



# Discovering the **Best in Aggregate**

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2020 Industry Advancement & Student Design Awards

# AWARD OF EXCELLENCE

The OSSGA Award of Excellence is given to sites that demonstrate an ongoing commitment to community relations, operational improvements, and sustainable practices.

## Walker Aggregates Inc.

Ridgemount Quarries

Town of Fort Erie

Walker Aggregates' Ridgemount Quarries was the 2020 recipient of the OSSGA Award of Excellence for its stewardship across all of the award's key criteria.

For the Ridgemount Quarries team, it is a priority to be a good neighbour. The company employs specialized technology and equipment to monitor and mitigate the noise, dust and vibrations caused by its operations and maintains a traffic safety program to keep its roads safe. The site also contributes to the health and well-being of its community through cash and material donations. In 2020 alone, it gave approximately 168 tonnes of stone to Habitat for Humanity for a housing project in Port Colborne and made cash donations to the Friends of Fort Erie's Creeks and the Greater Fort Erie Centre for the Arts. Beyond this, Ridgemount Quarries holds educational programs and site tours, and hosts paleontologists from all over North America.



Ridgemount Quarries' commitment to sustainable operations is equally noteworthy. Since 1999, the site has been conducting a rehabilitation project that aims to create a lake for recreational and natural activities. It also recycles concrete and asphalt from local infrastructure construction projects for reuse in the market and makes an effort to reuse equipment, e.g., its tire retreading program and moving assets to other Walker sites. The company incorporates energy-saving technologies and processes and carries out impactful recycling programs for other materials.

These and other efforts are part of Walker Aggregates' EARTH 1st philosophy, which challenges sites to: Efficiently operate, Acknowledge our part, Reduce our impacts, Take time to plan, Higher environmental performance, and be the first in Innovation and Leadership.

## A SPECIAL THANKS TO THE JUDGES

The Industry Awards Review Panel was comprised of judges invited from outside the industry, including Michael Williams, Ducks Unlimited Canada; Stephen Douglas, MNRF; Dr. Wayne Caldwell, University of Guelph; and Wayne Caston, University of Waterloo. They were supported by OSSGA members Bernie Janssen of Harrington McAvan Canada Ltd. and Danielle Solondz of The Ontario Aggregate Resources Corporation (TOARC).

The Biodiversity Award Review Panel included Steve Hounsell, Chair of the Ontario Biodiversity Council; Lynette Mader, Manager of Provincial Operations - Ontario for Ducks Unlimited Canada; and Ron Reid, founder of the Couchiching Conservancy.

The Student Design Award Review Panel was comprised of members of OSSGA's Rehabilitation and Ecology Committees: George Antoniuk, The Miller Group; Kevin Fitzpatrick, WSP Canada Inc.; Mike Le Breton, CBM Aggregates; Kristen Hinde, Skelton Brumwell & Associates Inc.; Adam Nordfors, LGL Limited; Jacqueline Forbes, Walker Aggregates; and Moreen Miller, Brandy Creek Consulting.



The Biodiversity Award honours OSSGA members for their contribution to sustaining biodiversity through species protection, habitat improvement and sustainable land use activities. They are also recognized for conserving biodiversity in a way that goes well beyond regulatory standard practices and typical activities undertaken by the industry. Ontario's Biodiversity Strategy, 2011 was central to the development of the award criteria. Each eligible project must demonstrate support for one or more of the following strategic directions: engaging people, reducing threats, enhancing resilience, and improving knowledge.

## **Lafarge Canada Inc.** **- A Member of LafargeHolcim** Uxbridge Regan Pit Township of Uxbridge

Lafarge Canada Inc. is committed to protecting, restoring and enhancing biodiversity at every one of its sites across the world. Its strategy closer to home includes developing Biodiversity Management Plans (BMPs) to help sites support the four strategic directions of Ontario's Biodiversity Strategy: engaging people, reducing threats, enhancing resilience and improving knowledge. Each BMP involves assessing a site's biodiversity history and potential, after which a customized action plan is created to guide the site in achieving Net Positive Impact (NPI) on all local plant and animal species.



To date, Lafarge has developed 19 BMPs for its Ontario sites, including one for its Uxbridge Regan Pit. The Uxbridge Pit team has engaged its community and improved knowledge through ongoing education and industry tours, local awareness campaigns, and tree planting initiatives with various local schools and organizations. Moreover, the site's operations team works with local groups such as Uxbridge Naturally and North Durham Nature to hold talks on biodiversity and gain insights to guide its biodiversity strategy.

The Uxbridge Regan Pit has also taken key steps to reduce biodiversity threats and enhance resiliency. It has rehabilitated portions of its site to create a wildlife corridor between the north and south forested areas around the pit, creating terrestrial habitats for various animals (e.g., foxes, snakes, rabbits, etc.), building 50 bird boxes for cavity-nesting birds and planting over 55,000 trees.

Looking forward, Lafarge aims to have one-third of its turnover come from products, services and solutions with enhanced sustainability performance by 2030. It is thanks to biodiversity leaders like Uxbridge Regan Pit that the company is well on its way to meeting this goal.



# COMMUNITY RELATIONS

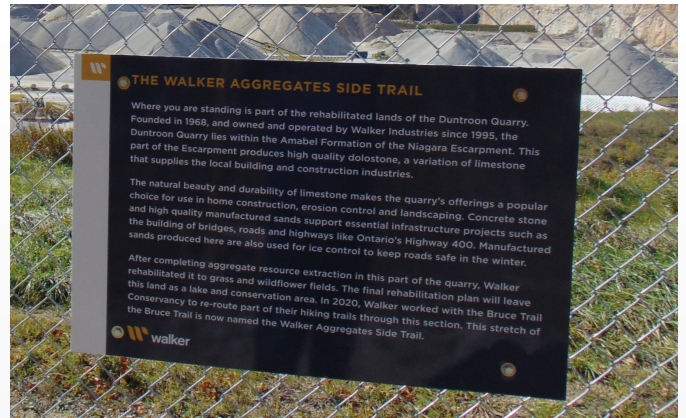
The Community Relations Award recognizes those who have demonstrated leadership in promoting good neighbour relations, community involvement, education and industry awareness.

## Walker Aggregates Inc.

Duntroon Quarry  
Town of Duntroon

Walker Aggregates' Duntroon Quarry has earned numerous OSSGA Awards for its ongoing efforts to reduce the impact of its operations and foster strong relationships with its neighbours. Onsite, Duntroon Quarry invests in daily noise and dust mitigation strategies and employs a retired police officer to help keep traffic safe in and around its operations. Quarry staff also contact the site's surrounding neighbours well in advance of blasts and maintain a database of complaints and feedback, which they use to inform continuous improvements. Community relations are also strengthened through annual events like their Public Liaison Committee (PLC) holiday wine and cheese reception.

Beyond its gates, Duntroon Quarry contributes to the local community by donating cash and materials to sports teams and organizations like the Collingwood Salvation Army and Clearview Stayner Food Bank. Both received donations in April 2020 to help address



community needs throughout the COVID-19 pandemic. Additionally, Walker Aggregates worked with the Bruce Trail Conservancy to develop 350 metres of new trail next to Duntroon Quarry.

Information on these events and other quarry news is shared through Duntroon's biannual newsletter, site tours and town hall gatherings. The latter were livestreamed during the pandemic.

## Walker Aggregates Inc.

Keppel Quarry  
Township of Georgian Bluffs

Keppel Quarry received its first OSSGA Community Relations Award for its holistic approach to being a good neighbour. In addition to controlling noise and dust emissions through various activities, the site also takes measures to keep its truck traffic safe along Grey Road 17.

Within its local community, Keppel Quarry donates material to numerous community organizations. This includes donating 22 tonnes of stone to the Grey Bruce Animal Shelter, five cubic metres of concrete to help repair the Lion's Head Lighthouse, and 44 tonnes of four-inch gravel for a cattle-crossing at a private farm as part of the Grey Sauble Conservation Authority's Upper Sydenham water quality improvement project. Over the past five years, Keppel Quarry has also donated machines and operators for stream and habitat enhancement along the Upper Sydenham River.

In addition to material donations, the Keppel Quarry provides financial support for various sporting organizations. It is also known for hosting public meetings, site visits and educational tours for Bluewater District School Board students. Although the pandemic put physical visits on hold in 2020, the quarry continued to keep its lines of communications open through newsletters and other digital channels.







### **Walker Aggregates Inc.**

McGregor Quarry  
Town of Amherstburg

This is McGregor Quarry's sixth OSSGA Community Relations Award. In 2020, the quarry was recognized for its advanced noise, dust and traffic mitigation strategies, as well as its ongoing contributions to local organizations and initiatives. Its donations included giving stone material to the nearby Gesslwood Camp and Education Centre, the Essex County Steam & Gas Engine Museum, and to local neighbours for highway maintenance. It also sponsored local golf tournaments and lent its site to the Windsor Police Service for long-range target practice. Site staff always look forward to hosting the quarry's annual

summer community barbecue but had to skip on this initiative in 2020 due to the COVID pandemic.

Public outreach is central to McGregor Quarry's community reputation. Neighbours are personally notified before blasting, and the quarry's team of workers continually collects feedback to improve the site's operation. On top of this, the quarry hosts school tours and site meetings (when conditions allow) and relays quarry news and events through its newsletter and personal interactions with community members.

### **Walker Aggregates Inc.**

Ridgemount Quarries  
Town of Fort Erie

A mix of onsite measures and impactful community work earned Ridgemount Quarries a spot on the 2020 OSSGA Awards list. Within its gates, the site employs Explotech technology to monitor noise and vibration levels, and uses equipment covers and regular watering to control dust. Additionally, the site promotes traffic safety with vehicle beacons and an onsite traffic enforcement officer and keeps a record of neighbour complaints to help guide improvements.

Within the community, Ridgemount Quarries donates material and cash to a range of organizations. In 2020 alone, it contributed 168 tonnes of stone for a Habitat for Humanity project in Port Colborne and donated cash to the Greater Fort Erie Centre for the Arts. As a world-renowned destination for fossilized sea scorpions (aka eurypterids), the quarry opens its site to paleontologists from across North America on a weekly basis (COVID-19 permitting). As well, it welcomes police forces from Toronto, York, Durham and the OPP to conduct "large vehicle disruption" training on behalf of the Canadian Explosive Research Laboratory at Natural Resources Canada. These activities and more are communicated to a wide readership through Ridgemount Quarries' newsletters and other communications.





## COMMUNITY RELATIONS



### **Walker Aggregates Inc.**

#### **Severn Quarry Township of Severn**

Community relations are a daily priority for the team at Severn Quarry. Beyond leveraging technology and industry best practices to reduce the impact of its operations, the Walker Aggregates site supports its neighbours in Severn Township and the surrounding region. In 2020, the quarry made donations to multiple food banks to provide additional support during the COVID pandemic.

Severn Quarry also hosts several groups and events at its site. These include educational tours for Georgian College students and a holiday PLC wine and cheese reception and summer barbecue – both of which were impacted in 2020 by the COVID pandemic. Outside of these events, the team stays in touch with its neighbours through biannual newsletters and personal visits.

### **Walker Aggregates Inc.**

#### **Vineland Quarries and Crushed Stone Town of Lincoln**

Located south of the Niagara Escarpment, this Walker Aggregates site is no stranger to OSSGA's Community Relations Award. This year, the quarry was honoured once again for its ongoing efforts to control the noise, dust and traffic from its operations and to strengthen ties with its neighbours.

Cash and material donations make up a significant part of Vineland Quarries' community outreach. In 2020, the quarry donated 443 tonnes of stone to organizations that include Habitat for Humanity's Fonthill ReStore, the 1st Lincoln Cub Scout Camp and Horse Cents for Kids. Additionally, Walker Aggregates pledged \$1.5 million to Hospice Niagara to support the construction of two new palliative care centres in the region.

Outside of these donations, Vineland Quarries hosts site tours, supports outdoor rehabilitation projects and throws community get-togethers like its summer barbecues and its PLC wine and cheese reception. It also hosts an onsite meeting for the Vineland Scouts - the scouting organization works the quarry on various roadway clean-up projects throughout the year. While many of these initiatives were put on hold during the COVID pandemic, they remain central to the quarry's community relations commitment.



### **Walker Aggregates Inc.**

#### **Walker Brothers Quarries Township of Stamford (Niagara Falls)**

A mix of onsite activities and community outreach makes Walker Brothers Quarries a respected name in the region. Within its quarry gates, the company uses monitoring devices to manage the noise and vibrations of its blasts, employs a retired police officer to enforce traffic safety, and controls dust emissions with equipment covers and watering. Additionally, the Walker team is in constant communication with neighbours to inform them of upcoming blasts and collect their feedback. The company also lets the Niagara Regional Police use their property, both in and around the quarries, for explosives and K9 training.

Beyond the site's borders, Walker Brothers Quarries donates cash and materials to several local organizations. In the past year, it contributed over 776 tonnes of stone to help enhance the Upper Canada Heritage Trail and provided financial support to the Landscape of Nations memorial park in Niagara-on-the-Lake. The company also pledged \$1.5 million to Hospice Niagara towards the development of two new palliative care centres in the region.



The Progressive Rehabilitation Award recognizes the ongoing efforts of individual operators to progressively rehabilitate their sites in accordance with their site plans.

JUDGES' CHOICE AWARD



## **Lafarge Canada Inc. - A Member of LafargeHolcim**

Lawford Pit

Town of Caledon

Since April 2015, the team at Lawford Pit has been in the process of converting the site's floor pit back to agricultural land while promoting the expansion of the Credit River and Core Greenlands System. Steady progress has been made throughout the year towards these goals. In 2020, the team rehabilitated 7.2 hectares of land for a site total of 20.5 hectares of rehabilitated space.

Recent work included redistributing onsite overburden material to slope the exhausted faces at a ratio of 3:1, as well as applying 320,000 cubic metres of overburden and topsoil over the area. The entire rehabilitated area has also been seeded to prevent erosion and to support natural revegetation over the long term. The seed mix includes creeping fescue, perennial ryegrass, Kentucky bluegrass and white clover.



## **Capital Paving Inc.**

Wellington Pit

Township of Puslinch

Wellington Pit's recent restoration work took place from April 2020 to May 2020 and included rehabilitating 8.28 hectares for agricultural use. As part of the overall plan, four of the site's small ponds are being retained to serve as irrigation for the agricultural fields. As well, three hectares of land in the centre of the area have been reforested to link wooded areas to the west of the site with the Country of Wellington's Little Tract forest that runs along the east boundary of the pit. The aim of this effort is to create a wildlife corridor. Moving forward, there are plans to grow an assortment of crops on the remainder of the rehabilitated land, which for several years now has been used to grow soybeans and corn.



## **CBM Aggregates**

**- A Division of Votorantim Cimentos**

Brighton Pit

Town of Brighton

In October 2019, Brighton Pit completed work on its seven-hectare rehabilitation project. The initiative started in April 2017 with Behan Construction grading and shaping the existing overburden in the distributed area to create to a 3:1 slope that supports surface water drainage towards the site's pond. Existing overburden was then applied and graded over the floor of the former plant area and haul road, and approximately 2,500 cubic metres of topsoil taken from onsite storage berms was distributed over the area at a minimum thickness of six inches. After the topsoil was applied, crews applied 875 kilograms of seed at a rate of 125 kg per hectare.







## **CBM Aggregates - A Division of Votorantim Cimentos**

Cannington Pit

Township of Brock

The goal of Cannington Pit's latest rehabilitation project was to convert the site's 2.5-hectare east shoreline into a 3:1 side slope that directs water into the eastern portion of the site's existing pond. Work was carried out from August 2019 to September 2019. This work included placing and grading subsoil and spreading 5,000 cubic metres of topsoil over the east side to an average depth of six to eight inches. The rehabilitated area was then seeded with a 812.50kg mix of annual rye, buckwheat, alfalfa, white clover, perennial rye, grass, tall fescue, creeping red fescue, phlox, Russell lupines and Iceland poppy. Finally, the site partnered with Ethic Tree Creations in spring 2020 to plant 8,411 trees, including willow, dogwood, cedar and tamarack.



## **CBM Aggregates - A Division of Votorantim Cimentos**

Harrington 2 Pit

Township of Zorra

Harrington 2 Pit's rehabilitation initiative was launched to transform 1.5 hectares of land into agricultural use. The effort began in July 2019 with site contouring and the placement of approximately 25,000 cubic metres of overburden. After contouring the overburden, crews spread topsoil taken from the northern portion of the pit over the rehabilitated area to a thickness of 30 to 40 centimetres. Next, the area was seeded with a grass legume mix in fall 2019. In spring 2020, the rehabilitated section was planted with 30 kilograms of corn and supported with 225 kilograms of fertilizer. Looking ahead, the Harrington 2 Pit plans to conduct soil testing in winter 2021 to assess the site's nutrient requirements and take steps to improve yield.



## **CBM Aggregates - A Division of Votorantim Cimentos**

Roszell Pit

Township of Puslinch

Roszell Pit's 1.5-hectare rehabilitation project focused on restoring its Pond 2 shoreline and the silt barrier portion of the site's setback area into a naturalized space. In 2017, crews reconstructed the silt barrier by excavating the site to bedrock and filling the trench with 6,000 cubic metres of silt material. The area was then left to settle for a season before the excavation of Pond 2's western and southern limits began in 2019. In the spring of 2020, Pond 2's western shoreline was contoured and seeded with a 90kg grass legume mix. Approximately 15,000 cubic metres of material was moved to complete the final shaping. Native conifers were then planted at a density of 2,000 stems per hectare (1,000 trees), and portions of the shoreline areas were live staked with native willow cuttings. At last report, the new rehabilitated trees were thriving.



## **Walker Aggregates Inc.**

Meaford Quarry

Municipality of Meaford

The goal of Meaford Quarry's rehabilitation is to convert the land into a wetland complex at the request of the property owner. This year, crews completed 5.75 hectares along portions of the site's north and south faces, as well as the quarry floor. Both faces were sloped to grades between 3:1 and 4:1 and covered with 175,000 cubic metres of overburden and 5,700 cubic metres of topsoil. Parts of the north and south faces were left sheer to promote biodiversity at the site (e.g., bird nesting) and create a more aesthetically pleasing final look. Rehabilitation efforts at Meaford Quarry began a decade ago and are expected to wrap up in approximately five years.



# PROPERTY ENHANCEMENT

The Property Enhancement Award recognizes operational best practices at a site's entrance, approach and perimeter screening, office and scale house areas, employee areas, plant appearance, environmental controls, truck and mobile equipment, and communicative signage. Sites that initially meet the minimum requirements in each of the aforementioned sections are awarded a plaque. Site operators are then provided with an opportunity to win a "gold" bar for each section by meeting the comprehensive list of criteria for each. There are a total of seven "gold" bars that can be achieved.



Cambridge Pit

## Lafarge Canada Inc.

A Member of LafargeHolcim  
Cambridge Pit  
Township of North Dumfries

Gold Bar:

- Entrance, Approach & Perimeter Screening

## Miller Group

Patterson Quarry  
Township of Stephenson

Gold Bar:

- Environmental Controls



Patterson Quarry

## Miller Paving Limited

Carden Quarry  
Township of Carden

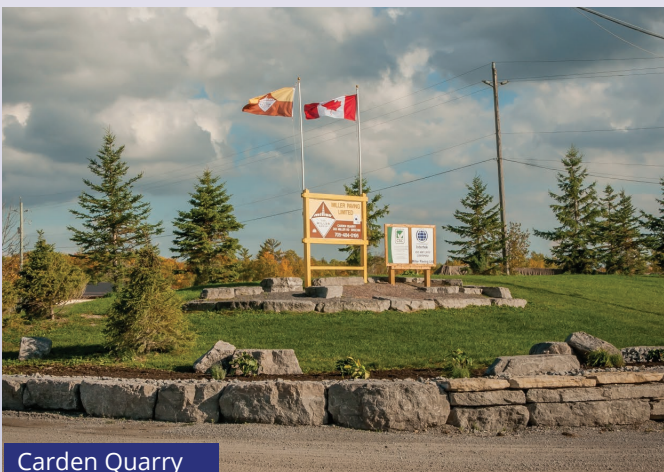
Gold Bar:

- Plant Appearance

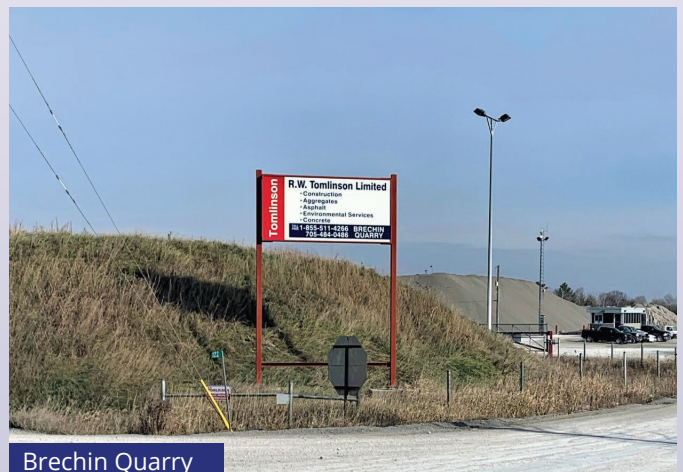
## R.W. Tomlinson Limited

Brechin Quarry  
Township of Carden

Plaque



Carden Quarry



Brechin Quarry



# STUDENT AWARDS

The Student Design Competition recognizes the most innovative and impressive designs for the rehabilitation of a former pit or quarry. This year, students were challenged to create site plans for CBM Aggregates' Codrington Pit located in the Municipality of Brighton, Ontario.

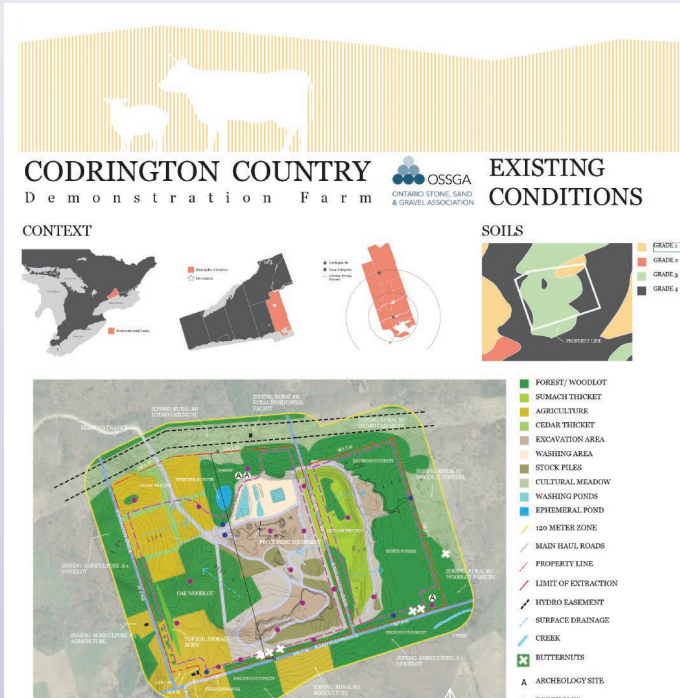
## Carbon Sink Conservation

1st Place (\$3,000)

School: University of Guelph  
Team: Claire Martin, Holly MacAlpine, Rachael Dickie

This top entry from the University of Guelph illustrates how various initiatives can reverse the CBM Codrington Pit's onsite and offsite carbon emissions. The plan calls for establishing large-scale carbon sink ecosystems over the four rehabilitation phases. The tallgrass prairies, shallow marshlands and meadows will help to increase soil carbon storage and create rich, fertile soils. The project spans 22 years, during which time the once-extracted gravel pit would be transformed into a 259-acre carbon sink. It would absorb over 2,000 metric tons of carbon dioxide in a 10-year period alone.

Beyond "reversing the footprint," the plan maps out a strategy for enhancing habitat diversity by developing distinct eco sites and restoring the Oak Woodland to expand habitats for native flora and fauna. It will attract visitors with outdoor activities like hiking, birdwatching, picnics, cross-country skiing and snowshoeing. It will also house a learning centre, trail system and archaeological site, making it a true environmental educational destination. To see its vision through, the team would consult with nearby Indigenous communities throughout the transformation.



## Codrington County

2nd Place (\$2,250)

School: University of Guelph  
Team: Charissa Teal, Marcus Leo, Nicole Moore

What if CBM's Codrington Pit was transformed into an "experimental farming operation" and educational hotspot? Codrington County sees the site's natural features utilized to develop prime agricultural soils, host livestock throughout the year, and incorporate amenities that invite the public to learn more about sustainable, viable agriculture. Additionally, the submission suggests transferring ownership of the land to the Ontario Agricultural College, which would apply its skills and expertise to operating the demonstration farm.

Highlights include developing grazing areas with a grass species mix that supports pollinators and wildlife species, installing public gathering structures, adding a homestead for extended onsite work, and creating and enhancing natural corridors throughout the area. "By establishing this experimental farming operation, it is hoped that a greater conversation will begin regarding the evolution of sustainable and efficient land use management," the team explains.



## Moundstale

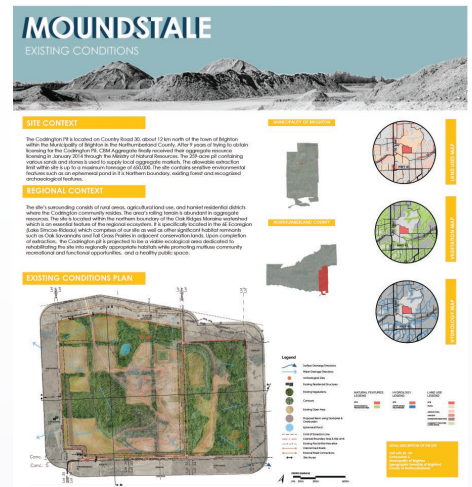
3rd Place (\$1,800)

School: University of Guelph

Team: Ahmad Abdelhamid, Raafat Hachichou, Adrielle Guigayoma

The Moundstale plan envisions a site where topographical impacts of gravel extraction act as a foundation for creating a unique, engaging and educational natural environment. Man-made mounds throughout the site would be used to showcase bird-watching stations, sculptures and gathering places for site visitors, while the rest of the land would be segregated into natural areas.

The blueprint includes eco sites and habitats throughout the pit, as well as an ephemeral pond. There would be a bird watching tower, amphitheatre, trail system and other public amenities to encourage visitation and raise awareness for the rehabilitated site and its new, natural inhabitants. These features would "provide a design experience and a learning journey for visitors about the natural and cultural heritage and a sense of place for the local community," the team states.



## Aviary Commons

Honourable Mention (\$1,200)

School: University of Guelph

Team: Wayne Flapper, Shanze Yoell, Emerson Blue

Aviary Commons earns a place among this year's winners for its plan to turn CBM's Codrington Pit into a wildlife rehabilitation centre and conservation destination. It would become a safe home for upwards of 54 avian species, incorporating an organic meadow marsh, lush woodlands, and other green spaces for recreational activities. An Aviary Commons Wildlife Rehabilitation Centre, run by the Lower Trent Conservation Authority, would house its avian patients. "The steep pit walls that are left exposed will not only serve as prime Cliff Swallow habitat, but also create immaculate views into the proposed tallgrass prairie, Maple-Oak mixed forests, and meadow marsh and boardwalk," states the team.

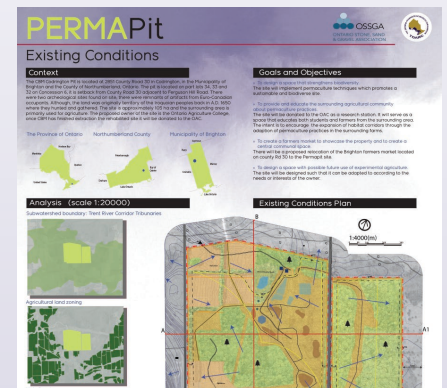
## PermaPit

Honourable Mention (\$1,200)

School: University of Guelph

Team: Sukhman Sanghera, Emilie Girard, Victoria Cross

The PermaPit entry earns recognition for its comprehensive plan to create an "innovative and sustainable agricultural site" through permaculture design. It suggests taking advantage of Codrington Pit's topography to create transitional areas that mix various ecosystems to promote regenerative farming. "A biodiverse strategy to farming is possible and should inspire farmers from the region to make changes to their own properties," the team states. "It will influence the expansion and connection of habitat corridors to the surrounding conservation area." Visitors to the PermaPit will be encouraged to visit the farm and conservation area, enjoy a farmers market and learn about sustainable farming up close.



## Spirit Stone Trails

Honourable Mention (\$1,200)

School: University of Guelph

Team: Kaitlyn Hartshorn, Tamia Noel, Julianna Nyhof Young

The intent behind Spirit Stone Trails is to restore the Codrington Pit's land to its natural state and create a site appealing to all five senses. It would include a seasonal pond, lush forests and bird habitats, as well as interactive features like the Labyrinth, Zen Zone Garden, Rock Garden and an amphitheatre. The project would also acknowledge the indigenous land it sits on by including cedar forest patches along the site's edges and by focusing the design on strengthening its ecosystem while "deepening the soul." "This is a site that recognizes the history of the land and history of its people," the submission notes. "[It] connects people spiritually and to nature."





ONTARIO STONE, SAND  
& GRAVEL ASSOCIATION

OSSGA's Industry Advancement Awards Program offers member aggregate producers province-wide recognition for a wide range of activities that encompass community relations, progressive rehabilitation, and property enhancement.

For more information, including submission requirements, visit: [www.ossga.com/awards](http://www.ossga.com/awards).

