



# **OPERATIONS REPORT**

ENGINEERING SERVICES UPDATE

APRIL 16, 2024

# OUTLINE

Core Service Areas

Overview of Programs within Engineering Services

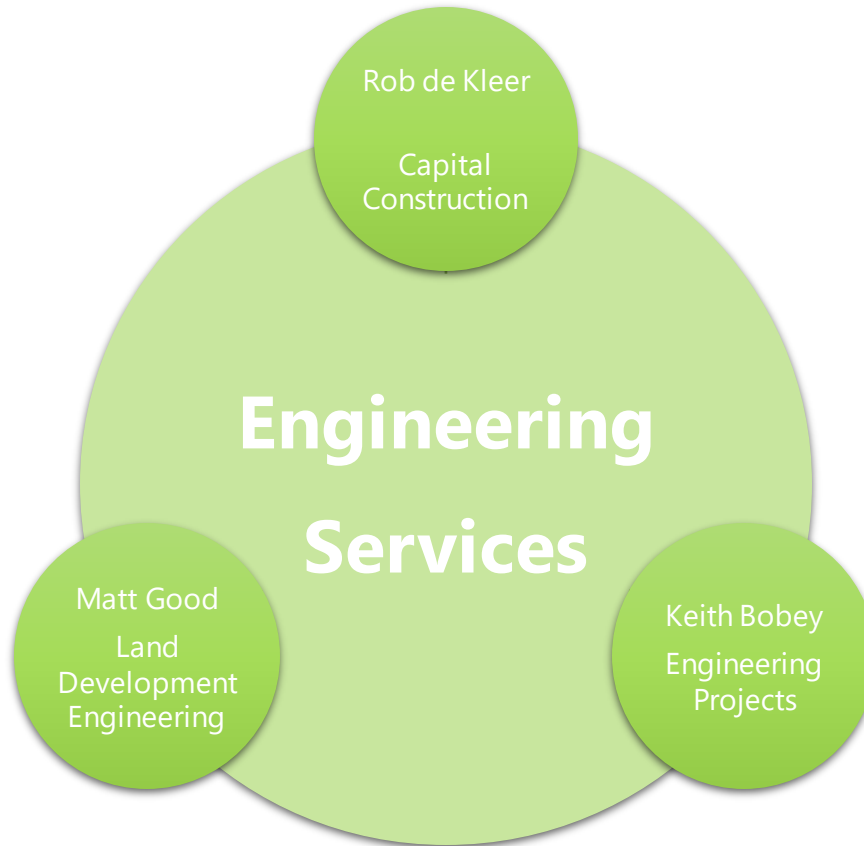
- 2024 Key Projects
- 2024 Key Activities

Project Communication Improvements

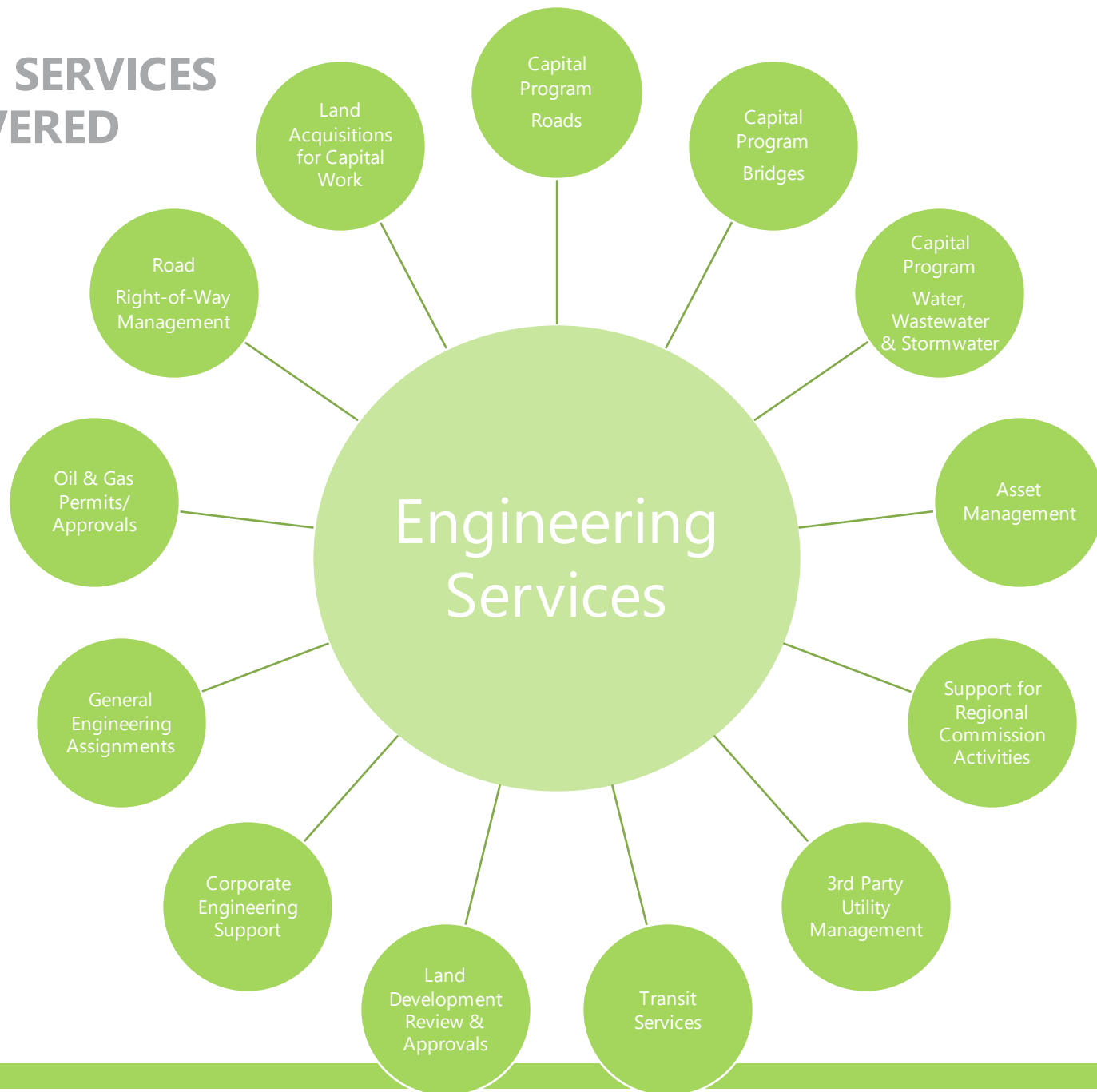
What's Next

# CORE SERVICES – BUSINESS UNITS WITHIN ENGINEERING

Three Business Units within Engineering Services



# CORE SERVICES DELIVERED



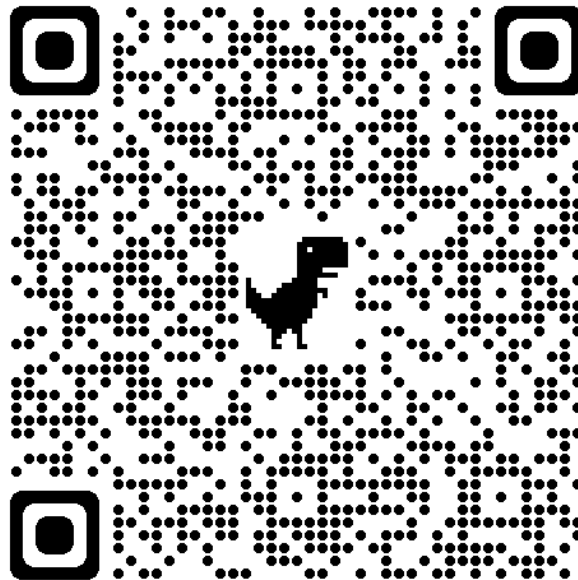
## KEY PROJECTS IN 2024

- Capital Program Allocated to Engineering in 2024 (\$34.9 M)
  - Increase of ~\$7M from 2023
- 2024 Program Highlights
  - Road Program
  - Bridge Program
  - Water/ Wastewater Program
  - Stormwater Program
  - Emerging Capital Initiatives
    - Wabamun Wastewater System Improvements
    - Acheson Intersection Improvements

# KEY PROJECTS IN 2024

2024-2027 Infrastructure Program available at:

- <https://www.parklandcounty.com/en/roads-and-transportation/current-capital-infrastructure-program.aspx?mid=72781>
- <https://www.parklandcounty.com/en/roads-and-transportation/resources/Documents/2024-2027-Cap-Prog-Complete-Booklet.pdf>



# PARKLAND COUNTY'S 2024 **ROAD** PROGRAM

- **ACP Surfacing Program (~\$1,700,000)**

- Rge Rd 14, Hwy 16 to Twp Rd 534
  - ↳ ACP overlay on approx. 3.2m of rural grid road
  - ↳ Planned for Spring / Summer 2024
- Rge Rd 32 (Duffield Rd), Duffield to Twp Rd 530
  - ↳ ACP overlay on approx. 600m of rural grid road
  - ↳ Planned for Spring / Summer 2024

- **Graded Aggregate Seal Coat Surfacing (~\$700,000)**

- 4 locations; along Twp Rds and Rge Rds
- Both washed and unwashed chip, fog sealing
- Total of 12.8 Km to be surfaced in 2024
  - ↳ Planned for Spring / Summer 2024

# PARKLAND COUNTY'S 2024 **ROAD** PROGRAM (CONT)

- **Surfaced Road Rehabilitation Program (SRRP)**  
**(~ \$815,000)**
  - New TRIAL program in Parkland County
  - Includes digging out small sections of soft or failing road segments, strengthening subsurface soil conditions and replacing the roadway.
  - This would be considered partial reconstruction and is a lower cost alternative to Full Depth Reclamation over entire length
  - Focus in 2024 is on Twp Rd 512 (Holburn Rd), Rge Rd 275 to Rge Rd 280.
    - ↳Planned for Spring / Summer 2024



# PARKLAND COUNTY'S 2024 **ROAD** PROGRAM (CONT)

- **Roadway Reconstruction/ Replacement**

- **Mink Lake Road, Hwy 770 to Rge Rd 25 (~1,000,000 remaining)**

- ↳ Majority of work activities completed in 2023

- ↳ Remaining work include second lift of asphalt, landscaping and intersection paving

- ↳ Repeated theft of above ground Telus line created issues for residents. This has been addressed.

- Planned activity for Spring / Summer 2024

- **Prospector's Point Road, Twp Rd 511 (Graminia Rd) to Parking lot (\$150,000 design)**

- ↳ Multiple improvements including Full Depth Reconstruction in some segments, spot repairs and strategic improvements, drainage repairs, asphalt surfacing and gravel surface restoration

- ↳ Length of project is 1.6 Km.

- Design Activity planned for Spring / Summer 2024
      - Potentially some construction in Fall 2024 – pending schedule and resource availability

- **Sundance Road, West of TransAlta Sundance Plant (\$150,000 design)**

- ↳ Surface improvements needed to remove differential settlements along roadway

- ↳ Length of project is about 600m.

- Design activity in Fall 2024 with potential construction in 2025

# PARKLAND COUNTY'S 2024 **ROAD** PROGRAM (CONT)

- **Other notable activities in 2024 include:**

- **Transportation Impact Assessment Update for Acheson / Big Lake (\$75,000)**

- ↳ Previous version completed in 2018

- ↳ Analysis was complete prior to major development initiatives being completed, namely Champion Pet Foods, Amazon, and others.

- ↳ Will ensure current and accurate information for development-based decisions

- Planned activity for late 2024

- **Street Light Installations in Acheson (~\$200,000)**

- ↳ Project identified to fill in “black-out” areas on major road networks in Acheson

- ↳ Priority location is identified between Highway 60 and Acheson Fire Hall

- ↳ Majority of work activity to be completed by FORTIS.

- Planned activity for late 2024

# PARKLAND COUNTY'S 2024 **BRIDGE** PROGRAM

- **Bridge Replacement at 2 locations (\$2,020,000)**

- Bridge File 70230 - (Twp Rd 510, 1.2 Km east of Rge Rd 50)
  - ↳ Project is estimated to be over budget based on final design cost estimate.
  - ↳ **Was planned for Summer 2024. Now deferred to Summer 2025 based on budget shortfall**
- Bridge File 73894 - (Twp Rd 531A, 800m west of Seba Beach)
  - ↳ Design was completed in 2023. Project is ready to advance subject to final land negotiations
  - ↳ Planned activity for Summer 2024. May be late season activity due to land discussions.

- **Bridge Assessments – Level I and Level II (\$50,000)**

- Inspection of bridges based on type and age, as well as previous inspections.
- Follows the Provincial BIM rating system and ensures quality long-term infrastructure
  - ↳ Annual program work to be completed in 2024

- **Bridge Design work for 2024 Construction (\$220,000)**

- Two bridge project to be issued for design consulting services
- Anticipate these will become 2025 Construction projects
  - ↳ Designs to be initiated in Summer 2024

## PARKLAND COUNTY'S 2024 **WATER/ WASTEWATER** PROGRAM

- **Acheson Zone 5 Wastewater Trunk Upgrade (\$2,650,000)**

- This is a capacity upgrade for Acheson Zone 5 wastewater system
- Additional work being completed to support ongoing development
  - ↳ Construction delayed to accommodate development coordination discussions
  - ↳ Anticipate a late summer start and late finish in the fall of 2024

- **Entwistle Water Line Crossings of Hwy 16 (\$50,000)**

- Part of the Water rehabilitation programs and funded through Utility Rates
- Addresses aging infrastructure and provide a looping option for optimal service continuation in the event of a failure or line break
  - ↳ Design activity planned for summer/fall 2024.

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- Addresses aging infrastructure and provide a looping option for optimal service continuation in the event of a failure or line break
  - ↳ Design activity planned for summer/fall 2024.

# PARKLAND COUNTY'S 2024 **WATER/ WASTEWATER** PROGRAM (CONT)

## • **Entwistle Water Treatment Plant/ Reservoir (\$9,000,000)**

- Design completed in 2023 with planned construction in 2024-2025.
- Prequalified contractor list is in place.
- Final procurement process ongoing.
  - ↳ Anticipate award in Q2 2024 with construction start in late Q2 2024
  - ↳ Timing was delayed to accommodate timelines for a grant application under the Alberta Municipal Water/Wastewater Partnership (AMWWP).
    - Decisions are still pending. Announcement anticipated in May 2024.

# PARKLAND COUNTY'S 2024 **WATER/ WASTEWATER** PROGRAM (CONT)

- **Other notable activities in 2024 include:**

- **Wet Weather Flow Monitoring (\$30,000)**

- ↳ New Program for 2024

- ↳ Flow monitoring equipment will be installed to collect data on the inflow/infiltration occurring within the existing wastewater systems

- ↳ Provides information on where there are issues, proves out capacity constraints or opportunities and helps direct investments in the system for maximum efficiency

- Active project will occur in advance of and during wet weather events

- **Annual CCTV Program (\$65,000)**

- ↳ Ongoing Annual Program.

- ↳ Includes video analysis of underground infrastructure and provides important information on the condition of existing infrastructure. This is critical to plan for future improvements, replacements and upgrades prior to failure of systems.

- Annual program to be completed in 2024

# CCTV VIDEO



## PARKLAND COUNTY'S 2024 **STORM WATER** PROGRAM

### • **Stormwater Rehabilitation in Acheson Zone 3** **(\$2,645,000)**

- Design completed in 2023 with planned construction in 2024.
- Work activity includes reconstruction of an underground storm system between two storm ponds in Acheson Zone 3.
- Project is intended to improve overland flooding and historical drainage challenges in the area.
- Project will also address local encroachment challenges with existing development and environmental contamination concerns.
  - ↳ Project was tendered in February 2024 and closed well above allocated budget
  - ↳ Engineering Services recommended the appropriate path forward would be to complete a value engineering exercise on the completed design and determine if there were any measurable cost savings in the project.
    - Project will be deferred to 2025 to ensure we are able to get best value from the project deliverables and ensure prudent financial expenditures



## PARKLAND COUNTY'S 2024 **STORM WATER** PROGRAM (CONT)

- **Stormwater Master Plan Implementation – Phase II (\$75,000)**

- Ongoing review of the Recommended Strategic Action Items from the Stormwater Master Plan is occurring. Engineering Services intends work with Drainage Services to review areas that would benefit most from smaller scale, focused action items.

↳ This activity is planned for Q3/Q4 2024

- **Acheson /Big Lake Fenceline Approval Update (\$30,000)**

- 5-year update on the Fenceline Approval, which is granted by Alberta Environment and Parks (AEP).
- This provides limited authority under the Provincial Water Act for Parkland County to make quick and efficient decisions on development

↳ This activity is planned for Q3/Q4 2024

# PARKLAND COUNTY'S 2024 **EMERGING CAPITAL** PROGRAM

## • **Wabamun Initiatives (\$5,000,000)**

- Engineering's participation includes the proposed Wastewater System Improvements
- Work activities include the replacement and upgrade of aged infrastructure, lift station renewal, force main replacement/upgrade lagoon restoration, etc.
  - ↳ Work activities to be divided into multiple individual assignments:
    - Osprey Subdivision Wastewater Line Replacement
    - Wabamun (less Osprey) Wastewater Line Rehabilitation – CIPP lining
    - Lagoon Rehabilitation – Dredging
    - Lagoon Rehabilitation – Landscaping, Berm Stabilization, Inlet/Outlet Replacement
    - Lift Station and Pumping Capacity Review
- Project Status is as follows:
  - ↳ Consultant to oversee all activities in place as of September 2023
  - ↳ Construction Contracts for Osprey line replacement have been awarded
  - ↳ Construction Contracts for CIPP Lining have been awarded
  - ↳ Construction Contracts for Lagoon Dredging are prepared and ready to tender
  - ↳ Remaining construction activities to be tendered in Q2 2024
  - ↳ Capacity Review to be completed following construction activities
  - ↳ Full project completion on-track for completion by March 2025

# PARKLAND COUNTY'S 2024 **EMERGING CAPITAL** PROGRAM (CONT)

- **Acheson Initiatives (\$18,500,000)**

- Engineering is moving forward with this initiative and making good progress. The project includes the following activities:
  - ↳ Reconstruction of Hwy 16A and Spruce Valley Road Intersection (\$7.75M)
  - ↳ Reconstruction of Hwy 16A and Pinchbeck/Bevington Road Intersection (\$10.75M)
- At both intersection locations:
  - ↳ Improve channelization, add turn bays and tapers, add signal lights and streetlighting, connect north/south roadways into intersection.
  - ↳ Pinchbeck/Bevington Road Intersection includes a new water and wastewater line crossing
- Project Status is as follows:
  - ↳ Design is at 100% completion
  - ↳ Construction Contract has been awarded.
  - ↳ Construction Activity has started with brush clearing and site preparation activity.
  - ↳ Main activities to kick off at end of April, early May 2024.
  - ↳ Majority of construction is expected to be complete by October 2024
  - ↳ Project is on-track for completion by March 2025

## PROJECT COMMUNICATION IMPROVEMENTS

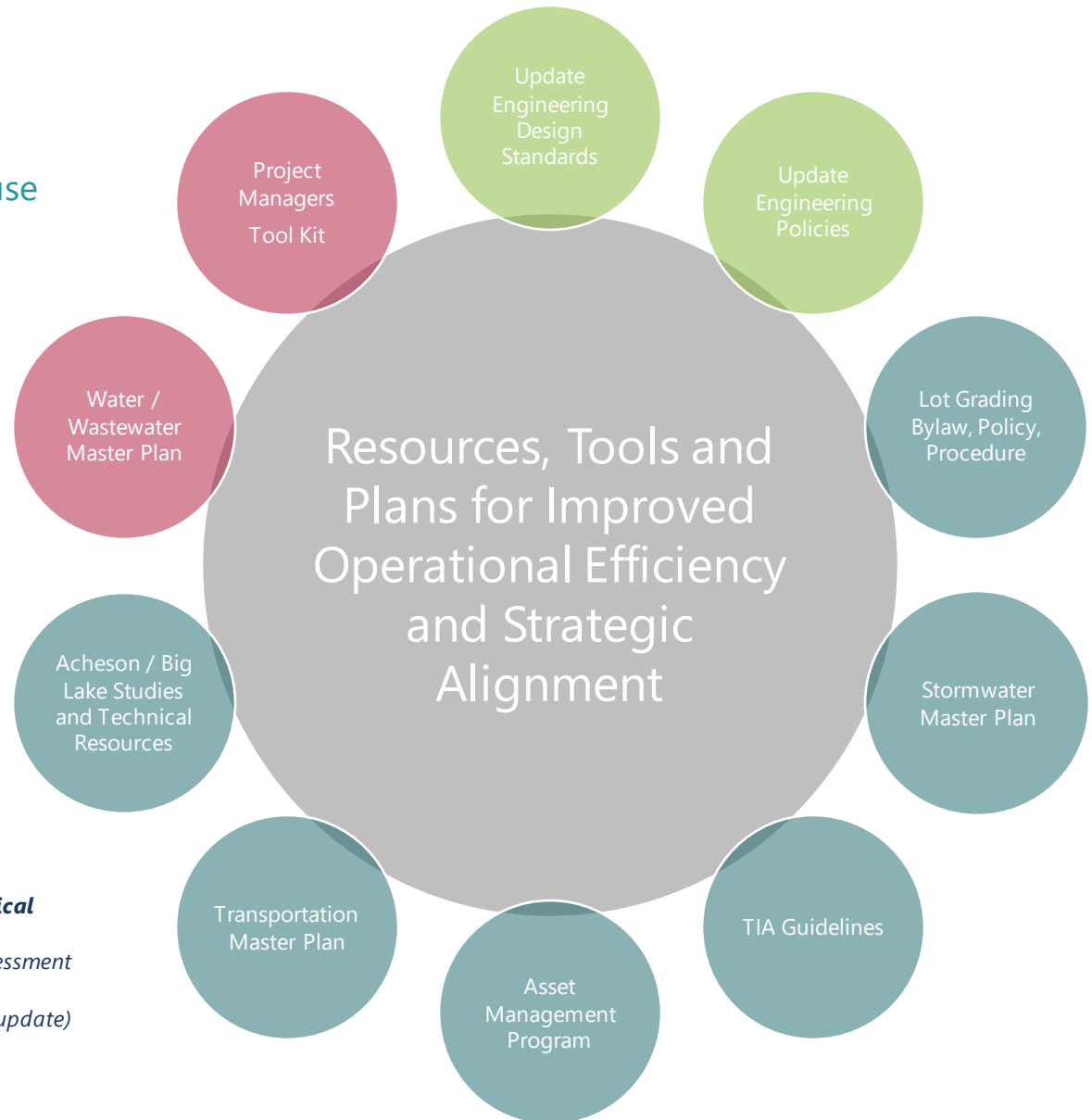
- **Information on major projects will be posted on YourParkland.ca**
  - Engineering intends to provide project specific details on major projects
  - Information will be available to the public to a greater extent than prior years
  - Pertinent project details will be shared at a high level and will include:
    - ↳ Project Description and Scope of Work
    - ↳ Project Schedule with key dates and timelines
    - ↳ Contact information for on-site inquiries (Contractor and Consultant)
    - ↳ Contact information for Parkland County Representatives
    - ↳ Project Updates and Key Milestones as they are achieved
    - ↳ Site Photos
  - Residents will be able to subscribe to the page and follow along with updates as work activity progresses

# WHAT'S NEXT

Light Green – in progress

Dark Green – complete and in use

Red – future initiative



**Acheson / Big Lake Technical Studies and Technical Resources include (not limited to):**

- *Acheson ASP level Transportation Impact Assessment (2018)*
- *Acheson Big Lake Area Structure Plan (active update)*
- *Water Servicing Plan (2022)*
- *Wastewater Servicing Plan (2022)*
- *Storm Water Servicing Plan (2020)*
- *Acheson Fenceline Approval (2022)*

QUESTIONS?

Photo is an aerial image of Osprey Subdivision - Wabamun

