



2025
10-YEAR HARD-SURFACING
ROAD STRATEGY

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INTRODUCTION

Beaver County recognizes that a strong, well-maintained road network is vital for ensuring safe, efficient travel for both residents and the commuting public. Roads not only support daily life but are critical for economic development, emergency services, and the overall quality of life within the County. The 10-Year Hard-Surfacing Road Management Strategy has been developed to provide a long-term framework for maintaining, upgrading, and expanding the County's hard-surfaced road infrastructure. The goal is to ensure efficient and effective travel routes while optimizing the use of County resources.

Strategic Objectives

1. **Infrastructure Resilience:** Develop and maintain a sustainable, road network that can withstand climate variability and evolving usage patterns.
2. **Cost-Efficiency:** Implement cost-effective approaches by optimizing resource allocation, reducing reactive maintenance, and increasing preventative measures.
3. **Safety Enhancement:** Prioritize projects that address high-risk areas to reduce accidents, improve visibility, and ensure public safety.
4. **Community Accessibility:** Enhance rural and urban connectivity to facilitate ease of movement, accessibility, and economic vitality.

Community Engagement

In 2024, the County held three public engagement sessions—two in-person and one online. Road surfacing was a key topic at the in-person events, sparking valuable discussions between staff and residents. These sessions provided essential data to help shape and guide this plan.

The Role of Portland Cement and Chip Seal

One of the key components of this strategy is the use of Portland Cement for road stabilization. This cement-based product in combination with the chip seal product strengthens unpaved roads, reducing dust, erosion, and ongoing maintenance costs. Portland Cement stabilization offers a cost-effective and durable alternative to traditional asphalt, helping the County maximize its road infrastructure budget while maintaining high-quality surfaces.

Current Stabilized Road Network

To date, 70 miles of roads throughout the County have been stabilized using Portland Cement:

- **Division 1:** 15 Miles
- **Division 2:** 14 Miles
- **Division 3:** 21 Miles
- **Division 4:** 3 Miles
- **Division 5:** 17 Miles

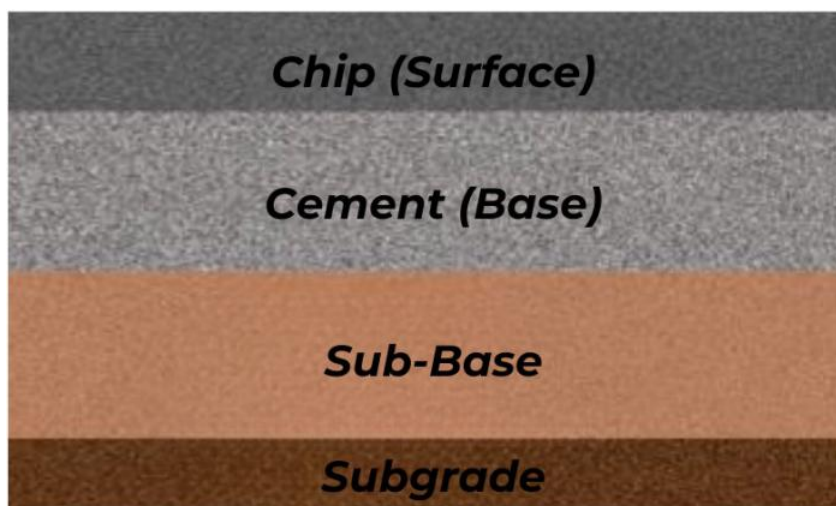
This foundation allows the County to focus on long-term road improvements, ensuring safe, reliable travel across all divisions. The 10-Year Hard-Surfacing Road Management Strategy outlines priorities for future projects, balancing immediate needs with sustainable development. It represents Beaver County's commitment to proactive planning and investment in the community's infrastructure.

ROAD RESURFACING PROCESS

The road resurfacing method is a comprehensive and precise process that ensures high-quality and durable road surfaces. The process begins with gravel being added to the existing road surface to prepare for stabilization. Portland cement is then applied to the first 500-metres (approximately) section of the road, and a reclaimer blends the cement powder, gravel, and water with the existing road surface. Next, the grader levels the surface, water is applied throughout the process, and the reclaimer completes another four passes for additional mixing. The grader and packers then shape the road surface to achieve the desired construction standard, followed by final shaping and smoothing.





Once the road base is complete for all sections of the road, the surface is prepared for the tack layer by spraying water to ensure proper moisture content. Tack oil is then applied to seal the road base surface. Fresh oil is applied directly ahead of the spreader, which lays a thin layer of chip that the packers compress into the oil.

Approximately two weeks after the first application, another layer of chip is applied to complete the project. In favourable weather conditions, approximately 1.5 kilometres of road can be resurfaced within three days.

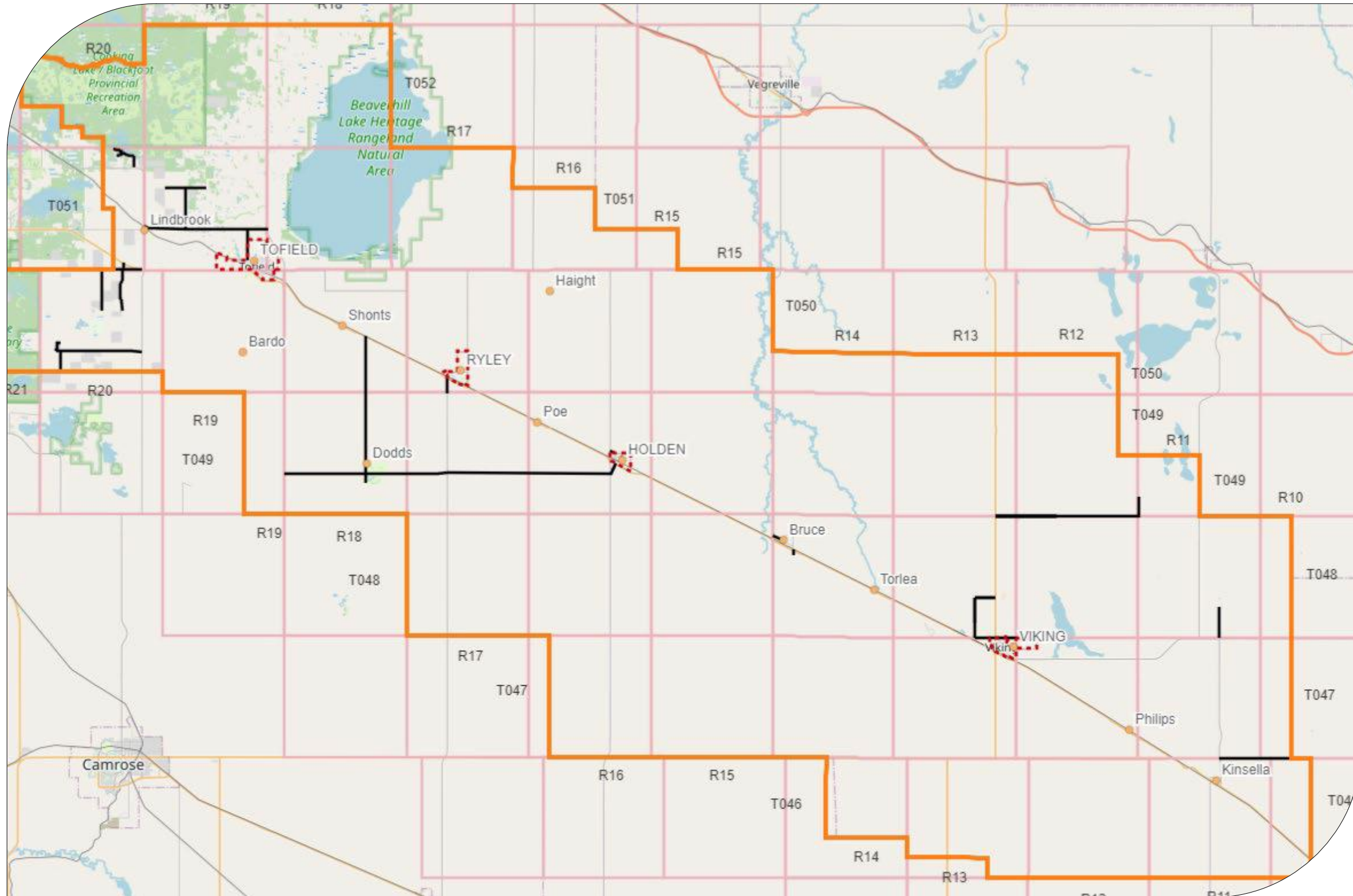


ROAD SURFACES & COSTS

There are multiple options for road surfacing, the below table presents those options along with the cost of application/construction per mile, maintenance costs, and lifespan.

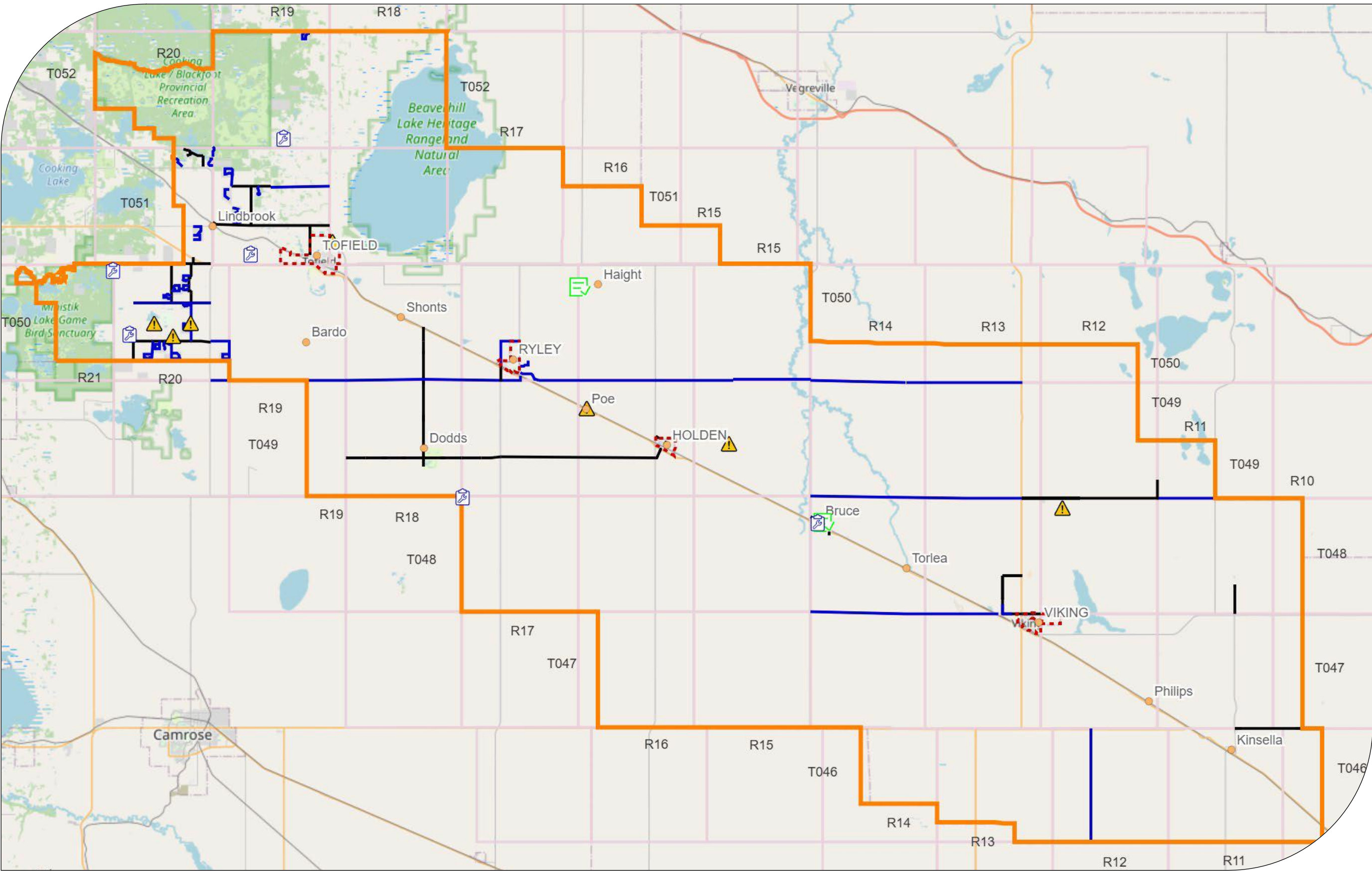
Type	Initial Cost (per mile)	Maintenance & Lifespan	Total Cost over 15 Years
 Dust Control	\$4,600 /mile	Entire application redone twice yearly	\$138,000 (15 years)
 Oil	\$160,000 /mile	Entire application redone bi-annually	\$1.2m (15 years)
 Portland Cement	\$280,000 /mile	Fogging: \$14,000 (Year 2) Re-chip: \$60,000 (Years 5-7)	\$354,000 (15 years)
NOTE: Pavement Overlay must be laid over an already stabilized base (such as Cement).			
 Pavement Overlay - does not include base stabilization	\$360,000 /mile	Crackseal: \$1,000 (Year 10) Line Painting: \$1,500 (Year 10)	\$362,500 (20 years)

CURRENT HARD-SURFACED ROAD LOCATIONS



- Islet Lake
- TWP 514 between RR 195 & 193
- RR 194 between TWP 514 & 512
- TWP 512 between HWY 630 & 834
- RR 191 between TWP 512 & Tofield
- RR 203 between TWP 510 & 504
- RR 202 between TWP 510 & 504
- TWP 510 between HWY 833 & RR 200
- Carey Ridge
- TWP 502 between Carey Ridge & HWY 833
- RR 205 between TWP 502 & Border
- TWP 492 between HWY 834 & 855
- RR 161A between HWY 833 & 14
- HWY 854 between TWP 500 & HWY 14
- RR 182 between HWY 14 & BNL
- Bruce:
 - 2nd Ave to Main Street
 - Main street between 1 & 2 Ave
 - 1 Ave between Queen St & Main St
- RR 145 between HWY 14 & TWP 484
- TWP 490 between HWY 36 & RR 120
- RR 120 between TWP 490 half a mile north
- TWP 482 between HWY 36 & RR 132
- RR 132 between TWP 482 & 480
- TWP 480 between RR 132 & 130
- RR 112 between HWY 619 to Camp Lake
- TWP 470 between HWY 870 & RR 105
- Spilstead Road

FINAL HARD-SURFACING PLAN (2035)



10-YEAR STRATEGY

The County's long-term vision for the next 10-years focuses on creating multiple hard-surfaced routes that connect one end of the County to the other. These routes aim to improve transportation efficiency, enhance safety, and support economic development for residents and businesses alike. In addition to expanding connectivity, the County is prioritizing the revitalization of existing infrastructure within Beaver County subdivisions, ensuring long-term sustainability and improved quality of life for the community.

While this overarching goal is clear, it must be balanced with other significant factors. Routine road repairs, budget limitations, labour constraints, and shifting development priorities all play a role in determining the pace and scope of progress. These considerations ensure that resources are used effectively and that immediate needs are not overlooked while striving toward long-term goals.

To provide clarity on the County's plans, a map of the proposed 10-Year Road Management Strategy is included in Appendix A, while detailed division-by-division breakdowns are available in Appendix B. This comprehensive approach allows for transparency and ensures the strategy aligns with the needs and expectations of the community.

Division Breakdown

Division	Current Miles (2025)	Future Miles (2035)
1	14	31
2	16	50
3	21	38
4	3	30
5	17	43

Why These Roads

Due to the shape of the County, in conjunction with the locations of provincial highways and major routes in neighbouring municipalities, these commuter routes prove to be the most cost effective and efficient. Feedback received during the 2024 Public Engagement, also supported these planned routes.

Budget Allocation

Most road construction projects are funded primarily through federal grants and the Claystone Waste Dividend, and this funding approach will continue moving forward.

Risk Management

Key risks include budget constraints, adverse weather conditions, and material shortages. A proactive risk management plan will include flexible project timelines, emergency funding provisions, and supplier diversification.

Expected Outcomes and Impact

- Enhanced road durability, reducing annual maintenance needs.
- Improved public safety through better road quality and proactive hazard management.
- Increased community satisfaction and economic opportunities from a well-maintained road network.

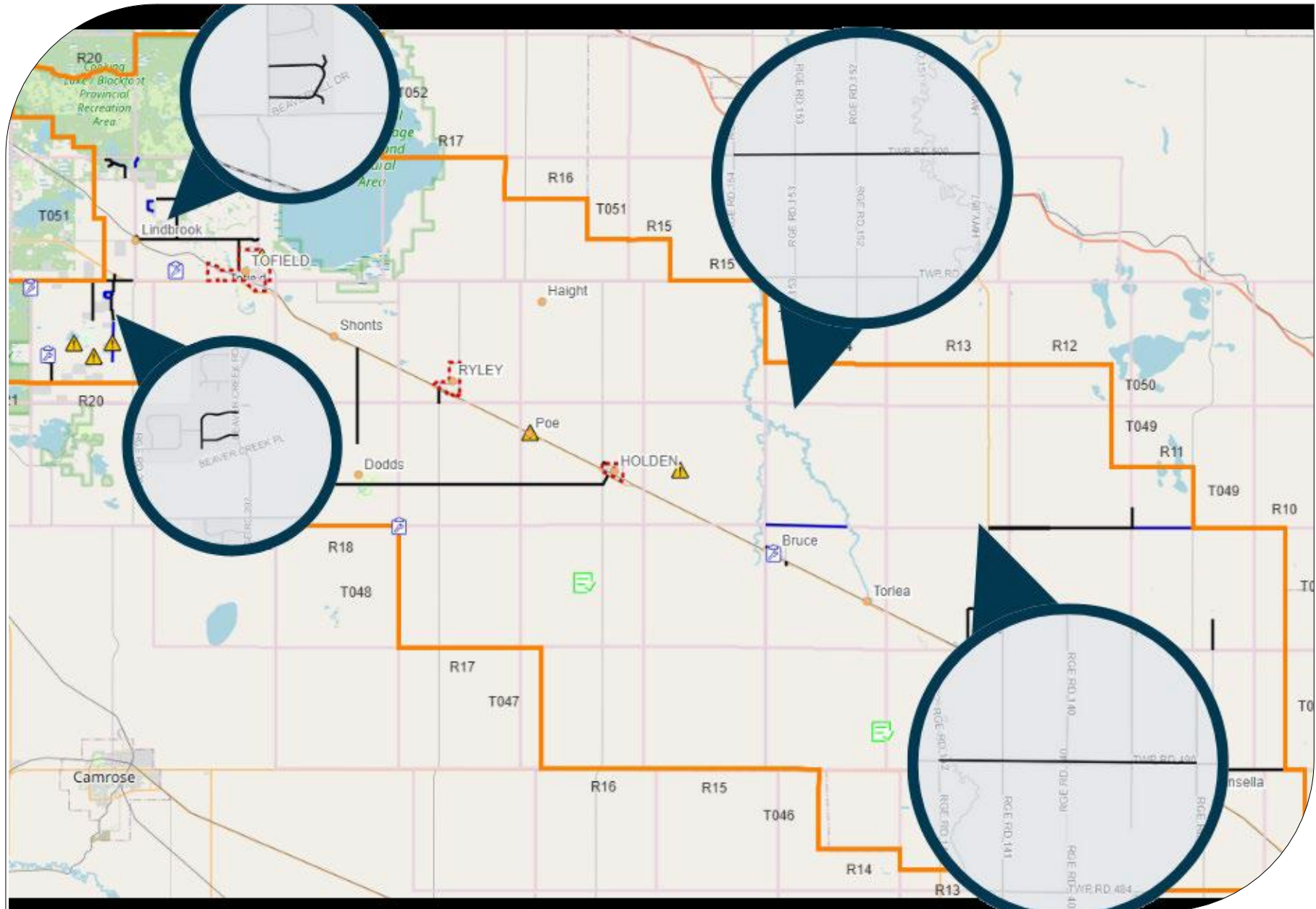
2025 Plan - 15 miles total



- ## 2025 Plan

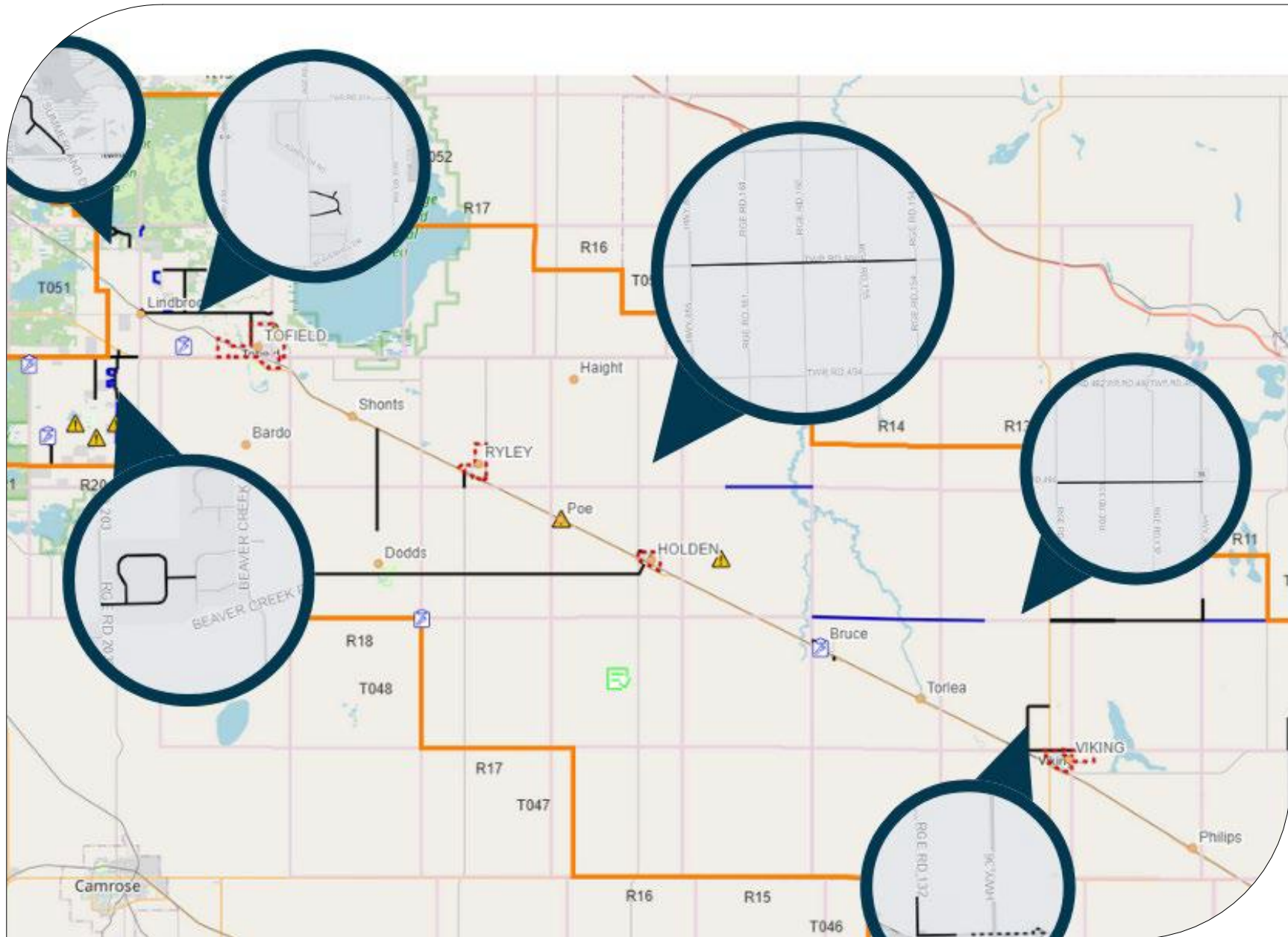
- RR 200 from HWY 630 to entrance to campsite and Hoopers drive
- TWP 490 between HWY 857 & RR 142
- TWP 490 between RR 120 & HWY 870

2026 Plan - 10 miles total



- Lindbrook Estates
- Beaver Creek Estates South
- TWP 490 between RR 142 & 134
- TWP 500 between RR 154 & HWY 857

2027 Plan - 10 miles total

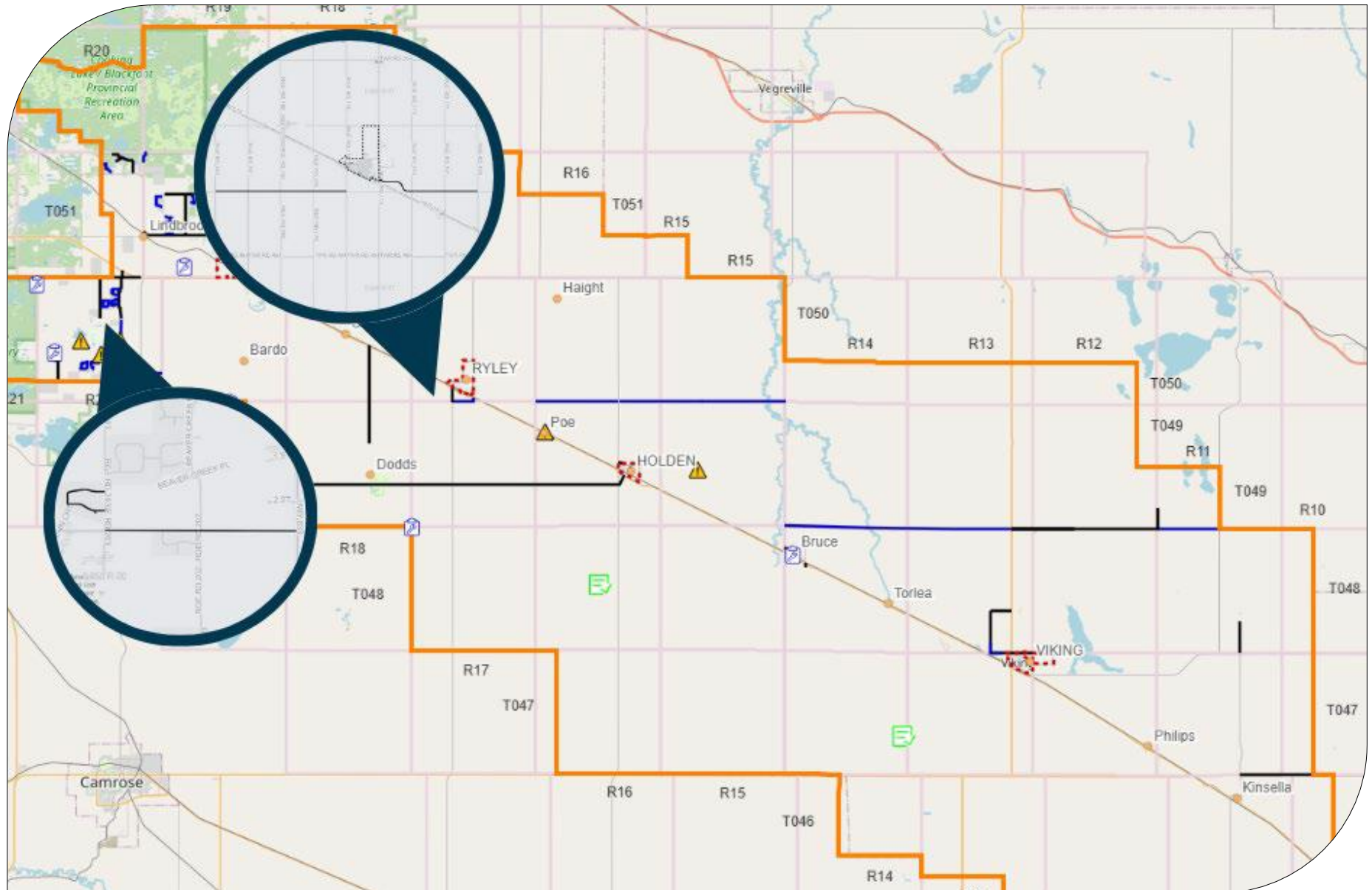


- Sherwood Forest
- Beaver Creek Estates West
- TWP 490 between HWY 36 & RR 134
- RR 132 north of TWP 480
- Forest Glen
- TWP 500 between HWY 855 & RR 154
- TWP 480 between HWY 36 & RR 132
- for 1 mile

The map displays the Ryle area with a proposed bypass route highlighted in orange. The route starts near Lindbrook, goes south through Bardo, Shonts, Dodds, and Ryle, then east through Holden, Bruce, Torlea, Viking, Phillips, and Kinsella. The existing route is shown in black. The map includes various road labels (R18, R15, R14, R13, R12, R11, R10, R19, R17, R16, R15) and town names. Three circular callouts provide detailed views of specific road intersections: Lindbrook, Ryle, and Viking.

- 10-YEAR HARD-SURFACING ROAD STRATEGY | March 2025

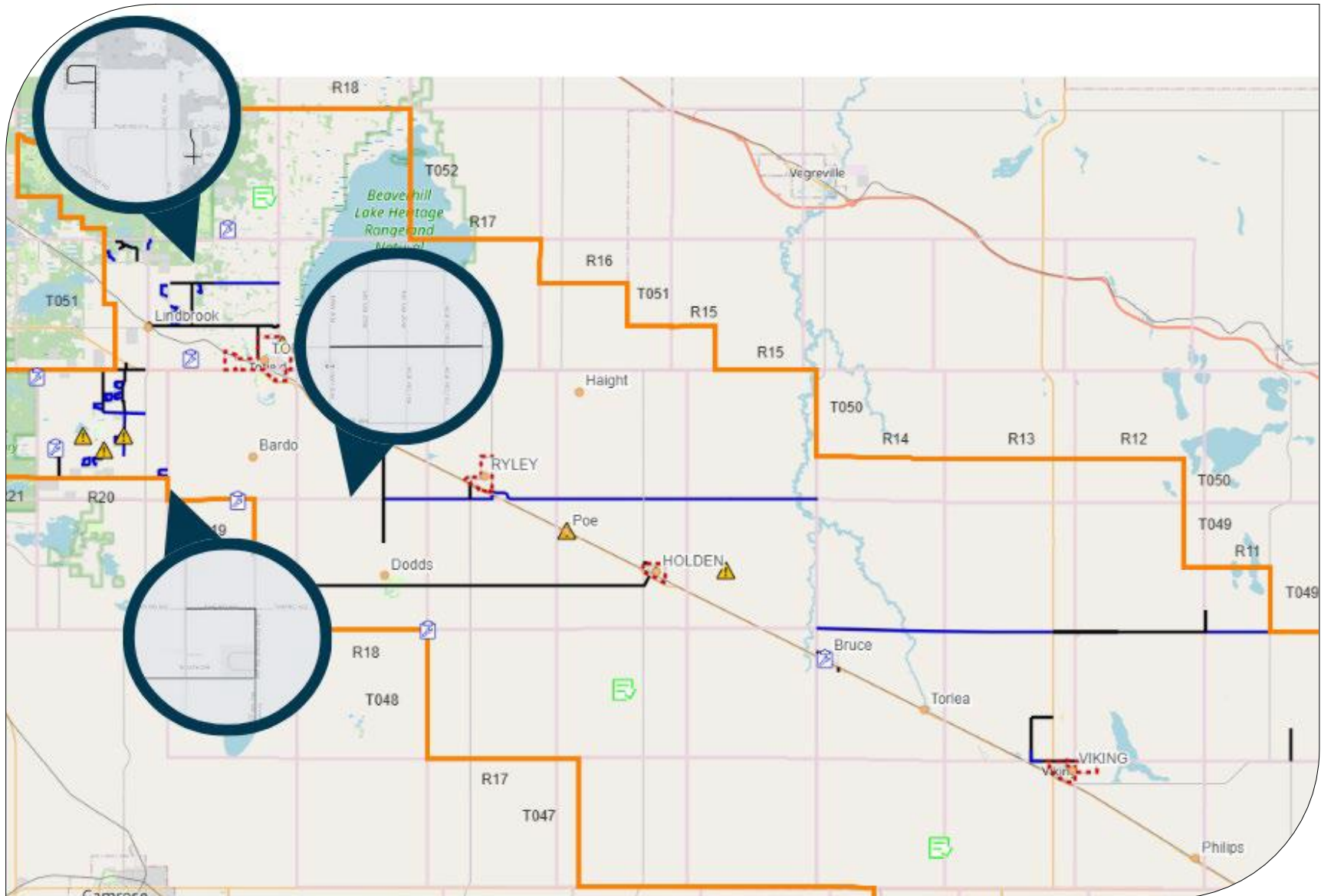
2029 Plan - 10 Miles total



- TWP 504 between RR 203 & HWY 833
- Royal Glen Estates

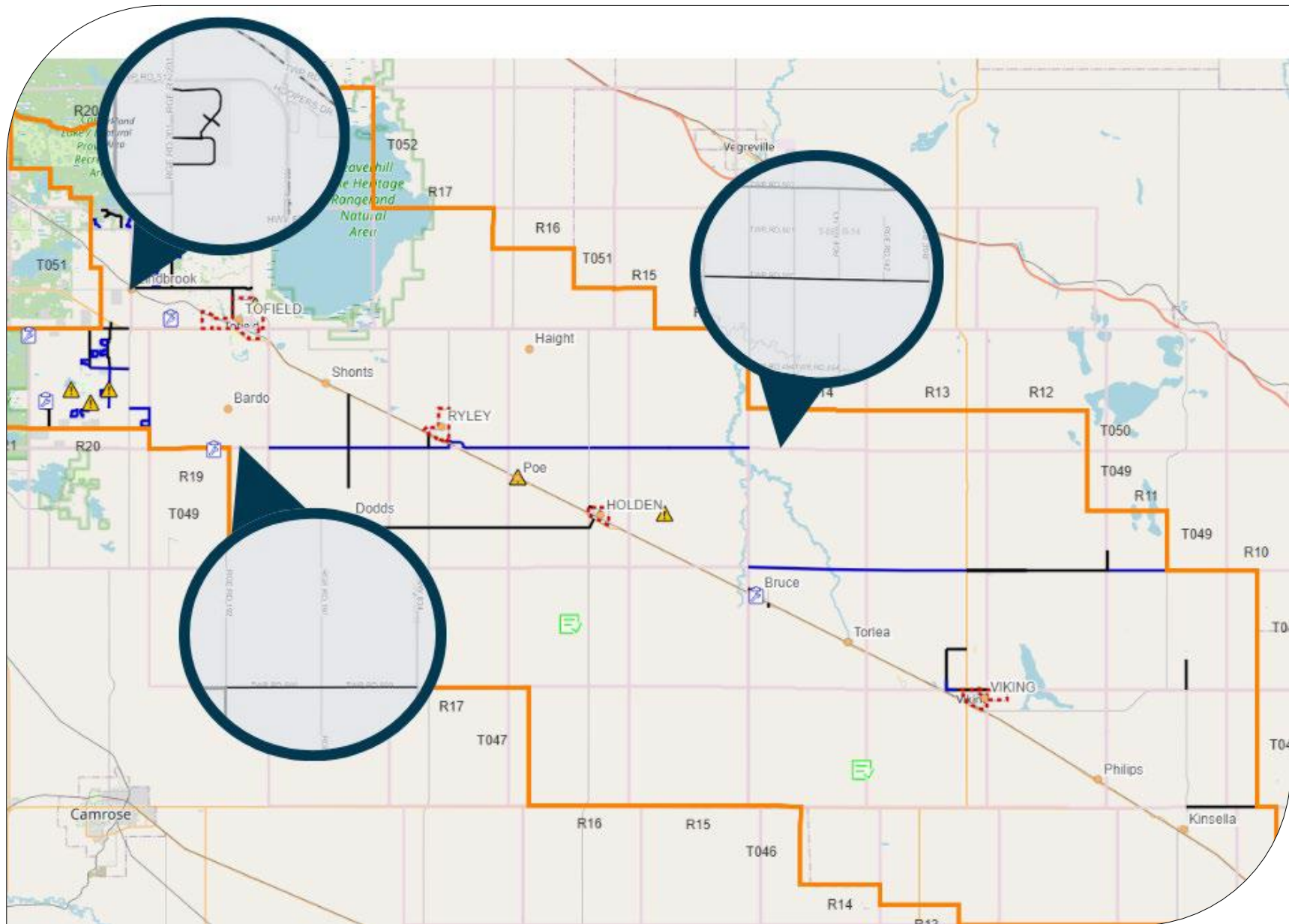
- TWP 500 between HWY 854 & RR 170
- TWP 500 HWY 854 & 182

2030 Plan - 10 Miles total



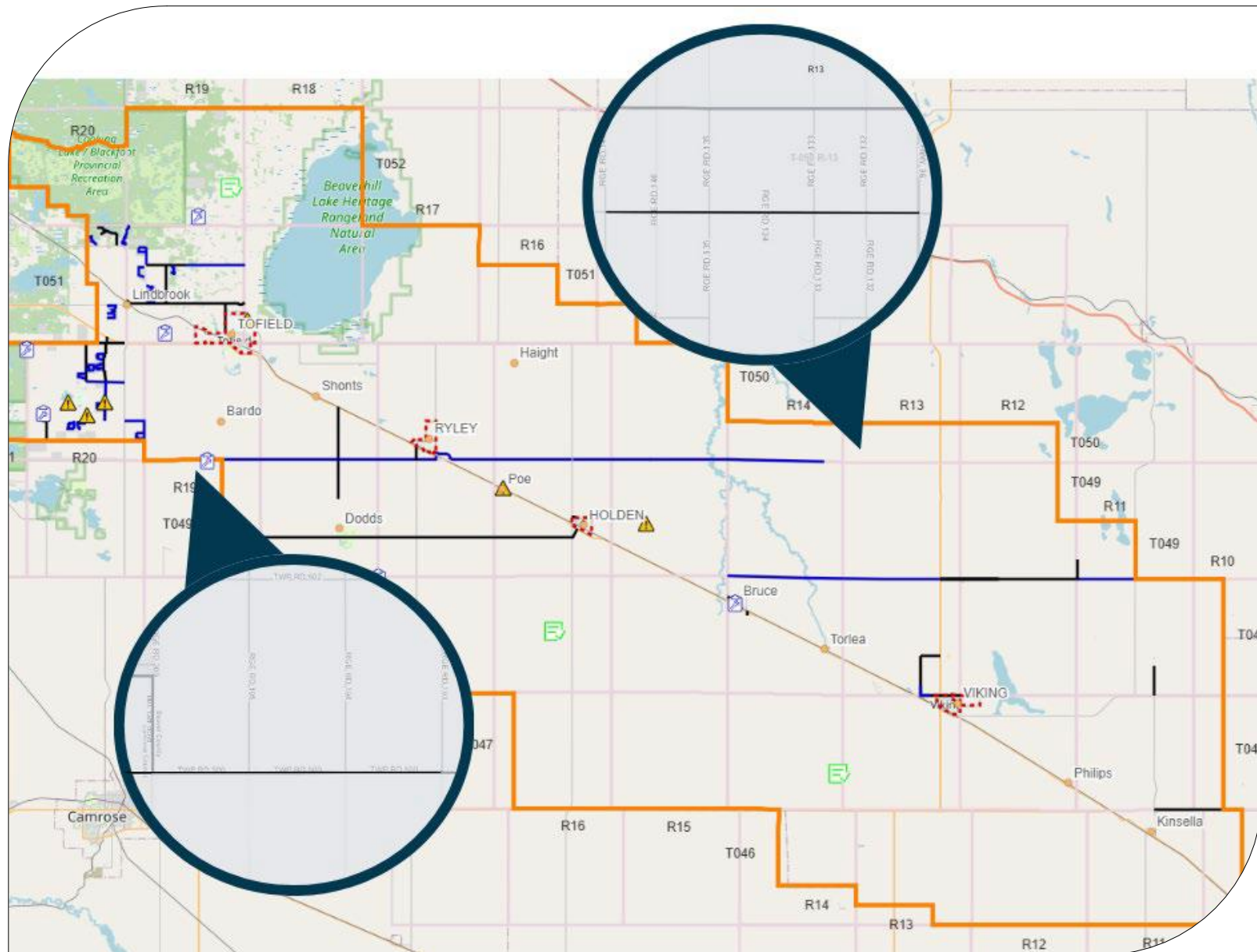
- Aspen Estates
- Country Squire
- RR 195 north of TWP 514
- TWP 502 between HWY 833 & RR 200
- RR 200 between TWP 500 & 502
- TWP 500 between RR 182 & 184

2031 Plan - 10 Miles total



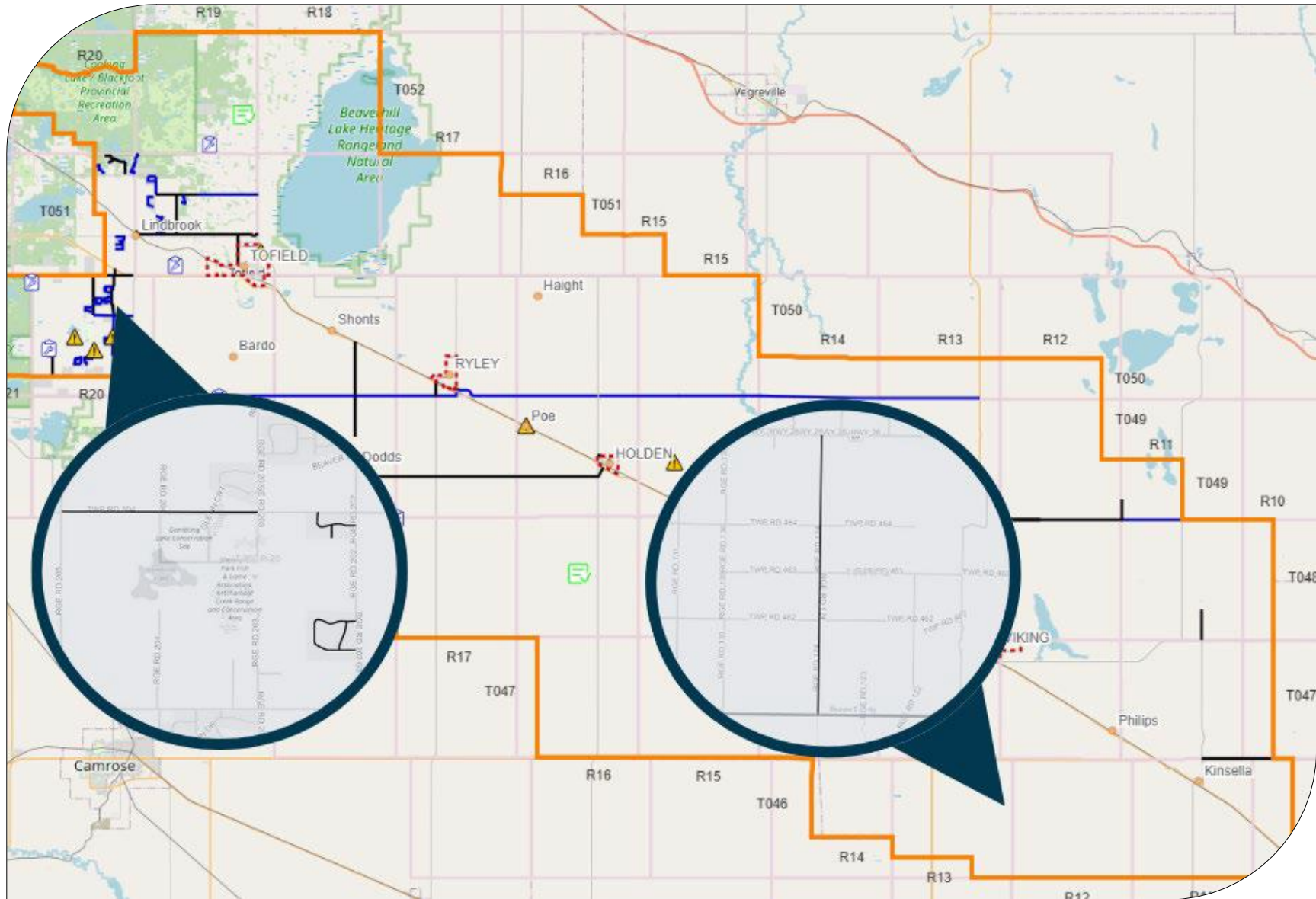
- Birch Grove Estates
- Meadow Brook Estates
- TWP 500 between HWY 834 & RR 193
- TWP 500 between HWY 857 & RR 141

2032 Plan - 10 Miles total



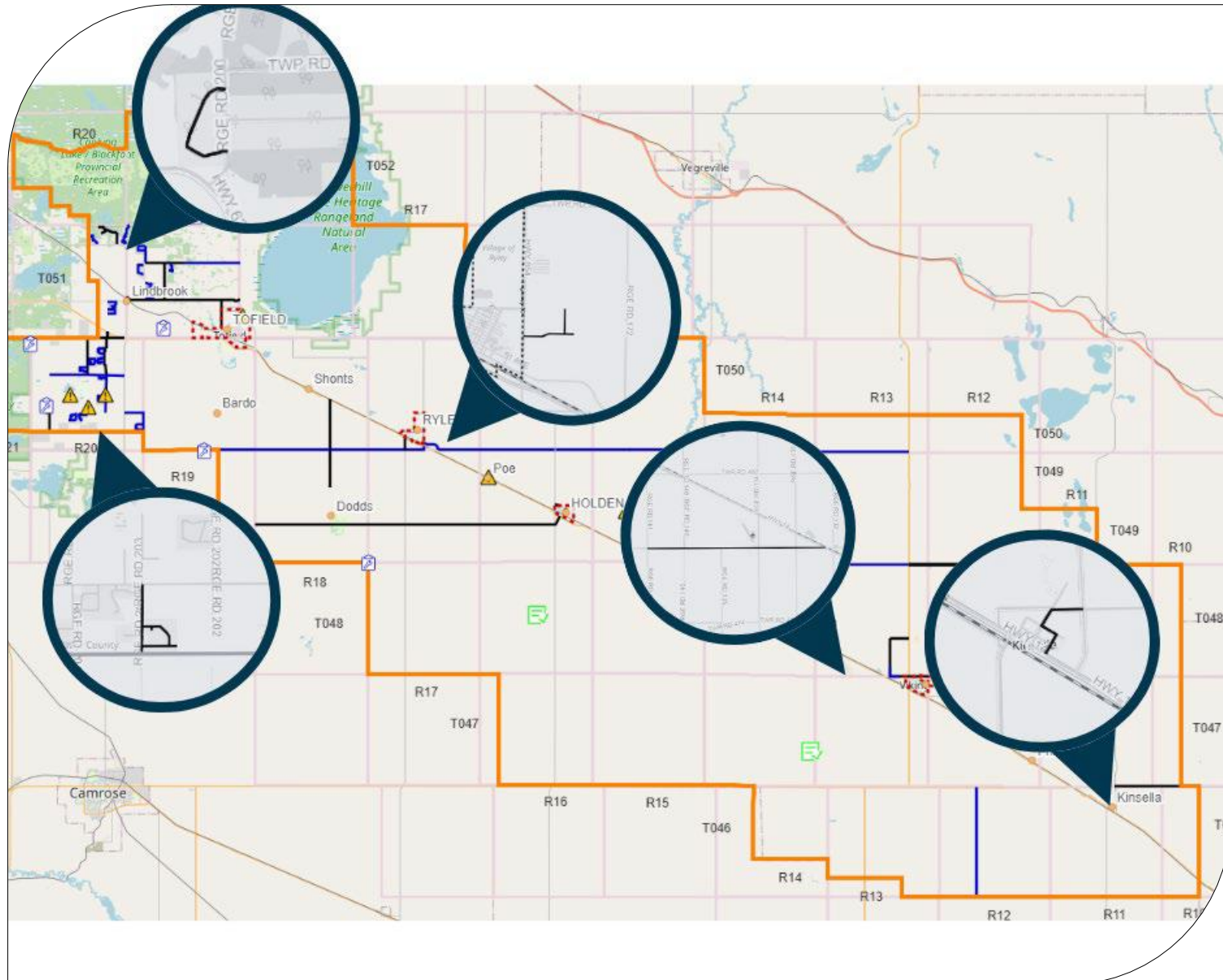
- TWP 500 between RR 193 & 200 (Possibly 1 mile in Camrose County)
- TWP 500 between HWY 36 & RR 141

2033 Plan - 10 Miles total



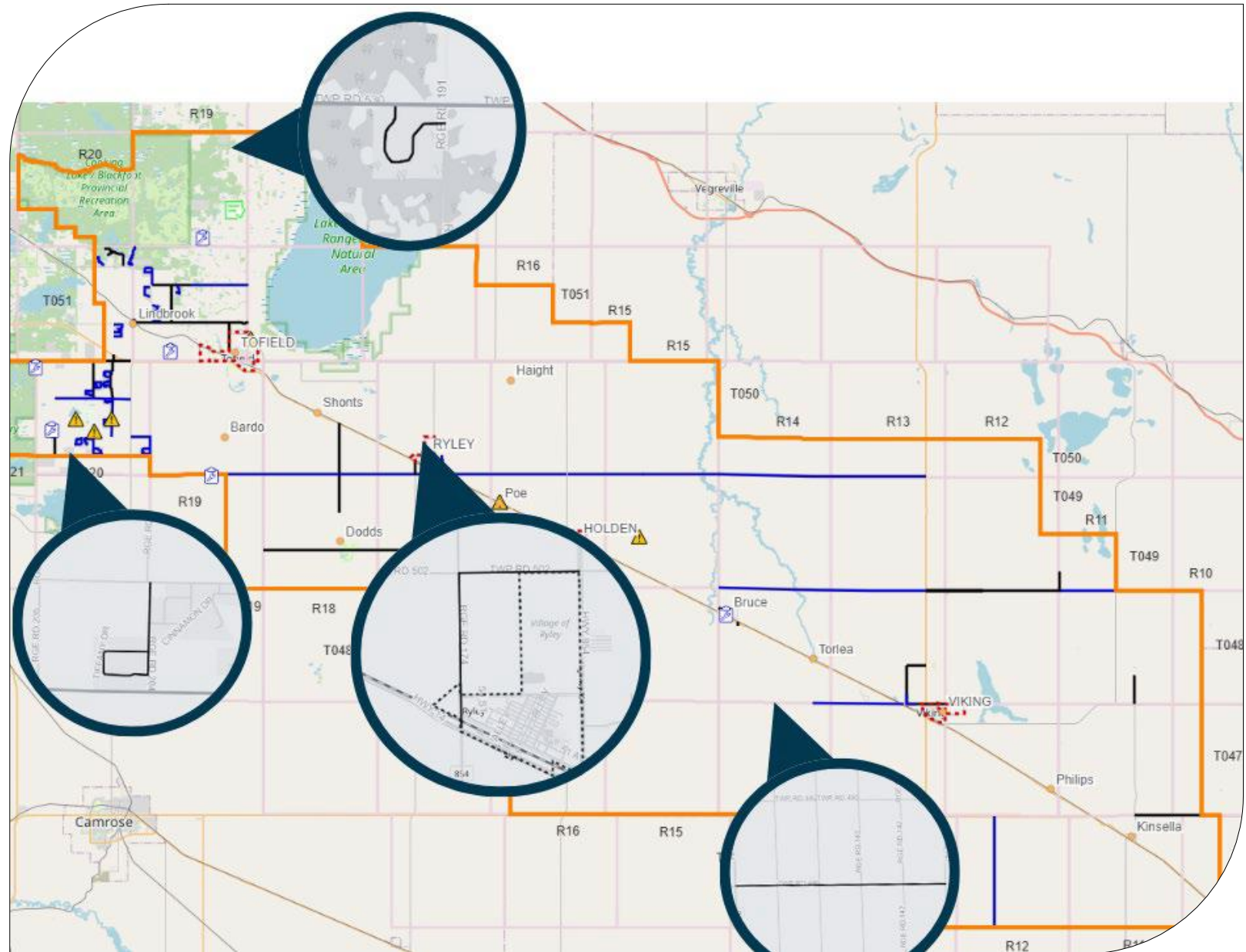
- TWP 504 between RR 205 & RR 203
- Lori Estates
- Rolling Glory
- RR 124 between HWY 26 & TWP 460

2034 Plan - 10 Miles total



- Beaver Hills Estates
- Miquelon Estates
- RR 203 between TWP 502 & 501
- TWP 480 between RR 141 & HWY 14
- Kinsella 1 mile

2035 Plan - 10 Miles total



- Park Glen Estates
- RR 204 between TWP 502 & 501
- Jade & Joyland Estates
- TWP 502 between Hwy 854 & RR 174
- RR 174 between TWP 502 & HWY 14
- TWP 480 between HWY 857 & RR 141