

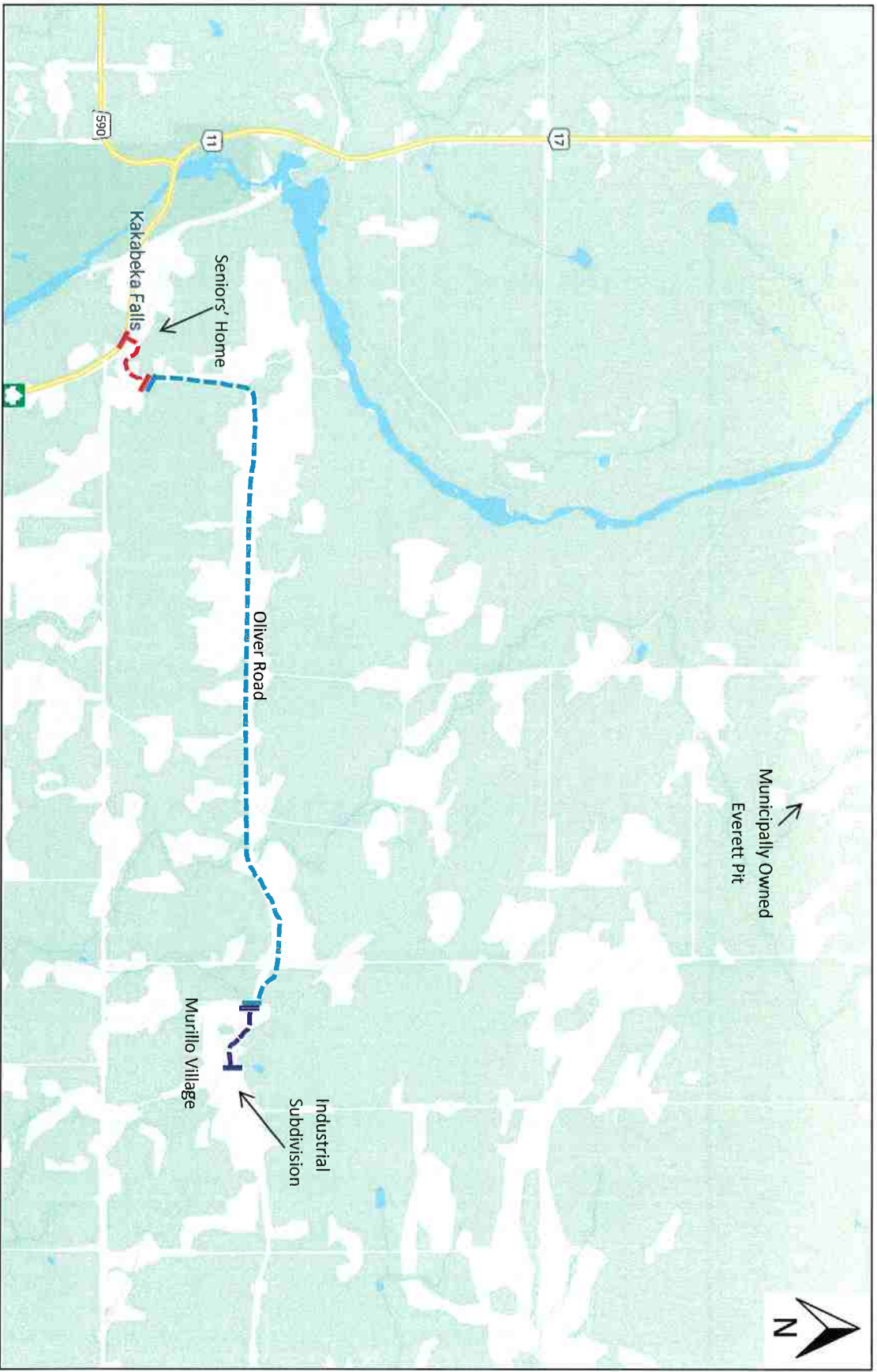
the **3rd** Annual
Municipal Paving **AWARD**



AWARD
Annual
Paving



Municipality of Oliver Paipouge



Section 1

Section 2

Section 3

History of Oliver Paipoonge

Oliver - Oliver is a rural township with an area of 164 square kilometres and a population of 2691. There are approximately 880 dwellings located within the township and two hamlet areas of Kakabeka (approx. 180 dwellings) and Murillo (approx. 150 dwellings). The township is named for Adam Oliver who turned the first sod in the Town Plot, Fort William, for the construction of the Canadian Pacific Railway. The major physical feature in Oliver is the falls at Kakabeka. Oliver Township was incorporated on January 1, 1879. Oliver was first settled by farmers and the township has always sustained a farm population. Farming along with tourism in Kakabeka are still the major economic activities in Oliver.

Paipoonge - Paipoonge Township is located on the south side of the Municipality and encompasses an area of 186 square kilometres and a population of 3171. There are approximately 1185 dwellings with about 30% of those located in Rosslyn Village (approx. 355 dwellings). The village first started experiencing growth in settlement in the 1880's during a boom in silver in the Rabbit Mountain area. A ferry operated at Lot 13 facilitating mining and resident traffic across the Kaministiquia River. This also led to the development of the railway, original brick manufacturing plant and the first post office for the Township. The Township of Paipoonge was incorporated in 1904. Paipoonge in Ojibwe means "winter".

The Townships of Oliver and Paipoonge amalgamated on January 1, 1998.

A Brief History

During the spring of 2017, a RFQ was issued for Engineering Design and Analysis for the proposed replacement of Oliver Road between Murillo and Kakabeka Falls in the Municipality of Oliver Paipoonge. This proposal was considered due to three (3) major factors.

- 1.) The roadway was starting to show considerable deterioration of its driving surface due to nearing its 20th anniversary of construction.
- 2.) The Municipality was intent on increasing the load rating of the roadway to facilitate and enhance Industrial and Commercial Access year-round to a Municipally owned Subdivision.
- 3.) Pressures from other roadway users to enhance cycling and pedestrian movements.

The RFQ was issued to Stantec (previously True Grit Engineering). The engineering review determined three (3) options that would facilitate the desired objectives.

Option 1) Mill the entire roadway 20mm depth, pad as required, drainage concerns to be addressed, widen the road platform and then overlay the entire width with 50mm S/Pave 12.5mm – life cycle – 13-15 years.

Option 2) Pulverize existing road platform, expand granular base, address drainage concerns, widen the road platform and then perform 1-40mm lift, 19mm binder, and 1-50mm 12.5 surface course including wider shoulders – life cycle 20-22 years.

Option 3) Full Depth Expand the existing roadway, widen the existing shoulder, address drainage concerns, and overlay the entire platform with 55mm S/P 12.5mm – life cycle – 18-20 years.

The engineers estimate showed a \$600,000 potential savings between option 3 and option 2. Option 1 was ruled out due to upcoming pressures being shown thru the Asset Management Plan that the Municipality would not be fiscally able to perform a Preventative Rehabilitative Effort in the years 2028 to 2030.

It was the Municipality's position that Option 3 created the "best bang for the buck" as it was endeavoring to finance this project through their own efforts. As well, administration recommended further developments along the corridor including a pedestrian railway crossing, additional illumination, updated guiderail installations, and additional walkways constructed in the hamlet of Murillo.

Based on Council's direction, a call for tenders was issued in the summer of 2018.

Of the three (3) proponents, Pioneer Construction was the lowest bidder and was awarded the project in July of 2018. The construction schedule was determined by several factors. The project was broken up over two (2) construction seasons. Phase 1 involved drainage replacements at 11 locations, curb and gutter replacement, illumination and storm sewer works in Murillo during the late summer of 2018. This area was chosen to be done at that time as during spring/summer, the abutting recreational facilities experience increased usage with baseball and soccer 5 days a week.

Concrete work was performed by NST Contractors from Thunder Bay with a “rollover” curb installed on both sides of the hamlet area. This style was chosen so as to facilitate further anticipated growth in the area without limiting lot developments with “pre-made” driveway curb drops.

Drainage works, full depth asphalt removal, and aggregate haul and placement were performed by Chaschuk Enterprises. Municipally owned aggregate was supplied from the Everett Pit which was approximately 8km from the center of the project. Prior to hot mix placement, fine grading was performed by Main Excavation & Grading. Pioneer then placed 2-40mm lifts of 12.5mm S/Pave over a period of two (2) days with tack coat being applied between the lifts by Bruno’s Contracting Ltd. Additional roadway illumination was performed by Wildon Wiring thru consultation with Ontario Hydro and the Municipality.

The Project

The project consisted of reconstruction of a 9.8km stretch of Oliver Road. The rehabilitation of the project was performed through three (3) distinct techniques in specific areas. Area 1 was from a railway crossing in the hamlet of Murillo to a point of distance approximately 850m, which incorporated the developed area. The strategy involved full depth asphalt removal, removal and replacement of curb and gutter, upgrade of catch basins and manholes, add additional granular base for x-fall correction and pave 2 – 40 mm lifts of 12.5mm S/Pave. This work was performed in the summer/fall of 2018. Area 2 extended from the end point of Area 1 which proceeded to a point approximately 450m from the village of Kakabeka Falls for a total distance of 8.7km. The pavement strategy in this area involved FD - EAM of 110mm depth with a 55mm surface course 12.5mm being placed to a wider roadway platform to add the required width on both sides for pedestrian movements. Roto Mill Services Inc. performed the EAM during the month of June 2019 with topcoat paving being performed in July of 2019. Area 3 was reconstructed with pulverization of the existing roadway, granular placement for x-fall correction, curve realignment and vertical grade control. A 40mm binder and a 50mm surface course of 12.5mm S/P were placed with tack coat being applied between the lifts. In this area, additional signage and guide rail replacements were performed to facilitate a new posted speed limit of 60km/h. This work was required to allow new safety measures for pedestrian movements from a nearby retirement home into the village of Kakabeka Falls. Signage and guide rail installation was performed by Wilco Superior Contractors. As well, upgrades to CN Railway crossings were performed to ensure safe passage of pedestrians with the inclusion of a new walkway and railway crossing.

Purpose

The purpose of the award is to promote and recognize the successful collaboration between municipalities and HMA producers for excellence and innovation in paving projects in Ontario.

Frequency

This will be an annual award. The finalists will be announced at the OAPC Fall Seminar to be held on December 5, 2019 in the GTA. The Municipal Paving Project of the Year Award will be announced at the OGRA Conference on February 25, 2020.

Instructions

Please complete all areas of the form. If your paving project qualifies, send the forms to the address below. If judged as the winner you will receive 2 handsome trophies: one for the Region/Municipality, one for the Contractor. The finalists will receive plaques as well.

1. Deadline and entry information

Completed forms and supporting documentation must be postmarked no later than December 20, 2019.

Ontario Good Roads Association
1525 Cornwall Road, Unit #22
Oakville, ON | L6J 0B2

Submissions received after this date will not be accepted.

2. Eligibility

The application should be a collaborative effort between the Region/Municipality and Contractor and signed off accordingly. The hot mix asphalt paving project should have been completed between January 1, 2019 and October 31, 2019. There is no minimum contract value and both capital and maintenance projects are eligible.

3. Judging Criteria

- Conformance to specifications based on testing
- Visual appearance
- Workmanship
- Innovation
- Other considerations (work window, night paving, traffic, interaction with public, etc.)

4. Cost

There is no cost for the application. It is an excellent opportunity to showcase your project to the rest of Ontario.

5. Judging Panel

The submission will be reviewed and a finalist decided by a minimum of 5 panelists who are members of the OAPC/OGRA Municipal HMA Liaison Committee.

PROJECT SUBMISSION:

Municipality: **Municipality of Oliver Paipoonge**

Contact Person: **Chris Bowles**

Contact Phone Number: **(807) 935 2613**

Email Address: **Chris.Bowles@oliverpaipoonge.on.ca**

Contractor: **Pioneer Construction**

Contact Person: **Malcolm Croskery**

Contact Phone Number: **(705) 507-4476**

Email Address: **mcroskery@pioneerconstruction.ca**

PROJECT SCOPE / SUMMARY:

A 9.8 km Section of Oliver Road located in the Township of Oliver Paipoonge between the Hamlet of Murillo and the Village of Kakabeka Falls. The project was divided into three (3) specific sections. Section 1 was the Hamlet of Murillo, Section 2 was the Rural Roadway between the two villages and Section 3 was the area adjacent to the Village of Kakabeka Falls. Section 2 was initially pre-shouldered prior to the Full Depth Recycling with Expanded Asphalt (FD-EA) process. The FD-EA process was completed in one step process. The recycling train processed 110mm of 49% existing asphalt and 51% of the underlying granular. The in situ material was 100% recycled into a homogeneous expanded asphalt base layer. Completing this project in one step process helped reduce public and traffic disruption as the road surface was never at a granular state. Oliver Road went from an existing asphalt platform to an expanded asphalt layer and then surfaced with hot mix asphalt.

A full project scope outline is attached.

Total project value \$4,270,000.

Key personnel

Contractor

Pioneer Construction

Construction Manager - Fred Hakala

Project Supervisor - Matt Olinski

QC Lab Manager - Tyler McCoy

Contract Administration

Stantec Consulting

Project Manager - Kevin Briggs

Site Administrator - Steven Finley

Site Supervisor - Mark Edgar

Municipality of Oliver Paipoonge

Director of Operations - Chris Bowles

QA Testing

Thunder Bay Testing & Engineering

Lab Manager - Forch Valela

Sub-Contractors

Roto-Mill Construction Inc.

General Manager - Dave Snow

Project Superintendent - Jamie Payne

Project Administrator/QC Coordinator - Kevin Snider

I HEREBY CERTIFY THAT THE ABOVE INFORMATION PROVIDED IS ACCURATE AND TRUE.

Municipality:

Print Name: Chris Bowles

Signature:

Contractor:

Print Name: MALCOLM CROSKERY

Signature:

Additional Comments:

Notes

1. QC testing of hot mix asphalt performed by Pioneer Construction
2. QA testing of hot mix asphalt performed by Thunder Bay Testing + Engineering.
3. QA testing of FDAM performed by Thunder Bay Testing + Engineering.
4. QA/QC compaction testing of hot mix asphalt performed by Pioneer Construction on-site through the use of a thin lift nuclear gauge.
5. QC testing of FDAM performed by Roto-Mill Inc.
6. Major Upgrade to Heli Pad for Emergency Services - ORNGE - Section 3.

PROJECT DETAILS:

Locations: **Oliver Road - Hill Street to the Town of Murillo**

Duration of Project: **6 months spread over two (2) Construction Seasons (2018-2019)**

Hot Mix Asphalt Volume(s) and Mix Type(s):

**+/- 14,500 tonnes of Super Pave 12.5mm
66,340 m2 of Full Depth Expanded Asphalt Mixture**

Why does this project fulfill/meets the purpose of this Award?

Innovation-using a green option of recycling the existing road way 110mm full depth recycling with expanded asphalt (FD-EA). This recycled 100% of the existing road section all in one process. This replaced the traditional pulverize and pave process. As well completing this project in one step process helped reduce public and traffic disruption as the road surface was never at a granular state. It went from a existing asphalt platform to an expanded asphalt layer and than surfaced with hot mix asphalt. All specification for the FD-EA product met contract specifications.

Life Style Enhancements - Sidewalks and Wider Shoulders for pedestrian movements

Economic Development - Full Loading of roadway, year round, which gives the ability of the municipality to attract new business' to adjacent municipally owned industrial/commercial subdivision

Health and Safety - Pedestrian railway crossings improvements, Guide Rail upgrades and Illumination of walkways

Asset Management - this project scope allows the municipality time and funding to deal with other pending infrastructure needs during the life cycle costing that this project presents.

All Specification parameters were met on all of the Tendered and Constructed items

Efficiency - The new smooth surface allows ease of plowing with an under-body plow allowing a fully cleared roadway after a snow event. As well, salt usage will be reduced as the brine will not accumulate or disappear in the previous potholes or cracks that were evident. T

Supporting Documentation - *Mandatory*

1. **Photographs** – Photos are to accompany this application on a USB drive in jpeg format in high resolution. One must be a "long shot" showing a main feature of the project and its surroundings.
2. **Test Results** – A summary of the HMA test results showing compliance to project specifications.

Supporting Documentation - *Optional*

1. **Video** - A maximum 3-minute video on standard USB drive showing all phases/details of the paving project.