

SKIPPING STONES

A newsletter for the neighbours of Severn Quarry and the Simcoe Pits



walker
aggregates

Spring/Summer 2018

QUARRY AND PITS UPDATE

The unusually long winter resulted in a late start for stone production at Severn Quarry, with start-up occurring in mid March — more than a week later than usual. According to superintendent Roger McGillvray, the quarry is nonetheless expected to be as busy as in previous years to meet the demands of construction projects in Simcoe County and beyond.

Three of Walker Aggregates' seven sand and gravel pits in Simcoe are particularly active this year. The Edgar Pit has begun producing stone for the manufacture of concrete for the first time in several years.

Rehabilitation at the Anten Mills Pit is continuing while production is ongoing year round, and heavy mining is happening at the Orillia Pit 7. Production in this former Stewart pit, which Walker purchased in December 2016, had been contracted out to an outside company. Walker has purchased its own equipment and is using more of its own employees to produce products at this location.

Ryan Wall has assumed senior management responsibility for the Simcoe County pits and quarries, in addition to his oversight of Walker Aggregates' Essex County operations. Ryan's new job title is vice-president of Aggregates for Simcoe and Essex. He reports to Ken Lucyshyn, executive vice-president of Walker Aggregates.



▲ Ryan Wall

▲ An aerial drone view of Severn Quarry.

CUSTOMER PROFILE

KING CITY COMPANY WORKS TO ENHANCE NATURE AND PROMOTE FUN

For a company based in King City, Latitude 67 Limited takes on construction projects all across southern Ontario, from Niagara to Kingston, the GTA and as far north as Penetanguishene. Company project manager Paul Degli Angeli says he stays away from working in the City of Toronto, though. "Too much traffic," he explains.

Paul and his brother Frank are co-owners of Latitude 67, a site works and excavating contracting company. It's a business they assumed after the death of their father in 1994, who established it more than 50 years ago.

Both grew up in the family business and began working for their dad at an early age. "The business was our playground," Paul explains.

Latitude 67 employs up to 15 people during the peak building season, and specializes in landscape construction, erosion control and sport field

construction. Among the projects the company has completed are shoreline protection work on Kempenfelt Bay in Barrie, sports fields in Stouffville and King City, and foundations for mausoleum construction projects in Southern Ontario. A large majority of Latitude 67's work is done for municipalities.

The company sources much of its stone from Duntroon and Severn quarries. "We love the connection we have with Walker Aggregates," Paul says. "We get the product we need when we need it, along with good service from the company."

Paul says his work in the family business "came naturally," and adds that he hopes it will continue for another 50 years, at least. His sons have expressed an interest in the business, with the oldest already a part of the work crew during summer holidays from high school.



▲ Gravel and armour stone from Walker Aggregates' Simcoe County quarries are being used by Latitude 67 Ltd. to construct Middletown Park in Bradford West Gwillimbury.

▼ *A blast at one of Severn's sister quarries south of Collingwood.*



HOW QUARRY BLASTS HAPPEN

For some people of a certain age, a blast might conjure up images of a coyote with several sticks of dynamite, connected to a plunger that sets off a big explosion — typically at the coyote's expense. But in reality, blasts in quarries are nothing like that.

Blasts in quarries are carefully planned, controlled and monitored. A series of holes is drilled in a row several metres back and pretty much parallel to the edge of the quarry. The holes are filled with explosives and then detonated in sequence — a few milliseconds apart — to control the impact of vibration. The rock blasted in a quarry typically drops straight down along the quarry face; it doesn't fly in all directions.

The provincial government sets maximum noise and vibration levels for quarry blasts to ensure the effects on neighbours and local wildlife are minimized. Seismographic monitoring stations are set up between 500 metres and one kilometre from the blast site to measure and record each blast.

The degrees of noise and vibration produced by a blast are primarily based on two factors. The first is the technical specifications of the blast — such as the size and depth of the drilled holes, and the type and amount of explosives used. The second factor involves atmospheric conditions such as wind direction, humidity and cloud cover. For example, a blast on a day with low cloud cover will sound louder than on a clear day, because the clouds can cause sound waves to bend or refract back down to the ground.

Every blast will generate noise and vibration that nearby neighbours will notice. Vibration levels are normally lower than common household events, such as a door slamming. No structural damage will occur due to noise or vibration with blasts that are within the limits established by the Ministry of the Environment and Climate Change.

Neighbours within 500 metres of a blast site who wish to be notified about planned blasts can request this from quarry management. In addition, a siren or horn is sounded at the quarry a few minutes in advance of every blast.

Blasts are designed and conducted by professionals who are certified in this skilled trade. Every quarry keeps detailed records of each blast. The records typically include the size, time and location of the blast, the amount of explosives used, and the monitoring results.

RESEARCH TO HELP FORESTS GROW FASTER

Some important ecological research is happening at one of Walker Aggregates' Simcoe County quarries in Duntroon.

Last fall, a team of researchers from the University of Waterloo began a project to determine whether the process of establishing a mature, old-growth forest can happen more quickly than the time it takes for such a forest to naturally occur.

Some of the forested areas in the quarry's expansion area will be removed for mining, while other areas of the property have been planted with trees to replace the woodlands.

The researchers are scraping off the top layer of soil from the older forest and transplanting it to the newly treed areas, with the aim of dramatically reducing the time it takes to create a complete forest ecosystem.

The research is being conducted by a team led by research associate Dr. Paul Richardson and professor Stephen Murphy of Waterloo's School of Environment, Resources and Sustainability. The \$750,000 funding for the project has come from the Natural Sciences and Engineering Research Council and The Ontario Aggregate Resources Corporation.

"Walker Aggregates' contribution to the project is as valuable as the funding we've received," says Dr. Murphy, adding that in addition to offering a site for the project, the company is also providing logistical support.

Last November, the Waterloo team created 45 experimental plots that were covered with living mulch from the donor forest.

"Living mulch includes the upper layers of the forest floor — from the topmost litter and woody debris through to the topsoil, with its banks of seeds and forest plants, plus essential soil animals, microbes, nutrients and organic matter," explains Dr. Richardson.

Over the coming years, his team will monitor and analyze how the transplanted forests compare with the donor forests.

"Within two or three years we'll be able to see what's going on," says Dr. Murphy. "We're hoping to be able to speed up the process to create an old-growth forest from the normal 150 years, to 50 or 60 years."



▲ *A team of researchers from the University of Waterloo has been transplanting soil from an old forest to newly treed areas at Walker Aggregates' Duntroon Quarry.*

EMPLOYEE PROFILE

MINING STONE AND WORKING THE LAND

Growing up on a family farm, Ryan McGillvray has never gotten farming out of his system. In addition to a full-time job as a blaster and equipment operator at Severn Quarry, Ryan puts in almost as many hours working in agriculture as he does in aggregates.

He is the fourth generation of McGillvrays to work the land on 500 acres just outside the small community of Brentwood, northwest of his home in Angus.

Just like his father, Severn Quarry superintendent Roger McGillvray — who also works on the farm — Ryan realizes that it's difficult to make a living farming. He has been employed in the industry full time for about 20 years.

He spends an hour commuting to Severn Quarry for his shift start at 7 a.m., and another hour coming home when he finishes work at 4 p.m. Then it's off to work on the farm during the late afternoons and early evenings through the week, and most of the day on weekends. Even winters are busy, repairing and maintaining equipment and getting ready for the spring planting season.

"I don't have any days off, but I enjoy it," he says of his lifestyle.

Ryan plans and conducts blasts at Severn Quarry typically twice a week, while stone production is happening. He surveys and lays out the drill pattern for each blast in



▲ Ryan McGillvray on the family farm near Angus.

preparation for drilling the holes. He is constantly altering the blast design due to the rock composition in different areas of the quarry, as well as compensating for factors such as wind, cloud cover and temperature.

"Every blast is different," he says. "They're all very challenging and we need to ensure good blasts — ones that are safe and in the best interests of everyone, including the community," he says. By that, he means not only for the company, but also the environment and the neighbours living nearby. He is constantly trying to reduce the impacts of blasting to well below government guidelines.

A typical blast at Severn will yield about 40,000 tonnes of rock. While his is still somewhat of a dangerous job, Ryan says safety has "improved immensely" over the years, both with blasting products and on-site safety.

He says he enjoys his job. "I like the crew I work with, the company is good and so are the benefits."

In the little time that he does take off, Ryan enjoys spending time with family as well as fishing for salmon and trout on the Nottawasaga River.

WHERE THE STONE GOES

Bradford West Gwillimbury Housing Development

More than 25,000 tonnes of stone from Severn Quarry is being used in pre-construction site servicing for the new Green Valley East subdivision at Simcoe Road and Line 6 in Bradford West Gwillimbury.



WALKER AGGREGATES RECEIVES MINISTRY OF LABOUR FINE

Walker Aggregates has been fined \$170,000 along with a 25 per cent victim surcharge by the Ministry of Labour after pleading guilty to a charge of failing to follow a safety procedure under the provincial Occupational Health and Safety Act. The fine comes after the tragic death of one of the company's employees at Severn Quarry in February 2017.

The incident and subsequent ministry investigation have compelled Walker Industries to launch a company-wide review of health and safety practices throughout all its divisions. This includes recently completed third-party safety audits of all its sites in Canada and the U.S. and their recommendations for further safety initiatives.

"The responsibility of working safely at Walker belongs to everyone," says Walker Industries president and CEO John Fisher, noting that the company has been enhancing its health and safety training and its oversight of employees to ensure an incident like this never happens again.

"We must always be mindful of the effects of unsafe work practices and the potentially devastating impact on a victim's coworkers, supervisors, and most importantly, their families," he adds. "We want to ensure that all of our employees get home safe at the end of each work day."

2017 Severn Quarry Public Liaison Committee Holiday Reception



SAVE THE DATE FOR OUR SUMMER BBQ!

Friends and neighbours of Severn Quarry and Simcoe pits are invited to our annual summer BBQ and quarry tour.

Thursday, August 16, 2018
3:30 - 6:30 p.m.

The BBQ is in the Severn Quarry shop at 2646 Nichols Line, Orillia. Buses for the tour and blast load at 4:00 p.m.

Please RSVP to Rosemary at 705-445-2300 ext. 4223 or rackermann@walkerind.com.

We hope to see you there!

SEVERN QUARRY AND ORILLIA PITS CONTACT INFORMATION

Severn Quarry, 2646 Nichols Line
Orillia, ON L3V 6H3 (705) 689-6800

Edgar Pit, 1540 Line 7 North, RR #2
Oro Station, ON L0L 2E0

Anten Mills Pit 4436 Horseshoe
Valley Rd. W., Minesing, ON L0L 1Y0

Pit 7, 1533 Line 12 N.
Oro-Medonte, ON L0L 1T0

Pit 5, 1267 Line 13 N.
Oro-Medonte, ON L0L 1T0

Pit 48, 4364 Uthhoff Line
Orillia, ON L3V 6H2

Roger McGillvray
Superintendent - Severn Quarry
(705) 689-6800 ext. 222
rmcgillvray@walkerind.com

Ryan Dosch
Superintendent - Simcoe Pits
(705) 487-2380
rdosch@walkerind.com

Ryan Wall
Vice President, Aggregates
Walker Aggregates
Simcoe & Essex
(705) 445-2300
rwall@walkerind.com



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