



Mink Lake Road Re-Construction



(Engineering Consultant)

Mink Lake Road Re-Construction

Why are we presenting this to you?

Parkland County has decided to re-construct Mink Lake Road (Township Road 524) this upcoming 2023 construction season. This virtual town hall is being used to give residents in the area information on what will be going on during the reconstruction on Mink Lake Road.

Mink Lake Road is currently a two lane 6.9 meter wide paved road that is 3.2 kilometers long and is located between Highway 770 and Range Road 25. The reconstruction of this roadway will provide a safer and better performing roadway with a new asphalt surface.

A Functional planning study was completed by Parkland County on a nearby roadway to study the needs of the area in the future. This was completed on a further East Section of TWP 524 This functional planning study is available at: <https://www.parklandcounty.com/en/live-and-play/township-road-524-functional-planning-study.aspx>



Photo: A Location Plan for Mink Lake Road

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Why is this roadway being reconstructed ?

Mink Lake road is being reconstructed because it currently is in poor condition and needs improvement. The main issues noted on Mink Lake Road are as follows:

- Poor asphalt surface condition
- Drainage issues causing pooling and flooding
- The current vertical profile (hills & valleys) are too steep along the roadway resulting in poor sightlines.
- The cost of maintenance for Parkland County is becoming high due to the poor condition of the roadway.
- This was also considered an opportunity to improve Star Lake's access by reducing the grade from Range Road 25.

This re-construction is intended to rehabilitate the surface condition of Mink Lake Road while also increasing safety and performance of the roadway.

This reconstruction is expected to start in the spring of 2023 with 90 % of works being completed before fall of 2023. Additional paving activities will be completed in 2024 and any deficiencies or warranty issues will be rectified by 2025.



Photo: A flooded section of ditch along Mink Lake Road

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Testing and Studies for Mink Lake Road

To provide an updated design for Mink Lake Road. WSP, the consulting engineering firm on this project, underwent a detailed review of the roadway's current surface condition, traffic volumes, geometry of the road, underlying soil conditions and drainage patterns.

WSP undertook the following steps to gather information on Mink Lake Road:

- A surface survey was completed to find where water was draining. Mapping was created of drainage patterns and areas where water was not draining correctly was noted. This was used in design to determine where drainage needs improvement.
- Soil suitability drilling was undertaken to take samples of the underlying soil underneath the roadway. These samples were then analysed to determine the characteristics of the soil under the roadway. This was used as information to design the roads structure.
- Analysis of the traffic volumes were used to select a suitable roadway width for current and future traffic volumes.



Photo: Drilling subcontractor conducting soil suitability drilling

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What is expected to change on Mink Lake Road?

The following general steps will be undertaken in the re-construction of Mink Lake Road.

1. Perform any clearing of trees necessary for road work to occur.
2. Strip the ditches of the roadway free of topsoil and stockpile inside the right-of-way for topsoil reuse.
3. Remove existing road surface (asphalt).
4. Regrade the roadway, condition and compact the soil.
5. Grade ditches and install culverts as needed to improve drainage patterns.
6. Adjust accesses or intersections as needed.
7. Resurface the roadway with gravel base and new asphalt.
8. Resurface approaches and intersections.
9. Landscaping of any disturbed areas to allow the areas to be reseeded and vegetation to regrow.

With the new construction some changes will be required or observed. A short list of expected changes is shown below:

1. The roadway will be widened to a paved width of 8.6 meters wide from the current paved width of 6.9 meters.
2. Any trees that require removal in the County Right-of-Way will be removed. Any trees that are required to be removed on private land will only be done after an agreement is made between the landowner and the County. With all tree clearing activities precautions will be put in place to ensure no birds are nesting or near the area prior to tree removal.
3. Some of the power poles may need to be relocated due to the wider roadway. This will be completed with minimal interruption if any to power for residents.
4. After construction is complete the number of cyclists that utilize this roadway is expected to rise. Please ensure caution when sharing the roadway with cyclists to ensure their safety.

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Typical Grading Cross Section

Shown below is the typical cross section for Mink Lake Road and Range Road 25. This cross section features the 8.6 meters wide asphalt road with typical profiles for ditches to be created along Mink Lake Road. All dimensions are in meters.

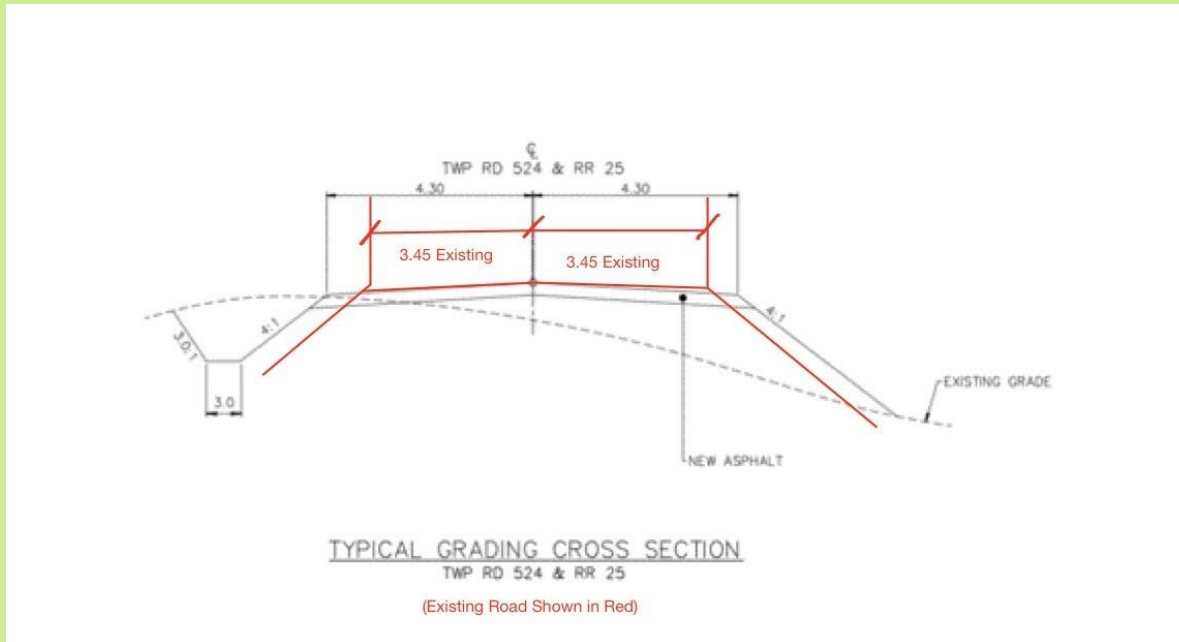


Photo: Typical Grading Cross Section

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Geometric Realignment

The geometric analysis of the hills and valleys of Mink Lake Road did not meet the design standards for sightlines and speed.

Therefore, Parkland County decided to take this opportunity to lower some of the road grades in select sections to conform to the modern design requirements and improve overall safety for road users.

These grade adjustments will be accomplished by lowering hills and raising valleys as required.

This will create a smoother vertical profile for Mink Lake Road which will be safer due to its flatter hills and longer sightlines.

The following features are important to note:

- The speed limit on the roadway will not be raised, the roadway will remain posted at 80 km/hr.
- There are no new passing opportunities planned for this roadway due to the number of approaches present on this roadway.



Photo: Steep Section of Mink Lake Road at Range Road 25 Intersection looking East

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Improvements on Mink Lake Road

When Mink Lake Road is re-constructed landowners can expect some improvements along the roadway.

A short list of the planned improvements is shown below with brief descriptions of what the improvements will entail:

- Range Road 24 intersection and subdivisions entrances will be reconstructed and paved.
- Drainage will be improved on Mink Lake Road. Areas with poor drainage will be rectified and existing culverts will be replaced if needed.
- Residential approaches and field entrances will be resurfaced with new Asphalt when Mink Lake Road is repaved.
- Star Lake Access will be improved to have a lower slope going down to the lake. Please see slide #9 for more details.



Photo: Existing Intersection between Mink Lake Road and Range Road 24.

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Star Lake Access Improvement

One specific improvement that is important to the re-construction of Mink Lake Road is the improvement of the Star Lake Access Road.

The Star Lake Access road will have its grade reduced by lowering the intersection of Mink Lake Road, Range Road 25 and Star Lake Access Road. This will increase safety in this intersection and make the intersection more user friendly for drivers.

With the changes to Star Lake Access improvement a brief duration closure of the access will be required for the construction to take place. This closure will be communicated to landowners with ample notice and the closure will be as short as possible.

Some trees will need to be removed from this intersection to accommodate the lower intersection.



Photo: Existing Star Lake Access

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Traffic Accommodation

Traffic accommodation will be controlled by the selected contractor and will be overseen by WSP.

WSP will ensure that the contractor is effectively using construction signs, flaggers and is controlling work so that interruption to traffic is as minimal as possible.

Currently no detours are expected on this project. One way traffic should be able to be always maintained however, some interruptions may be experienced dependant on contractor activities. No access will be closed to either subdivision or Mink Lake Campground throughout the construction.

The roadway will be kept in serviceable enough condition that all vehicles will be able to use the roadway. This will include all emergency services, travel trailers, smaller cars and most vehicles.

Some residential and field accesses will need to be temporarily closed to improve the accesses. Landowners will be given notice if their accesses are going to be closed, and work will be scheduled in such a way that access is restored as soon as possible.

Please see Storyboard #12 for more information on project contacts if there are any traffic related issues on site during construction.



Photo: Construction Ahead Sign

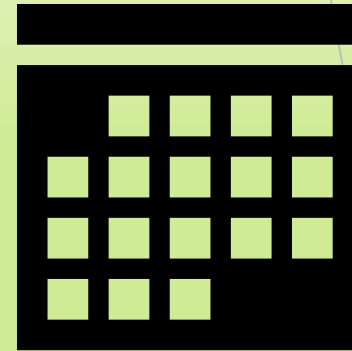
Photo Taken from: <https://strathmorenow.com/articles/alberta-government-makes-changes-to-hwy-construction-zones>

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Preliminary Construction Schedule

Construction schedule will ultimately be decided by the contractor on how they want to stage their work during the periods of work in this project. Schedule will be dependant on construction progress, contractor scheduling, weather and any environmental factors.

Shown below is the preliminary schedule for the re-construction of Mink Lake Road. Please note these dates are only forecasted at this point and may change.



Feb 2023:
Contractor is selected by Parkland County

May 2023:
Road Work Begins

October 2023:
90 % of Project Scope is completed

June 2025:
Any Warranty Repairs are completed

March 2023:
Tree Clearing activities begin

September 2023:
First Layer of Asphalt is Paved

June 2024:
Second Layer of Asphalt is Paved

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Project Key Contacts:

All contact information will be available on the Parkland County Project Information Site which can be located at:
parklandcounty.com/minklake

This project site will have up to date information, any notices, contact information and is a valuable tool for landowners to find information on the project as construction progresses.

If any issues are noted during construction landowners are asked to follow the order below to ask for assistance with any issues.

The Contractor will control on site activities and will therefore be able to provide the most immediate response to any concerns.

Contact information for Contractors will be provided before construction with construction notifications delivered to all landowners on the project.



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Frequently Asked Questions.

Question	Answer
Will there be any street lights or signal installed at Highway 770?	Any street light or signals will not be part of the scope the Mink Lake Road's Re-Construction.
Will my municipal taxes go up from this work?	No, your taxes will not be affected by this project. The funding is being secured by a grant to Parkland County.
I have a special event planned for the spring of 2023 is there any way I can make sure construction won't hinder my plans?	Please contact Parkland County with the details as soon as possible. Arrangements will be made to try and minimize any disturbances.
Will anything be happening with the Hills of Hope Sign?	Yes, the Hills of Hope will be reinstalled after construction activities are completed.
I have school aged children who take the bus to and from school. Will there be interruptions for bus routes?	No there will not be any interruption to school bus service. If you have school age children who use the bus please contact Parkland County to notify them so special attention can be made to ensure the school bus can make it to and from your home.

Any questions can be sent to: cole.fodor@wsp.com. All questions and answers will be posted on parklandcounty.com/minklake after the virtual open house has concluded.

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Thank you, Residents,

The project team would like to thank the residents who reviewed this presentation for their time and interest.

We would also like to pre-emptively thank all the residents for their time and patience on the reconstruction of Mink Lake Road. We would also like to ask for cooperation on listening to flagger instruction and construction signage during construction.

This project will be a good use of County funds, will lead to lower maintenance costs in the future and will deliver a roadway with long term improvements that will service the Mink Lake area for many years.

Special thanks would also like to be extended to any residents who are providing permission for work on private land or any individuals who are inconvenienced by construction.



Photo: A Flooded Ditch along Mink Lake Road