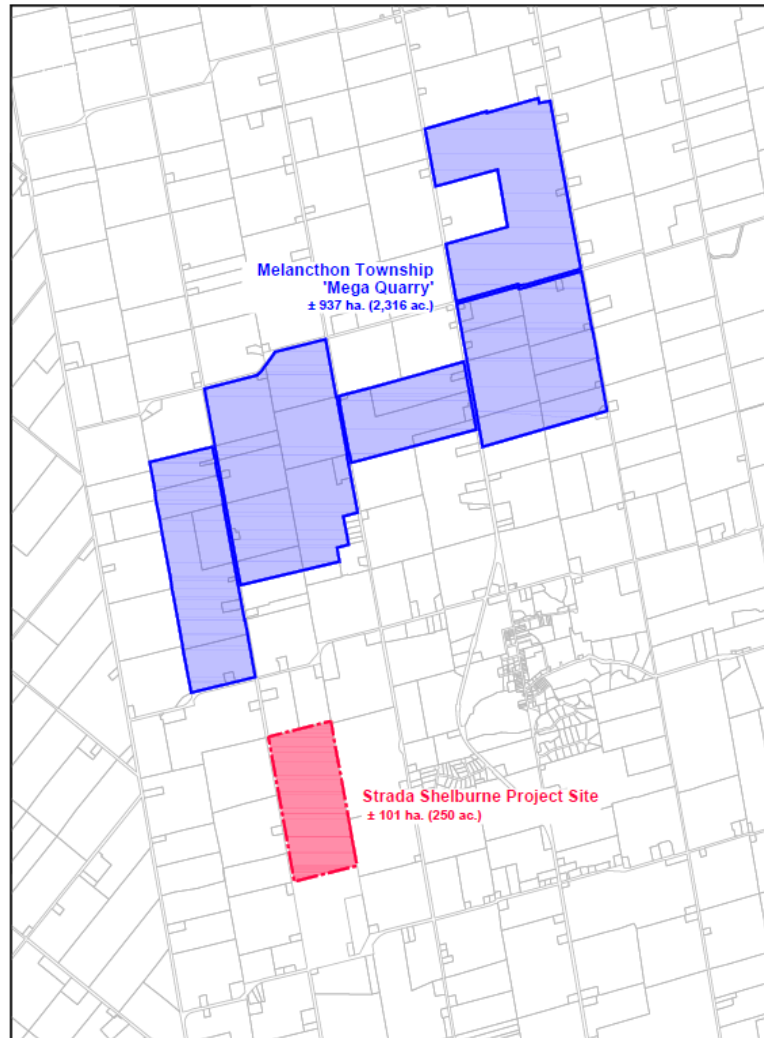
Proposed location for the Strada Quarry

Study Area and Project Location



- Assessments and studies are being completed to understand the existing conditions and the potential of bedrock extraction below the water table.
- The project location reflects the boundaries of the existing gravel pit, totaling approximately 360 acres.
- Project Location is adjacent to both existing and historical aggregate extraction operations.
- The licence area and proposed extraction footprint are yet to be defined but would be set back from the current site boundary. Estimate: 250 acres
- Strada will keep the community informed as more information becomes available.

Melancthon Quarry Site Comparison



- The location is close to the former proposed “mega quarry”
- Strada’s proposed quarry is about 1/10th the size
- Mega quarry was planned at 2,316 acres vs. 250 acres
- Mega quarry proposed extraction of 10 million tonnes per year vs 2 million tonnes
- Mega quarry was planned on agricultural land vs an existing gravel pit

Resource & Hydrogeology

Surface Water Resources

Natural Environment

Archaeology

Visual

Noise, Blasting and Air Quality

Cultural Heritage

Agricultural Land

Land Use Planning

Traffic

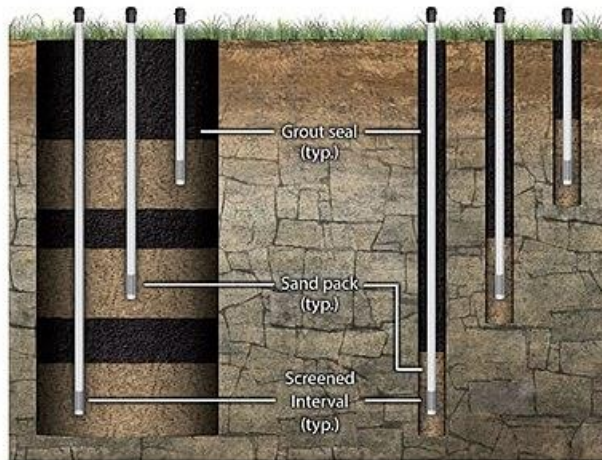
Purpose

- Assist in determining the potential of the project, characterize existing conditions, predict future conditions and support the required applications
- Assess potential effects of the project on the environment and the community, and identify if mitigation or management solutions are required.
- Ensure no adverse environmental effects from operations

Schedule

- Technical studies commenced in 2020 and will be on-going through 2021
- If technical reports support feasibility of site, a licence application would be likely in late 2022.

Hydrogeology and Surface Water



Nested Well

Well Cluster



- Strada's top priority is ensuring a quarry would have no adverse impact on surface or groundwater resources
- Strada has installed 31 monitoring wells to better understand existing groundwater conditions
- Studies will assess the potential effects of a quarry on the quality and quantity of water in surrounding water wells and natural environment
- Ontario's regulations protecting water near quarries are among the most stringent in the world
- Strada must show there will be no significant impacts on ground or surface water as a result of operations



- Study will calculate peak hours of operations and associated site traffic
- Use existing entrance and haul route
- Evaluate future operations of the road network
- Prepare mitigation strategies for any potential impacts



- A noise and vibration impact study will identify potential effects on sensitive receptors
- A blasting assessment will be completed that includes ground and air vibrations
- Quarries in Ontario are required to blast well below the “zero probability limit,” meaning at a level where there is no chance of vibrations causing damage
- Damage associated with blast vibrations has never been observed at these limits, even in historical structures

The Approvals Process

Figure 1: Aggregate Resources Act Policy Framework



- Ontario’s Aggregate Resources Act (ARA) is one of the most rigorous aggregate application processes in the world
- The ARA sets out a comprehensive set of study requirements and standards
- Extremely stringent requirements to ensure no adverse effects on community and environment
- Requires detailed site plans with conditions and mitigation requirements
- Full agency peer reviews required
- Mandated public notice and consultation
- Indigenous duty to consult
- Unresolved objections (if any) decided by LPAT



- Strada is committed to going above and beyond the requirements of the official review process
- Plan to engage the public early and often, and incorporating their feedback into the application
- Committed to providing fact-based information to the public when it becomes available
- Committed to working closely with the public and all levels of government to ensure a transparent application process

Timeline

- **Summer 2020** – Initiated field studies.
- **Mid 2021 and throughout 2021** – Meetings with Indigenous communities, local government representatives and the local community.
- **2022** – Potential Study Completions
- **2022** – Potential application submission
- **Beyond 2021** – Continued engagement with all stakeholders outside of and within the official process, and when a licence is granted, on-going communication with the public.

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- A copy of the presentation will be posted on stradaquarry.com
- You can contact us anytime at info@stradaquarry.com

Contact us by phone or e-mail:

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Visit the project website:
stradaquarry.com