AGENDA
COUNCIL MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
Tuesday, February 10, 2026
3:00 pm
Council Chambers

A. ADOPTION OF AGENDA

B. DELEGATION

a) 3:00 pm - CAPTUS

C. MINUTES/NOTES

1. Council Committee Minutes
   - January 27, 2026
2. Council Meeting Minutes
   - January 27, 2026

D. UNFINISHED BUSINESS

E. BUSINESS ARISING FROM THE MINUTES

F. COMMITTEE REPORTS / DIVISIONAL CONCERNS

1. Councillor Tony Bruder – Division 1
   - WBRA January 2026 Update
2. Reeve Rick Lemire – Division 2
   - Southern Alberta Investment & Economic Development Progress Update
3. Councillor Dave Cox– Division 3
4. Councillor Jim Welsch - Division 4
   - What was 2025 even about? – Emergency Services 2025 Recap
5. Councillor John MacGarva – Division 5

G. ADMINISTRATION REPORTS

1. Operations

a) Public Works Department Report
   - Report from Public Works dated February 5, 2026
   - Schedule A – Shop/Fleet Report

b) Utilities & Infrastructure Report
   - Report from Utilities & Infrastructure dated February 5, 2026

c) Cridland Dam - Hydrotechnical and Geotechnical Reports
   - Report from Utilities & Infrastructure dated January 20, 2026

2. Finance

a) Grant in Place of Taxes (GIPOT) 2025 Write Off
   - Report from Finance, dated February 5, 2026

3. Planning and Community Services

a) Crowsnest Pass RCMP Detachment
   - Quarter 3 Report

b) Bylaw 1370-26 (Land Use Bylaw Amendment – Hann Rezoning)
   - Report from Development dated, February 5, 2026

c) Request for Development Agreement – Irrigation Line in Road ROW
   - Report from Development dated, February 5, 2026

4. Municipal

a) CAO Report
   - Report from Administration, dated February 5, 2026

H. CORRESPONDENCE

1) For Action

a) Crowsnest Pass RCMP Detachment
- MD of Pincher Creek No. 9 - Community Priorities Plan Invitation

b) Castle Mountain Community Association
- 2026 CMCA Golf Classic Sponsorship Request

2) For Information

a) Email from Dave Bairnes, dated February 3, 2026
- Ethical Conflict and Support for MD Stewardship (#2840)

b) Parks Division – Alberta Forestry and Parks
- Release of the New Plan for Parks

c) Oldman Watershed Council
- Accepting Watershed Legacy Program Applications for 2026

d) Letter from Wendi Campbell
- Open Letter to Premier of Alberta and All Albertans re: Bill 12

I. NEW BUSINESS

J. CLOSED MEETING SESSION

K. ADJOURNMENT

MINUTES
REGULAR COUNCIL COMMITTEE MEETING
MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
Tuesday, January 27, 2026,
11:00 am
Council Chambers

Present: Reeve Rick Lemire, Deputy Reeve Tony Bruder, Councillors John MacGarva, Jim Welsch and Dave Cox.

Staff: CAO Roland Milligan, Public Works Manager Alan McRae, Utilities & Infrastructure Manager David Desabrais, Community Peace Officer Robyn Potter, Development Officer Laura McKinnon, and Executive Assistant Jessica McClelland.

Reeve Rick Lemire called the meeting to order, the time being 11:00 pm.

1. Approval of Agenda

Councillor Dave Cox

Moved that the agenda for January 27, 2026, be approved as presented.

Carried

2. Delegations

Jeremy Gross with Pincher Colony and Pete Jones with Dennis Dirtworx attended the meeting at this time to discuss their current irrigation project west of Pincher Creek.

Jeremy discussed the history of the old pivots at wastewater lagoons in the Town of Pincher Creek. During construction, the colony discovered 3,200 acre feet of irrigation and contacted the company for an irrigation assessment. They then submitted a license request to Alberta Environment, which was approved within a couple of months and planning stages began. The lands in question are both rented and owned by the colony, and they are seeing a vast difference in irrigation vs non irrigation lands. Financing has been approved through a bank once water licensing was secured.

In the early stages of the project, the colony considered staging the build, but it made more sense to put it into operation at once. To be successful for the Fall crop, off-site storage was needed. The goal was to have it in place for spring seeding. Alberta Environment has authorized a holding pond, and engineers have taken the project lead and are also working with WSP.

The Colony’s new water licence is permanent, provided the water is used within 5 years. The Ministers' discretion to amend applies in the event of extreme drought. The water storage is for fall irrigation, with water being drawn from the river only in the spring. The licence states that April through July for use.

There are currently pump sites with existing water lines for cattle and grass, with existing licenses – plans are to alternate between new and old pivots.

Council questioned whether there are any anticipated issues with pivots near the airport location. Cables would have been over the height limit. The company will change to ensure maximum coverage and comply with the 3-metre height restriction. All new technology can be turned on and off via an app on a phone. If MD makes changes for the airport, they can be done easily. MD has met with a consultant who is familiar with NavCanada rules.

There is a clause to make changes if needed, but the current project will not be an issue – future airport development can make changes as necessary.

Council expressed concern about MDs' lack of awareness of this project, with no fault on the Colony's part. The Colony informed the MD, but authorization is through Alberta Environment. Notification from Alberta Environment doesn't need to inform the MD or other landowners.

The project is moving forward smoothly with other utility companies and is on track to be completed. It will change the way the land is farmed, increase profit, and add value to the farm.

Concerns about the current road use agreement. The road ban is at 75%. A short stretch off Highway 3 to access the bin site – PW manager suggested Highway 6 around the traffic circle to 507 to the bin yard – Colony would prefer to come off Highway 3 directly to the bin yard on MD roads. The only way would be through a Council exemption. Council understands the logistics and the impact of running that many truckloads and the weight on roads not built for that. Colony questioned whether it's possible to put in speed restrictions or move the ban to 90%? Council mentioned a cost-share agreement with the colony to upgrade the road? As a possibility – MD can't afford to upgrade roads for the use of a few landowners. The colony would be open to that discussion. MD staff and Colony to discuss options to assist. MD concern is the reservoir with these projects – Castle Mountain now a 4-season resort, potential coal development west of us, and water security for the community.

Jeremy Gross with Pincher Colony and Pete Jones with Dennis Dirtworx left the meeting at 11:52 am

3. Closed Session

Councillor Jim Welsch

Moved that the Council move into closed session to discuss the following, the time being 11:54 pm.

a) Public Works Call Log – ATIA Sec. 29.1

Councillor John MacGarva

Moved that Council move out of closed session, the time being 12:18 pm.

Carried

4. Positive Ticketing Initiative

Community Peace Officer Robyn Potter discussed with Council the implementation of the Positive Ticketing Initiative as an enforcement and community engagement tool to encourage positive decision-making among youth in the Municipality, to be administered by Enforcement Services. Robyn is seeking Council support to begin this incentive program. Costs would be minimal, and she would look to local businesses for possible participation.

Council is supportive of this positive initiative to encourage youth to understand bylaws and view enforcement as a safety component of the community.

5. Draft Bylaw 1365-25, Traffic Bylaw

Development Officer Laura McKinnon and Community Peace Officer Robyn Potter presented changes to draft Bylaw 1365-25, the Traffic Bylaw. Section 8 – Road Allowances will be amended and brought back to a future Council meeting for further consideration.

4. Round Table

- Community meeting for a potential campground with ID #4 being proposed for next Friday, at the Twin Butte Hall, through a community group. MD does not have an application for this project.
- Alberta SouthWest upcoming presentation for biodigester at a landfill in the region, manager will attend instead of a Councillor.
- Fire Guard proposal is open for applications – Castle Mountain Resort is applying.
- Summerview Road sign discussion. Administration isn't sure where the sign authority came from as there is no historical information for the 1 ton ban which applied to certain times of the day.

5. Adjournment

Councillor Dave Cox

Moved that the committee meeting adjourn at 1:50 pm.

Carried

_____
REEVE

_____
CHIEF ADMINISTRATIVE OFFICER

MINUTES **10066**

MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
REGULAR COUNCIL MEETING
JANUARY 27, 2026

The Regular Meeting of Council of the Municipal District of Pincher Creek No. 9 was held on Tuesday, January 27, 2026, in the Council Chambers of the Municipal District Administration Building, Pincher Creek, Alberta.

PRESENT Reeve Rick Lemire, Deputy Reeve Tony Bruder, and Councillors Dave Cox, John MacGarva and Jim Welsch.

STAFF CAO Roland Milligan, Director of Corporate Services Meghan Dobie, Public Works Manager Alan McRae, Development Officer Laura McKinnon, and Executive Assistant Jessica McClelland.

Reeve Rick Lemire called the meeting to order at 3:00 pm.

A. ADOPTION OF AGENDA

Councillor Tony Bruder 26/029

Moved that the agenda for January 27, 2026, be amended to include:

Action:

d) Upcoming Value Scoping Session – Livingstone Range School Division

Removal of the following reports:

- Cridland Dam - Hydrotechnical and Geotechnical Reports
  - Report from Utilities & Infrastructure dated January 20, 2026
- Bylaw 1365-25 (Traffic Bylaw
  - Report from Development, dated January 21, 2026

AND THAT the agenda be approved as amended.

Carried

B. DELEGATIONS

C. MINUTES

1) Council Committee Meeting Minutes – January 13, 2026

Councillor John MacGarva 26/030

Moved that the minutes of the Council Committee Meeting of January 13, 2026, be approved as presented.

Carried

2) Council Meeting Minutes – January 13, 2026

Councillor Dave Cox 26/031

Moved that the minutes of the Council Meeting of January 13, 2026, be approved as presented.

Carried

D. UNFINISHED BUSINESS

E. BUSINESS ARISING FROM THE MINUTES

F. COMMITTEE REPORTS / DIVISIONAL CONCERNS

1. Councillor Tony Bruder – Division 1

- Chinook Arch Regional Library Meeting
- Crowsnest Pincher Creek Landfill Association
- (Alternative Land Use System) ALUS Terms of Reference
- Carnivores and Communities Program Meeting

2. Reeve Rick Lemire – Division 2
   - Pincher Creek Emergency Services Commission
   - Rural Crime Watch update
   - Foothills Little Bow
3. Councillor Dave Cox– Division 3
   - Pincher Creek Foundation
4. Councillor Jim Welsch - Division 4
   - Agricultural Service Board
   - Family and Community Support Services
   - Police Advisory Committee
   - Pincher Creek Emergency Services Commission
   - Foothills Little Bow
5. Councillor John MacGarva – Division 5
   - Healthcare Committee
   - Foothills Little Bow
   - Housing Committee
   - Statement of Local Emergency Training

Councillor Tony Bruder 26/032

Moved to accept the Committee Reports as information.

Carried

G. ADMINISTRATION REPORTS

1. Operations

a) Public Works Operations Report

Councillor John MacGarva 26/033

Moved that Council receive the Public Works Operations Report, including Schedule A – Shop/Fleet Report, for the period January 5, 2026, to January 18, 2026, as information.

Carried

b) Utilities & Infrastructure Report

Councillor Tony Bruder 26/034

Moved that Council receive the Utilities & Infrastructure report for January 8, 2026, to January 20, 2026, as information.

Carried

c) Oldman Reservoir Emergency Intake - 2026 Budget Allocation & Capital Adjustment

Councillor Dave Cox 26/035

Moved that Council approve $182,682 in 2026 funds for the Oldman Reservoir Emergency Intake Capital Project,

AND THAT Council approve the same funding stream breakdown as the 2025 approved funds for $67,682 of the 2026 funds (75% covered by AMWWP, with 70% of remaining 25% covered by DFPP, and remaining covered by the Water and Wastewater Reserve), and that the remaining $115,000 be funded from the Water and Wastewater Reserve.

Carried

2. Finance

a) Request to Waive Tax Penalties - Tax Roll 1736.000

Councillor John MacGarva 26/036

Moved that Council deny waiving the tax penalties on tax roll 1736.000 in the amount of $666.64.

Carried

Meghan Dobie left the meeting at this time, the time being 4:02 pm.

3. Development and Community Services

a) Bylaw No. 1368-26 (Land Use Bylaw Amendment -Secondary Suites)

Councillor Dave Cox 26/037

Moved that Council give first reading to Bylaw No. 1368-26, being the Land Use Bylaw Amendment (Secondary Suites),

AND THAT Council set a date for the required Public Hearing on March 10, 2026, at 3:00 pm.

Carried

4. Municipal

a) CAO Report

Councillor Jim Welsch 26/038

Moved that Council receive the CAO Report for the period January 12, 2026, to January 23, 2026, as information.

Carried

b) Corporate Policy C-CO-009 Enforcement Services Appeal Board & Committee Members

Councillor John MacGarva 26/039

Moved that Council approve policy C-CO-009, Enforcement Services Appeal Board;

AND THAT Councillor Dave Cox, and members at large, Jeff Hammond and Laurie Klausen be appointed to the Enforcement Services Appeal Board, effective immediately.

Carried

H. CORRESPONDENCE

A. For Action

a) Alberta CARE (Coordinated Action for Recycling Enterprises) Seminar 2026

Councillor Tony Bruder 26/040

Moved that the Alberta CARE (Coordinated Action for Recycling Enterprises) Seminar 2026 brochure, be received as information.

Carried

b) Pincher Creek & District Municipal Library – Roles and Responsibilities Session

Councillor Tony Bruder 26/041

Moved to table the discussion on Public Library Services Branch (PLSB) of Municipal Affairs with the Government of Alberta coming to Pincher Creek to present a session on the roles and responsibilities of municipal Councils and library boards in the Province of Alberta, pending further clarification of the session.

Carried

c) RMA Spring Convention – March 16 through 18, 2026 - Invitation to Meet Minister of Transportation and Economic Corridors

Councillor Dave Cox 26/042

Moved that the RMA Spring Convention invitation to meet Minister of Transportation and Economic Corridors, be received as information.

Carried

d) Upcoming Value Scoping Session - Livingstone School

Councillor Jim Welsch 26/043

Moved that Reeve Rick Lemire and Councillor John MacGarva be authorized to attend an upcoming Value Scoping Session with Livingstone School.

Carried

B. For Information

a) Alberta Municipalities

Councillor Tony Bruder 26/044

Moved that the MD of Pincher Creek agree to let their name stand with the Alberta Municipalities - Recognition of Participating CEIP Communities for Emerald Awards for Environmental Excellence.

Carried

b) Water and Circular Economy Division, Alberta Environment and Protected Areas

Councillor Tony Bruder 26/045

Moved that the Water and Circular Economy Division, Alberta Environment and Protected Areas

- Water (Ministerial) Regulation Change - Exemptions to support water availability
- New Rules Boost Water Storage and Conservation
- Freedom to Water

Be received for information.

Carried

I. NEW BUSINESS

J. CLOSED SESSION

Minutes
Council Meeting
Municipal District of Pincher Creek No. 9
January 27, 2026

Councillor Dave Cox 26/046

Moved that Council move into closed session to discuss the following, the time being 4:25 pm.

a) Appointment to Agriculture Service Board Committee – ATIA 22.1
b) Request for use of closed alleyway - Pincher Station – ATIA 28.1
c) Road Closure and Purchase Request – Adjacent to Block 2, Plan 9411612 – ATIA 28.1
d) Road Closure Resolution Portion of Uncancelled Road Plans 197BM & 3299BZ – ATIA 28.1

Councillor Dave Cox 26/047

Moved that Council move out of closed session, the time being 4:46 pm.

Carried

a) Appointment to Agriculture Service Board Committee

Councillor Jim Welsch 26/048

Moved that Council appoint Stuart Lewis to the Agriculture Service Board Committee, effective immediately.

Carried

b) Request for Use of Closed Alleyway - Pincher Station

Councillor Jim Welsch 26/049

Moved that the request to use closed alleyway adjacent to Lot 6,15, Block 12, Plan 1993N in Pincher Station be denied;

AND THAT the resident be requested to remove all buildings from the MD municipal parcel by no later than July 1, 2026.

Carried

c) Road Closure and Purchase Request – Adjacent to Block 2, Plan 9411612

Councillor Tony Bruder 26/050

Moved that Council approve the request to close and purchase portions of undeveloped Statutory Road Allowance between Block 2, Plan 9411612 and Block 1, Plan 9411463, with the applicant being responsible for all costs associated with the closure, purchase and consolidation with the parcels.

Carried

d) Road Closure Resolution Portion of Uncancelled Road Plans 197BM & 3299BZ

Councillor Jim Welsch 26/051

Moved that Council pass the following Road Closure Resolutions:

A Resolution of the Municipal District of Pincher Creek No. 9 for the purpose of closing to public travel and cancelling a public highway in accordance with Section 24 of the Municipal Government Act, Chapter M26, Revised Statutes of Alberta 2000, as amended.

WHEREAS, the lands hereafter described are no longer required for public travel, NOW THEREFORE be it resolved that the Council of the Municipal District of Pincher Creek No. 9 does hereby close the following described road, subject to rights of access granted by other legislation.

Road Plan 3299BZ, affecting the following quarter sections:

SW 23-9-1 W5M
Containing 2.19 Hectares (5.41 acres) more or less
To be placed back in Certificate of Title No: 221191 500 +2
AND
Road Plan 197BM, affecting the following quarter sections:
SW 23-9-1 W5M
Containing 1.036 Hectares (2.56 acres) more or less
To be placed back in Certificate of Title No: 221 191 500 +2

Carried

As the requested information was received from the Pincher Creek & District Municipal Library prior to the end of the Council meeting, Council rediscussed the request.

Pincher Creek & District Municipal Library – Roles and Responsibilities Session

Councillor Tony Bruder 26/052

Council moved to receive the request on attending a Roles and Responsibilities Session as information.

Carried

K. ADJOURNMENT

Councillor John MacGarva 26/053

Moved that Council adjourn the meeting, the time being 4:49 pm.

Carried

_____
REEVE

_____
CHIEF ADMINISTRATIVE OFFICER

Outlook

Fw: WBRA January 2026 Update

From Tony Bruder <CouncilDiv1@mdpinchercreek.ab.ca>
Date Fri 2026-01-30 20:31
To Jessica McClelland <AdminExecAsst@mdpinchercreek.ab.ca>

Hi Jessica

Can you please add as information to the next meeting.

Thank you
Tony
Get Outlook for iOS

From: Waterton Biosphere Reserve Association <info@watertonbiosphere.com>
Sent: Friday, January 30, 2026 5:09:13 PM
To: Tony Bruder <CouncilDiv1@mdpinchercreek.ab.ca>
Subject: WBRA January 2026 Update

Friday, January 30, 2026

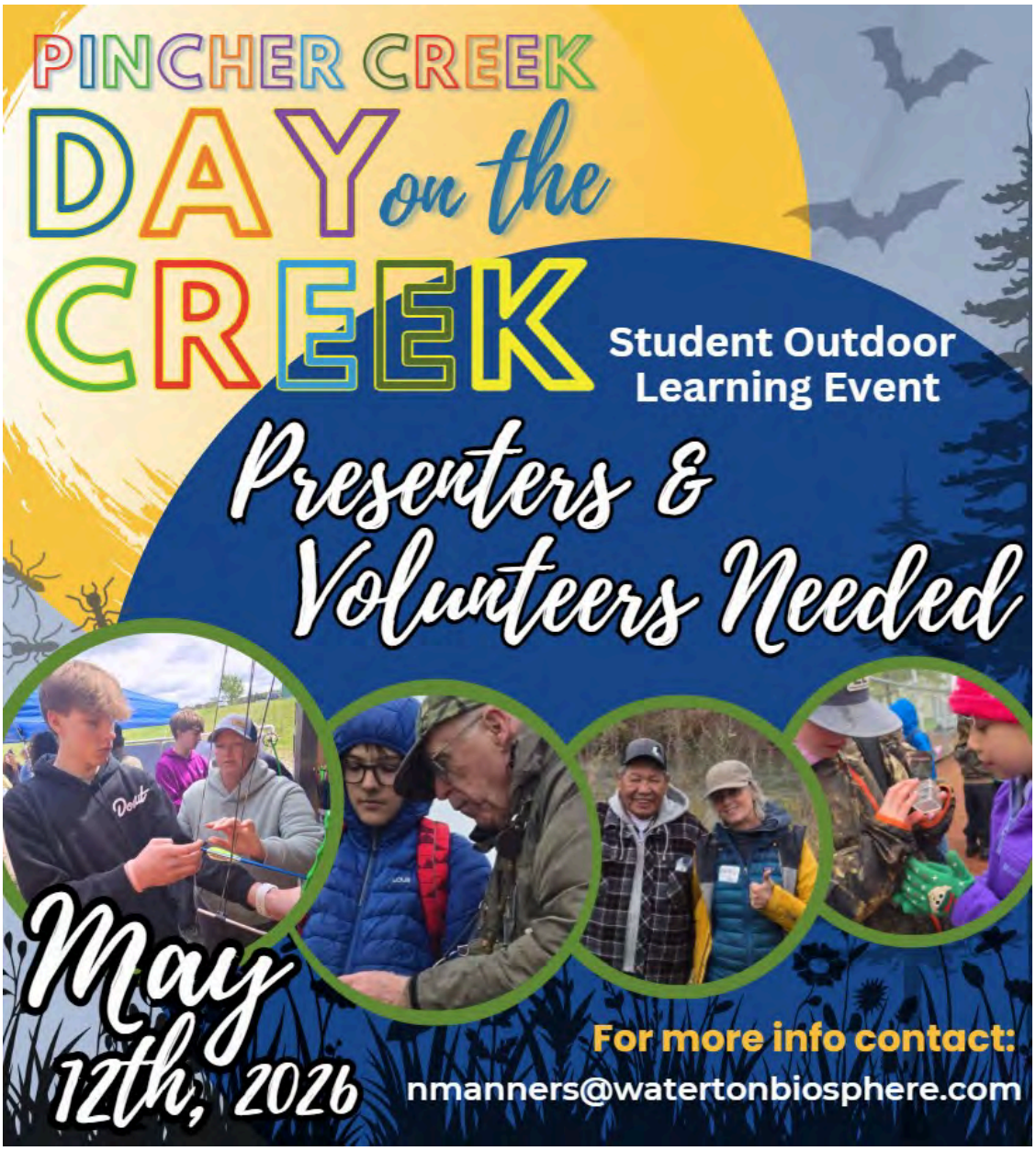
WATERTON
BIOSPHERE REGION

What's new with WBRA

SILENT SENTRY - Waterton Biosphere Region is home to many interesting species of owls, several of which reside here year round. This Northern Saw-whet (Aegolius acadicus) is one of the world's smallest owls, standing only about 20 cm tall. Fun fact - it is the male saw-whet who does the majority of the parenting. The female leaves the nest approximately 18 days after the young hatch, often times not returning. The male continues to feed the young until they are able to fly and hunt for themselves. (Photo: B.Bart)

CACP Public Meetings

COMMUNITY MEETINGS PLANNED - The CACP will be hosting community meetings in February to share information about our programs and projects. We anticipate an interesting agenda, presented by representatives from both WBRA and the Government of Alberta. These meetings are a great opportunity to stay informed and share ideas on all things related to bears, wolves and cougars.



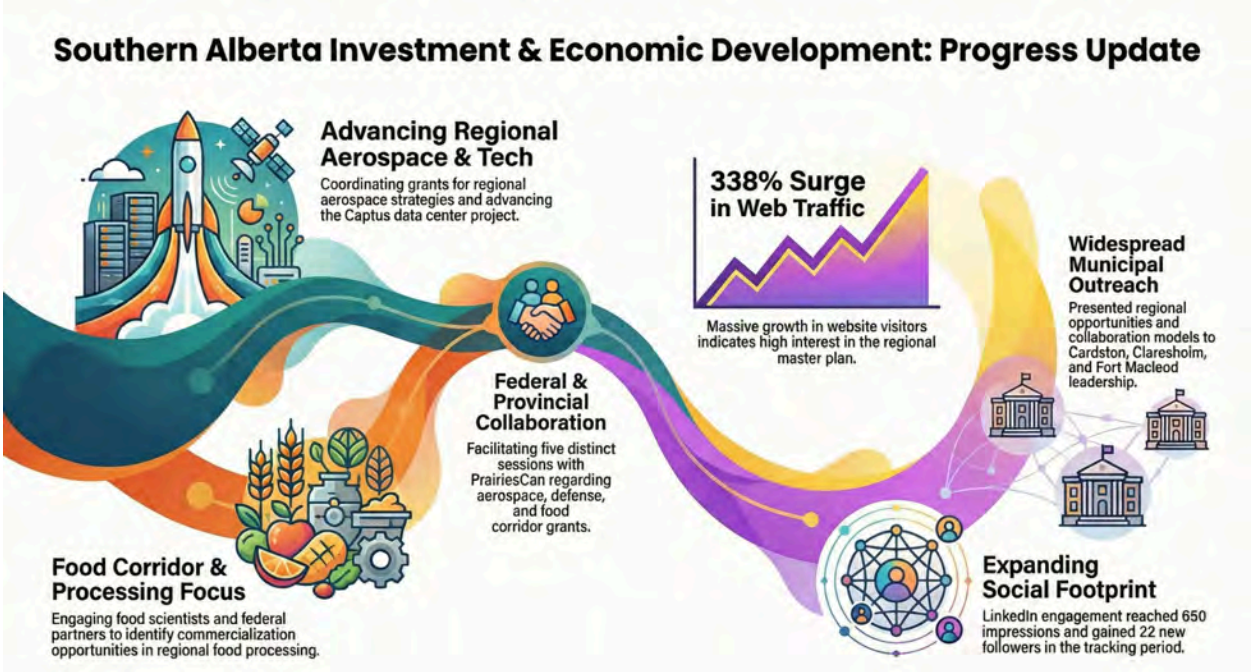
MANY HANDS, LIGHT WORK - If you're looking to get involved in meaningful volunteerism this year, look no further. The Waterton Biosphere Region and its supporters are once again hosting the Day on the Creek outdoor experiential learning event. On May 12th, students from area schools will be gathering along the banks of Pincher Creek to learn about biodiversity, water resources, wildlife coexistence strategies, regional history, and more! If you're willing to lend a hand to make this day amazing, please contact Nora Manners at nmanners@watertonbiosphere.com.

Show Your Support

PUT YOUR DOLLARS TO WORK - If you're looking to support good work in our community, consider giving to the Waterton Biosphere Region. Every dollar donated goes toward building healthy ecosystems right here in southwest Alberta. By supporting the WBR you are supporting biodiversity, sustainable development, and capacity building. Above, attendees to our 2024 fall tour got to see a WBR project first hand at a beaver mitigation project on the Palmer Ranch. Click the link below to lend a hand. (Photo: T. Porter/WBR)

DONATE

Visit our Website



January Overview

January was full of meetings and engagement to fact find, engage to inform and map out actions for detail on the investment attraction master plan. Engagement will continue through February. This included supporting existing inquiries and activity, engaging and updating our partners to confirm our role, value and how we can work together to leverage shared goals. We are currently on schedule with original progress timelines.

Meetings and Progress Overview

- **Captus Meeting: (Data Centre)** Met in Pincher Creek to discuss progress of the project and any community engagement or other support they may need. Next: Connect Captus to RMA.
- **RMA Meeting:** Met with their team to discuss the Pincher Creek data center progress and how and what they could advocate for in addition to conversations about other supports. NEXT: Connect Captus to RMA
- **Fort Macleod Meeting Daniella: (Fort Macleod EDO)** Meet and greet and discussion on airport plans, regional potential and exchanged status of planning and priorities. NEXT: Share planning documents when complete, set up CAO and council visit.
- **Cardston County:** Presentation to introduce and remind what we do, what we are working on and how we may support. NEXT: Follow up with CAO.
- **Cardston Town:** Presentation similar to county, spoke of return on investment and agreement on a need for an ROI. Discussed coming out with metrics and sharing. NEXT: CAO.

- **CFI Meeting: (MD of Willow Creek Flight School)** Invited Mark Brown from Community Futures. Deep dive on business model, financials and strategy and how they could be a core business in a regional aerospace strategy and grant ask. NEXT: Update PrairiesCan on grant fit
- **Alta Link Meeting:** Met with representative Colin to review their role. Discussed having him present and potential for sponsorship. NEXT: Schedule a presentation and follow up when sponsorship plans complete.
- **PrairiesCan x 5:** Regional aerospace grant, defence grant for CFI, food corridor. NEXT: February 2 construct grant principles, next steps on food corridor progress.
- **Cardston county entrepreneur:** Counselled entrepreneur on next steps for their declined development proposal; engage neighbours appropriately if he wants support. NEXT: Send article on effective community engagement
- **Claresholm Team:** Met with EcD team to discuss pending plans and share roles
- **Claresholm Council:** Met with Claresholm Council and presented on ABSW what we do, role we play and opportunity potential. NEXT: Schedule another presentation
- **Planning Natalie Gibson x 2:** Met with Natalie to deep divine past project results from MECAP, EAT and Bastion and action translation to the current project.
- **Regional Resilience Meeting:** Connected with regional colleagues to discuss immediate new developments and updates across southern Alberta.
- **Letter of support Captus Meeting:** Met with Marie, Laura (pincher MD) and Captus to discuss response to Invest Alberta RFI for data centres. Submitted an “in principle” letter of support from ABSW.
- **Alberta Innovates:** Exchanged information on Endpoint Recovery and follow up questions to determine their progress, grant support status and confirm attendance at information sessions
- **Airport Regional Cluster Scan:** Connected Aerodrome/Airport communities with consultant to advance information collection to advance strategy and grant application.
- **Mark Brown:** (Community Futures ABSW) Met with Mark and discussed their winter supports and new ways to work together longer term.
- **Endpoint Recovery:** Confirming details of their status and demonstration site.
- **Monthly RINSA (Regional innovation network Southern Alberta)**
- **Food Scientist:** Met with a food scientist to discuss ABSW role in food processing, high level opportunities, commercialization opportunities and speaking educational opportunities.

Digital Engagement Statistics

LinkedIn: 650 impressions and 22 new people following our page.

Website: 338% increase in visitors

Outlook

Fwd: What was 2025 even about?

From Jim Welsch <CouncilDiv4@mdpinchercreek.ab.ca>
Date Thu 2026-02-05 07:30
To Jessica McClelland <AdminExecAsst@mdpinchercreek.ab.ca>

Hi Jessica
Could you please include this for the next council meeting
Thanks
Jim
Sent from my iPhone

Begin forwarded message:

From: Sariah Brasnett <sariah.brasnett@pincherfire.com>
Date: January 29, 2026 at 6:39:49 PM MST
To: Sahra Nodge <SNodge@pinchercreek.ca>, Rick Lemire <CouncilDiv2@mdpinchercreek.ab.ca>, Jim Welsch <CouncilDiv4@mdpinchercreek.ab.ca>, Wayne Oliver <woliver@pinchercreek.ca>
Subject: Fwd: What was 2025 even about?

Hey,

Here is the information from the meeting and some other random things. It was sent to our EMS staff :)

Sariah Brasnett
Deputy Chief of Emergency Services
Pincher Creek Emergency Services Commission
PO Box 1086, 655 Charlotte St.
Pincher Creek, AB T0K1W0
Office: 403-627-5333 Fax: 403-627-3502
Cell: 403-627-8947
Email: sariah.brasnett@pincherfire.com

Begin forwarded message:

From: Fire Mail <sariah.brasnett@pincherfire.com>
Subject: What was 2025 even about?
Date: January 29, 2026 at 17:56:53 MST
To: PCES EMS <pcesems@pincherfire.com>

Hey Team ,

I wanted to share with y'all some fun facts about our year. Some are shocking, some are obvious, but it is all worth noting.

Thank you for what you do and for being her for our community (and others). We appreciate you more than you know.

So with that…..here goes…..

In 2025, our radios beeped 2488x (excluding all the beeps when we miss a unit contact) PC EMS has provided care (and sometimes just a hand hold) for many different events, including emergency calls, inter-facility transfers, cancelled calls, and flexes out of the community (87x)

We have responded within the town and MD of PC as well as Piikani First Nation, Lethbridge City and County, Waterton Park, Crowsnest Pass, Fort Macleod, Willow Creek MD, MD of Ranchlands, Cardston County, High River and Calgary.

Piegan Ambulance responded to Pincher Creek and the MD 49 times. (I don't have the stats for AHS direct delivery responding so Pincher because they won't give me that info).

We staffed two ambulances 24 hours a day, never putting an ambulance out of service due to staffing. That is 35,040 (wo) man-hours of work. Our A1 truck was never downgraded to BLS.

We slept overnight (in the ambulance) in other communities to provide coverage when they could not (Just call us Blairmore 3) – our engine idle hours will reflect that.

We travelled a total of ~185,000km with 4 ambulances, which is equivalent to 4.6 times around the world.

Our 3538 unit, which was primarily used for A1, travelled 115,000 of those kms.

We only hit 3 deer in 2025 (Kate wanted to make sure we added a deer family to the 2025 stats)

Our busiest day of the week for emergency calls was Saturday, with mid-afternoon being the high time.

Our busiest day of the week for IFT events was Monday mid-afternoon.

Foothills transfers totalled 27 for the year and 4x each to the Rocky View, PLC and South campus.

We were tasked on 92 Blairmore transfers. (I felt like it was more!)

We consumed gallons of coffee (and energy drinks) to stay alert during long transfers and had countless meals in the front seat of the ambulance (even while responding to calls).

I am sure many have cried (not me specifically) and laughed together, creating some lasting memories (or nightmares).

2025 was a lot - it is the busiest year we have had to date.

Thank you for sticking it out with us!

“ I am not here for me - I am here for we - and we are here for them. “

Sariah Brasnett

Deputy Chief of Emergency Services
Pincher Creek Emergency Services Commission
PO Box 1086, 655 Charlotte St.
Pincher Creek, AB T0K1W0
Office: 403-627-5333 Fax: 403-627-3502
Cell: 403-627-8947
Email: sariah.brasnett@pincherfire.com

Recommendation to Council

TITLE: PUBLIC WORKS DEPARTMENT REPORT	
PREPARED BY: Alan McRae	**DATE: February 3, 2026**
DEPARTMENT: Public Works	
ATTACHMENTS: **1.Shop/Fleet Report**	

APPROVALS:

	February 3, 2026		2026/02/05
Public Works Manager	**Date**	**CAO**	**Date**

RECOMMENDATION:

THAT Council accepts the Public Works Department Report for the period of January 19 to February 1, 2026 as information.

Permanent snow fence maintenance- Remove and rebuild PSF-04-32 (Div 4)
Permanent snow fence maintenance- Repair to PSF-04-33 (Div 4)
Permanent snow fence maintenance- Partial removal of PSF-01-39 (Div 1). Will be rebuilt at later date
Gravel road maintenance- Grading
Gravel road maintenance- Shoulder work/gravel retriever
Gravel road maintenance- Spread load of gravel at Lundbreck Falls and grade.
Gravel pit exploration- McRae pit
Hard surface maintenance- Check lights and barricades at Southfork slide. Monitor slide
Sign inventory for year end
Asset management-Field additions to asset management-MRF
Guard rail maintenance- Repair wire rope guard rail on Summerview hill.
Equipment training
Brushing program- Mechanical and hand slashing in Div 4 (Snake trail and Lank Bridge areas)
Sign maintenance- Replace bridge weight signs at Tiberts bridge, fix cattle at large sign (Div 4)
Sign maintenance- Fix checkerboard sign near Bonertz bridge (Div 1)
Yard maintenance-Clean-up/organization in PW yard and Quonset

FINANCIAL IMPLICATIONS:

None

PUBLIC WORKS REPORT SCHEDULE "A"

SHOP/FLEET OPERATIONAL REPORT	
PREPARED BY: Brett Ackerman	**DATE: February 3, 2026**
DEPARTMENT: PUBLIC WORKS	**ATTACHMENTS: N/A**

SHOP/FLEET OPERATIONS SUMMARY: January 19, 2026 – February 1, 2026

Graders

Unit # 071 (160) – Multiple leaks, transmission line, ORB on sense line, transmission rear cover plate, filter housing O-ring, turbo drain hose gasket. New cab filters.
Unit # 057 (160) – Tighten fender mount hardware. Check and adjust circle shims.
Unit # 065 (160) – Lube-Oil-Filter. Fluid samples taken. R&R 2-lights.
Unit # 061 (160) – Field service, blow out radiator.
Unit # 070 (160) – Hydraulic leak on AWD motor, R&R. Circle shims and wear strips adjusted. Replace burned out LED work lights. R&R grease fittings that would not take grease. Install new cutting edges.
Unit # 075 (150) – Radio service, intermittent signal. Replaced Webasto timer. Installed new cutting edges.

Heavy Trucks/Trailers/Equipment

Unit # 421 (plow) – Dash cam remount.
Unit # 418 (plow) – Test and replace batteries.
Unit # 021 (trailer) – CVIP. Brakes and lighting replaced as required.
Unit # 038 (forklift) – R&R heater hoses and gas support strut under hood.

Light Duty and Light Trailers

Unit # 415 (F-450) – Replaced block heater cord. Installed steering damper strut and stabilizer bar link. R&R brake hardware and slide boots. R&R rear shocks. R&R leaking front axle seals.
Unit # 510 (Chev 1500) – Lube-Oil-Filter. Install new all-season tires.
Unit # 494 (Chev 2500) – Road test for steering wobble, replaced pitman arm assembly, center link and added steering stabilizer strut. R&R tires as tread separation anticipated.
Unit # 505 (Chev 2500) – Lube-Oil-Filter, axle/differential service. Tire rotation. R&R slip tank hose.

EVENTS

Overhead crane, vehicle hoist, and picker truck NDT and mechanical inspections completed by Kova Engineering and Elevated Crane Service.

M.D. OF PINCHER CREEK NO. 9

UTILITIES & INFRASTRUCTURE REPORT

SUMMARY OF MAJOR UPDATES JAN. 21st – FEB. 3rd

GENERAL PROJECTS

- 2026 Budget approved for Oldman Reservoir Intake project
- Project invoice processing 90% complete for all 2025 projects with exception of Oldman Reservoir Intake project (moved to 2026)

LARGE (PRE-2026) PROJECTS

- Potassium Permanganate Treatment for VIS intakes ordered, 10-14 weeks delivery.
    - Scoping building options.
    - Reviewing safe handling protocols and procedures.
- Events Board install finalized along with training.

LARGE 2026 IMPLEMENTATION PROJECTS

- Began kicking off preliminary work required for Lundbreck Wastewater Line rehabilitation.
- Kicked off design work for BF 71542 Waldron Flats and BF 76203 West End Maycroft.

LARGE 2027+ IMPLEMENTATION PROJECTS

- No major updates.

STUDIES & PLANNING WORK

- Transportation Master Plan: Comments discussed on proposed revised road classifications, reviewing alternate options prior to finalization.
- Cridland Dam: Final spillway (hydrotechnical) report and geotechnical report presented to Council for information.

Operations Updates

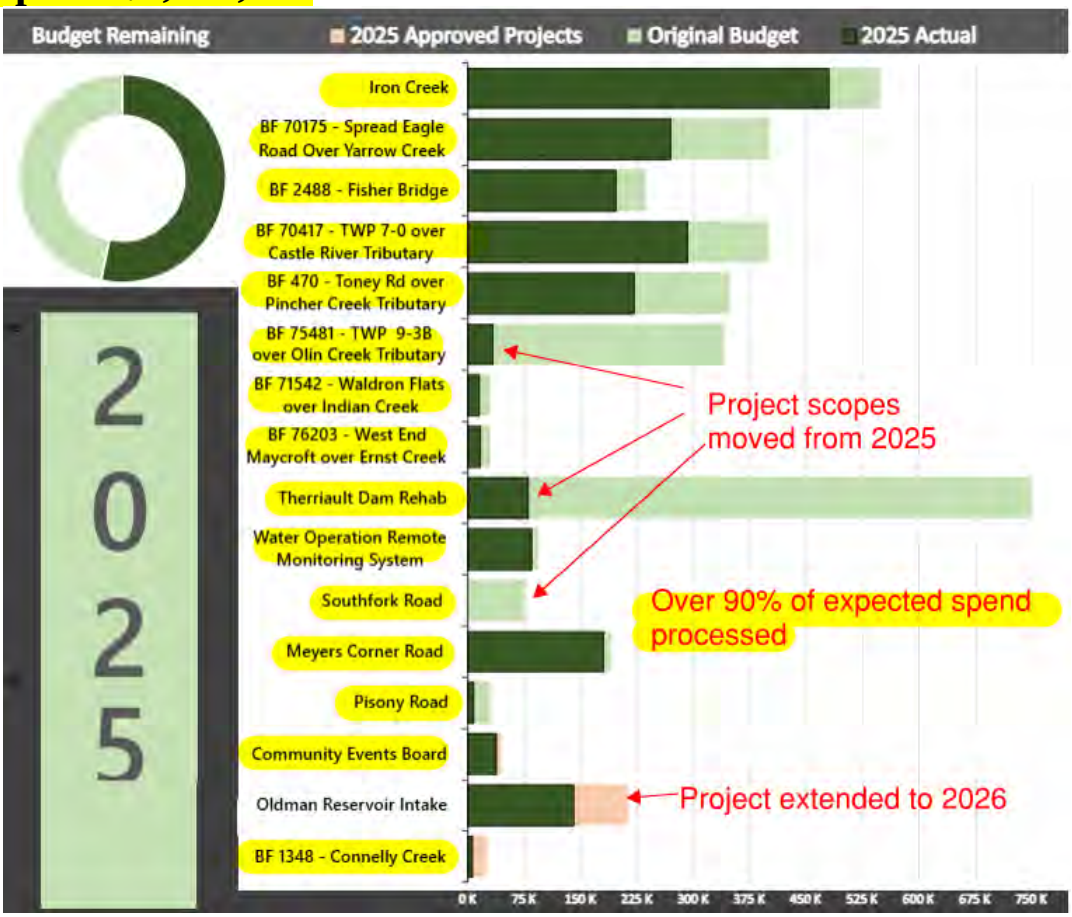
- 2025 Implementation Report complete Jan. 14th. Major conclusions summarized.
- Standpipes calibrated to new pricing. Working to come up with a solution regarding PC standpipe getting stuck on.
- Planning for Lundbreck reservoir access later in the year.
- Completed site tour of confined and restricted spacing, updating signage and documentation.
- Changed all major access keys.
- Annual crane inspections complete.
- Fort Macleod MoU for backup under final steps, orientation planend for Feb. 5th.
- Navigating Circular Materials audit of Eco Center tickets and contradictions regarding potential lack of paper recycling
    - CNPCL has indicated they are working with E-360 on restarting paper acceptance.
- Completed repair & safety projects at Lundbreck Grader shop (snow stops and garage door)
- Completed review of substandard bridge loading signage deficiencies.

General Projects Budget Update

2026 Approved Budget: $3,226,000 ~~$3,111,000.~~ Jan 19th Spent: $0

Graphic under development

2025 Approved Budget: $3,862,000. Feb. 3rd Spent: $2,059,284 ~~Jan 19th Spent: $2,029,909~~



Large Ongoing Projects (Pre-2026 Construction Start)

Oldman Reservoir Water Intake Low Level Project

- $1.68M grant application finalized Jan 30th, 2024
  - Approval received for $1.8M project, covering up to 75% of costs
- DFPP (Drought and Flood Protection Program) grant application approved, topping up Capital Project and covering 70% of costs for a Drought Projects Assessment
- Potassium Permanganate treatment setup order placed, scoping install location/building. Attempting to arrange site tour to assess required safety & operational protocols.
- Additional budget request of $115,000 approved by Council Jan. 20th

Watercourse Crossing Inspection & Remediation Project – 100% Grant funded

- Funding agreement signed Mar. 28th, 2023 for $1.55M
  - Extension received to March 31st, 2027
- Status report 5 complete for up to Dec. 31st

Bridge File 75481 – TWN RD 93B over Olin Creek Trib., SW-23-009-01 W5M

1.5m x 24m L culvert with high deflection and corrosion. Replace with two (2) 1.2m x 36m L CSPs

- Tender closed Nov. 4th. Ten (10) bids received. Awarded to low bidder (Vitae Environmental Ltd.) for **$277,910** **(Eng. Est. $299,357)**
- Preliminary engineering complete Oct. 11th. STIP unsuccessful
- Council approved Mar. 31st, 2026 construction completion date at Sep. 23rd meeting
- Revised legal plan received Oct. 6th. Working to closeout alternate land plan with landowner prior to mobilization (road ROW swap)
  - Surveyor has finalized plan and land agent has signed new package with landowner, executed and returned
- Contractor has initiated contact with MD regarding work proceeding. Working through deliverables, major revisions required on TAS

Meyers Corner Road Culvert Replacement

Replace failed 900mm culvert via boring method with 1.37m x 35m welded pipe

- Work substantially complete. Temp. fence to be removed in Spring to allow seed to take.
- UROW and road plan registration survey complete, sent to land titles.

Community Events Board, Admin Building

Single sided electric community events board on Admin building to advertise current events and upcoming meetings

- Project complete.
- Training held Jan. 29th, 2026.

Bridge File 70175 – Yarrow Creek Bridge Rehabilitation, NW-22-003-030 W4M

Perform a pile splice repair on two piles in the west abutment, replace the east pile cap, place fill and riprap at the west headslope, minor wheel guard repairs & repairs to timber span, channel realignment, and west abutment riprap work

- UROW and road plan registration survey complete, sent to land titles.
- Project complete. Seeding has not taken significantly, to be reviewed in Spring.

WCR #1: Iron Creek under Tapay (Carbondale) Road, LSD SE-15-006-03 W5M

Install new 4.7m x 2m x 15m L corrugated steel box culvert to remediate fish passage concerns on Iron Creek under the WCR program (100% funded)

- Project complete.
- UROW registration survey complete, sent to land titles.

Bridge File 70417 – TWN RD 70 over Castle River Trib., SE-05-007-01 W5M

6.1m clear span bridge with extensive rot and voids in piles and pile caps. Replace with two (2) 2m x 27m L CSPs

- Project complete.
- UROW and road plan registration survey complete, sent to land titles.

Bridge File 00470 – Toney Rd over Pincher Creek Trib., SE-02-006-01 W5M

1.6m x 43m L culvert with significant perforations and minor deflections. Install Steel Wall Pipe Liner (SWPL)

- Project complete.
- Road plan registration survey complete, sent to land titles.

Large Projects Planned for 2026 Implementation

Lundbreck Wastewater Main Rehabilitation between Railway/Park St.

2021 inspection and subsequent wastewater study determined MH 5 to 6 is aggregate material and a good candidate for trenchless rehabilitation. Work required to install Cured in Place Pipe (CIPP).

- Scoping underway.

WCR #3: Connelly Creek under Connelly Rd (BF 1348), LSD SW-03-008-02 W5M

Replace or design a maintenance solution for the 3m x 49m L (5.6m cover) structural plate corrugated steel pipe (SPCSP) and remediate fish passage under the WCR Program.

- STIP application submitted Nov. 24th.
- Received funder guidance/approval to proceed with prelim eng. under WCR program.
- Council approval received Mar. 11th, 2025.
- Preliminary engineering kicked off Apr. 3rd, awaiting completion.
- Survey complete Apr. 25th.

Bridge File 71542 – Waldron Flats over Indian Creek, SE-07-010-01 W5M

2m x 2.2m x 32m L culvert with isolated perforations in the roof of 3 rings and 1 ring on the foot. Replace with a 2.7m diameter x 48m long culvert.

- STIP application submitted Nov. 24th.
- Kicked off Design work Jan. 28th.

Bridge File 76203 – West End Maycroft over Ernst Creek, NW-26-010-03 W5M

2.5m x 1.8m x 20m L culvert with 3 cracked rings in sidewall with 85mm remaining. Deflection and corrosion also present. Replace with two (2) 1.8m diameter x 28m L culverts.

- STIP application submitted Nov. 24th.
- Kicked off Design work Jan. 28th.

Pisony Road over Cow Creek Tributary Culvert, LSD NE-01-009-03 W5M

1m x 14m L culvert failing on dead end road. Dual 1m x 13m L culverts are anticipated solution.

- Preliminary engineering and basic aquatic assessment kicked off Jan. 31st, 2025 with Roseke. Reduced prelim. eng. scope compared to Bridge Files.
- Preliminary engineering assessment received Jun. 16th. Under review.
- Anticipate Fall 2026 construction.

Large Projects Planned for 2027 Implementation

Gladstone Rd. over Mill Creek Trib., LSD SE-01-006-02 W5M

0.6m x 17m L culvert failing and causing significant scour and erosion downstream. Preliminary engineering required to determine replacement requirements.

- Located on an unmapped Class A waterbody. Fish passage not expected to be required due to downstream barriers.
- Revising proposal based on reduced scope of DFO requirements.
- Potential for project to get accelerated to 2026.

Southfork Hill Road

Emergent investigatory and repair work for the Southfork Hill slide issues

- STIP LMI resubmission complete Nov. 27th, 2025.
- Geotechnical scope awarded and complete. Final geotech. report received Dec 9th.
  - Initial STIP application submitted Nov. 28th, 2024 – Unsuccessful.
- Project paused pending further deterioration or future grant opportunities. Design work pending STIP decision.

Therriault Dam – Rehabilitation Work

Geotechnical and Hydrogeology study complete in 2023. 2024 preliminary engineering determined most economically viable solution to address undersized spillway/overtop potential. 2025 work included detailed design work to rehabilitate spillway. 2026 work set to begin after DFPP funding decision and (if successful) shall include a lifecycle assessment on how to best use water source during drought.

- DFPP application submitted Nov. 27th. Anticipate response Q1 2026.
- Spillway design complete, regulatory submissions pending grant timing.
- Significant amount of history related to Therriault Dam reviewed during application process. Disaster Recovery Program (DRP) accessed in 1995, 2002, 2005, 2010, and 2014 related to Therriault Dam and spillway rebuilds. About $600,000 spend (inflation adjusted) on flood recovery since 1994. A flood was also noted in 2006.
- Additional design work pending grant decision.

Bridge File 73608 – Twin Butte Rd. Over Waterton River, NW-34-003-10 W4M W5M

78m L steel truss bridge with isolated pile and stringers in fair-poor condition. Preliminary engineering required to determine extend of recommend repair work and costs.

- MD to reach out to Cardston upon conclusion of preliminary engineering to discuss potential for cost sharing.

Bridge File 673 – Skyline Rd. Over Olin Creek, SE-31-009-01 W5M

2m x 2.2m x 54m L culvert (7m cover) with roof/sidewall deflection and cracked seems. Preliminary engineering required to determine feasibility of maintenance vs. replacement.

- Fish passage anticipated to be a requirement at this site. Current site likely inhibits.

Beaver Creek Rd. over Beaver Creek Trib., LSD NE and SE-33-008-28 W4M

Two separate failing culverts along Beaver Creek Rd. One 0.9m x 28m L (5m cover) has failed section in middle with cavity in ditch. One 0.75m x 30m L (9-10m cover) silted off/failed at downstream end. Preliminary engineering required to determine appropriate replacement/boring feasibility.

- Maintenance not anticipated to be feasible. Assessment of options required.

Studies and Planning Work

Regional Facilities Condition Assessment & Master Plan

- Grant application submitted Nov. 25th for Alberta Community Partnership – Intermunicipal Collaboration Grant with Cowley support.
- Awaiting funding decision.

Regional Drought Strategic Implementation Strategy & Raw Water Storage Project

- Grant received (up to 70%) for a Drought Projects Assessment under DFPP.
- Grant application for 3 month (25-year) forecasted volumes received from AEPA.
  - $3.4M project, up to 75% of costs.
  - ATEC has confirmed stacking of AMMWP Raw Water Storage grant funds acceptable for the Drought Projects Assessment (Phase 2).
- Forecasted demand and water requirement scenarios presented to Council June 10th.
- Draft water resource assessment received Aug. 8th, comments sent back Aug. 12th.
  - Assessment sent to MD for final review Nov 10th. Review complete Nov. 30th, minor comments sent back prior to finalization.
- Received draft land siting and design criteria to approach stakeholders. Three (3) of three (3) initially planned stakeholders approached. Discussions ongoing. Approaching additional stakeholders.

Transportation Master Plan

$200,000 grant received from ACP to complete a Transportation Master Plan, consisting of a paved, gravel road condition assessment, culvert (non Bridge File) condition assessment, gravel pit analysis, airport runway assessment

- Awarded August, 2024.
- Gravel pit report complete.
- Maycroft Road draft prelim. assessment received May 26th.
- Draft TMP report received Jul. 21st, significant amount of comments on new sections of report. Internal comments to be sent back to MPE prior to Sep. 9th Council meeting
  - Received comments back and path forward plan Sep. 10th. Discussion held with MPE Oct. 10th. Comments incorporated and sent back for MD review Dec. 16th. MD review and additional comments sent back Dec. 19th.
- Draft revised road classification sent to MD for review, internal discussions ongoing.
- Anticipating final report by February.

Cridland Dam

Geotechnical work as recommended in 2021 Dam Safety Review due to observed seepage and unknown soil properties

- Site visit complete Apr. 1st, costed plan received Apr. 25th.
- Draft report for spillway discussed Jul. 22nd. Revised draft received Sep 25th, comments sent back for review Oct 8th. Final copy received Dec. 11th. Geotechnical report discussed Jul. 30th. Final copy received Aug. 27th.
  - Initial results indicate spillway requires some (relatively minor) earthworks and spillway culverts are undersized.
  - Confirmed observed dam face seepage coming from reservoir. Dam face does not meet long term Factor of Safety (FoS) requirements.
    - At minimum, recommendation is quarterly monitoring of seepage
- Reports presented to Council for information Feb. 10th.

Miscellaneous

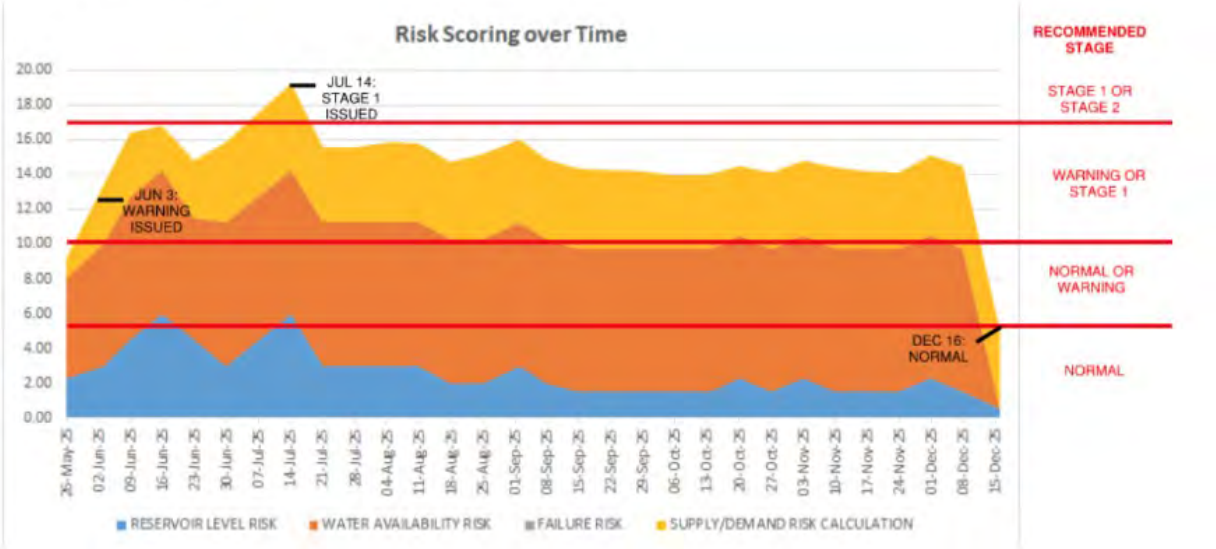
- Airport pavement assessment to be kicked off.
- 10 yr. bridge study update kicked off Jan. 27th, 2025 with Roseke. Data entry complete.
  - Draft received Dec. 18th, 2025. Reviewed, final copy expected by Council.

Operations Updates

WATER SHORTAGE RESPONSE PLAN

Implemented Stage: Normal (Restrictions ended Dec. 13th)

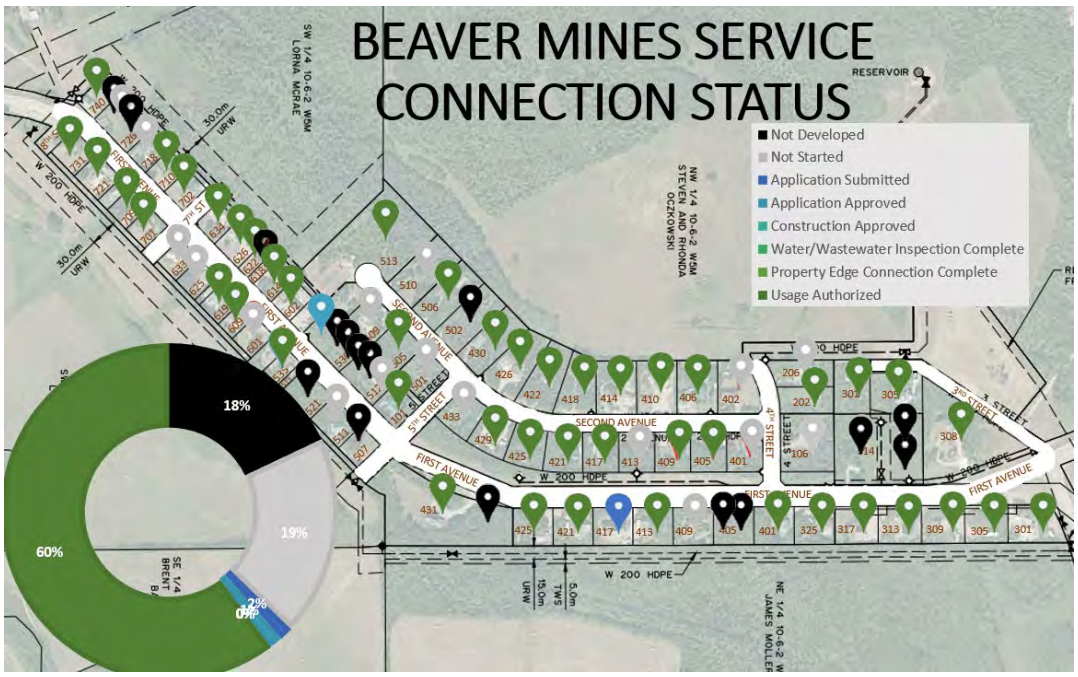
- Monitoring risk scoring once/month.
- 2025 Implementation Report complete Jan 14th



- Major conclusions:
  - The new tool gave appropriate heads up and recommendations regarding restrictions, but some minor tweaks are recommended during the next modification.
  - Further pump testing of new VIS' is necessary during the next low level event.

Beaver Mines Lot Servicing

- 49/66 developed applications received, 48 approved, 47 connected (71%)
  - Fifteen (15) undeveloped fully serviced locations, One (1) exempt with conditions



General Water Operations Updates Feb. 3rd, 2026:

- Reviewing plan to access Lundbreck reservoir for minor repair work.
- Reviewing handling and PPE requirements for Potassium Permanganate to ensure safe design.
- Standpipes calibrated for new pricing. PC Standpipe experienced a failure event resulting in upper fill getting stuck on. Working on more permanent solution along with solutions to deal with chronic ice buildup.
- Reviewing expiring water plant approval reapplication. Operations Manual redrafted, awaiting direction from AEPA on Water Source Assessment requirements.
- 2026 annual reports complete.
- Inquiring with various companies regarding moving Make Up Air (MUA) unit in Lift Station.
- Performing review and signage update of all restricted and confined spaces.
- Annual crane inspections complete, reports received.
- Keys changed for all water assets.
- Contravention submitted to AEPA Oct. 28th for non-compliance due to operating without a Level II Water Treatment Operator during vacation/illness.
    - Met with Fort Macleod Nov. 24th, potential for agreement. Sent draft Memorandum of Understanding (MoU) Nov. 28th. MoU ready for signature pending minor internal review by Fort Macleod
    - Fort Macleod remote monitoring setup, planning orientation day along with agreement finalization Feb 5th
    - Contravention formally ended Jan 19th.
- Letter sent to Cowley Mar 28th detailing various requests and proposed path forward for water assets, licenses, and amended operations contract
    - Regarding transfer of water reservoir and treatment building, indicated next step as *"two councils to determine how the asset valuation will be addressed and make a plan for next steps"*
- Beaver Mines Water/Wastewater Projects
    - Awaiting thaw/rain event to assess BM WWTP infiltration

- Awaiting minor changes to Lift STN Record drawings

General Miscellaneous Operations Update Feb. 3rd, 2026:

- Circular Materials notified regarding EPR reporting non-compliance with Paper. Circular Materials has indicated they have been working to resolve via meeting with CNPCL
  - Meeting held Jan 22nd with Circular Materials. CM indicated that CNPCL stated that paper has not been going into to landfill. We are trying to clarify with CNPCL, unsuccessful in receiving a response to date. CNPCL has indicated they are working with E-360 on restarting paper acceptance.
  - CM is auditing our tickets to Capital Paper/E-360, working to obtain verification from CNPCL
- Waste handling contract expiring
- Snow stops added to Lundbreck Grader shop roof

- Repair work completed on Lundbreck Grader shop garage door due to sagging roof

- Reviewed substandard bridge loading. Provided direction to add updates to four (4) signs to match required postings

Recommendation:
That the Utilities & Infrastructure report for Jan 21st – Feb. 3rd, 2026 is received as information.

Prepared by: David Desabrais Date: Feb. 3rd, 2026

Council Meeting Date: Feb. 10th, 2026

Recommendation to Council

TITLE: Cridland Dam – Hydrotechnical and Geotechnical Reports			
PREPARED BY: David Desabrais		**DATE: Jan. 21st, 2026**	
DEPARTMENT: Utilities & Infrastructure			
David Desabrais	26/01/21	**ATTACHMENTS:** **1. Dam History** **2. Final Geotechnical Report** **3. Final Hydrotechnical Report**	
Department Supervisor	**Date**		
APPROVALS:			
David Desabrais	26/01/21	**Roland Milligan**	2026/01/21
Department Director	**Date**	**CAO**	**Date**

RECOMMENDATION:

That Council receive for information the Cridland Geotechnical and Hydrotechnical Reports.

BACKGROUND:

- The MD completed a Dam Safety Review (DSR) in 2002 for five (5) dams as required by provincial and federal regulations.
- Forty (40) recommendations were identified, four (4) of which were "high" priority.
- The two (2) high priority recommendations related to the Cridland Dam were to complete a site specific geotechnical investigation, and to complete a more detailed freeboard and spillway capacity analysis (based on survey), due to the following findings:
  - "The minimum Factor of Safety (FoS) of downstream face of dam may not be adequate"
  - "Overtopping of the dam was observed in 2014 …"

A major events history of the Cridland Dam has been attached (*ATTACHMENT #1)*. The dam was decommissioned for 5-8 years due to historical seepage/slide concerns prior to stabilization measure installations in 2003 (no records available).

2025 Studies

- In May 2025, the MD awarded services to MPE Engineering to complete a Geotechnical Analysis Report and Spillway Capacity Analysis and Report.
- The Geotechnical Report was completed Aug. 27, 2025 (*ATTACHMENT #2*) and the Hyrdrotechnical Dec. 5th, 2025 (*ATTACHMENT #3*)

Recommendation to Council

- **Geotechnical report major conclusions:**
  - Spring observed on downstream abutments of dam are highly likely to be seepage from the dam as opposed to another stream/aquifer - potential for internal erosion over time.
  - The existing embankment does not meet Canadian Dam Association (CDA) long term steady state Factor of Safety (FoS) requirements
    - FoS met for other five (5) design cases including seismic, rapid drawdown, etc.
- **Geotechnical report recommendations:**
  - Until stabilization measures can be implemented, increase inspections to quarterly to ensure no slope stability issues.
  - Lowering Full Supply Level (FSL) to 1362.0 m (6m) would be required to satisfy FoS requirements as designed (*effectively eliminating the dam*).
- **Hydrotechnical report major conclusions:**
  - The Inflow Design Flood (IDF) may be underestimated, as "overtopping" has been observed six (6) times in last 50 years per previous DSRs.
    - *Note: Reported "Overtop" events may have actually been spillway/road overtop events as opposed to dam overtop. Records are unclear.*
  - Spillway vegetation, sloping, and obstructions are reducing capacity during high flow events.
  - Dam may have experienced more severe events than the IDF in the past.
  - Spillway culverts are not sized to pass IDF.
- **Hydrotechnical report major recommendations:**
  - Remove hydraulic obstructions (weir on spillway, trash/beaver rack, and routine debris) which prevent flow blockages and reduce spillway capacity.
  - Routinely manage vegetation to reduce flow resistance.
  - Additional protection:
    - Excavate spillway bed to remove flat section (significant increase in spillway capacity).
    - Upsize (install additional or replace) culvert at upstream end of spillway to reduce chance of access road overtop during IDF.
    - Upsize (install additional or replace) culvert across RR302A (Kerr W) to reduce chance of road overtop during IDF (*Note: this would become a BF sized culvert*).

FINANCIAL IMPLICATIONS:

- No major financial implications at this time.

Cridland Dam History
By: David Desabrais
Date: January 6th, 2026

- Earthfill dam constructed in 1958 by PFRA for supplementing existing creek water during low flow for stockwatering/irrigation. Level controlled by earthcut spillway. Transferred to MD in 1968.
    - Raised in 1975 and 1980 (no records found).
- 1975: Overflow spillway damaged due to excessive flow. Repaired in 1997.
- 1975 to 1980: Embankment raised.
- 1989: Inspection noted seepage on downstream face, among other deficiencies.
- 1993: Inspection noted sliding near 1989 seepage point. Monitoring program put in place
    - Remedial actions included decommissioning the dam (among others).
- 1994: Reservoir drained, filled unexpectedly during 1995 flood event (no overtop). Dam drained again after flood event.
- 1995 to 2003(?): Dam remains drained.
- 2003: Stabilization measures put in place, outlet upgrades complete, Full Supply Level (FSL) lowered.
- 2008 to 2022: Four (4) "overtop" events reported – likely overtops of the spillway, not the dam. Multiple spillway culvert replacement/upsize projects complete.

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Lethbridge, AB T1J 0V1
Phone: 403-329-3442
1-866-329-3442

a division of Englobe

MEMORANDUM

To:	**David Desabrais**	**From:**	**Dylan Postman**
		cc:	**Jeff Hust**
Re:	**Cridland Dam Hydrotechnical Assessment**	**Date:**	**December 5, 2025**
File:	**N/17/70/037.doc**	**Pages:**	**9**

BACKGROUND

The Municipal District of Pincher Creek (MDPC) has retained MPE a division of Englobe (MPE), to carry out geotechnical and hydrotechnical investigations of Cridland Dam and Spillway. As part of this work, MPE reviewed the Dam Safety Review (DSR) prepared by SNC-Lavalin in March 2022. The DSR concluded that the emergency spillway capacity and available freeboard at Cridland Dam were sufficient to safely convey the Inflow Design Flood (IDF). However, the DSR also noted that the dam has experienced overtopping in the past and recommended that a detailed freeboard and spillway capacity analysis, informed by updated survey data, be undertaken to confirm whether the spillway and freeboard meet current design requirements for passing the IDF.

SURVEY

On June 4, 2025, MPE completed a GPS survey of Cridland Dam and Spillway. Based on the collected data, three dam cross sections and eighteen spillway cross sections were developed. Elevations and dimensions of the two spillway culvert crossings were also recorded. The cross sections are provided in the appendices of this memorandum.

SPILLWAY CAPACITY

The spillway's flow capacity was initially assessed using Manning's equation. However, the first 90 m of the spillway could not be reliably analyzed with this method due to the flat slope and the presence of a weir at station 0+050 (see Figure 1).

Figure 1: Grassed Weir at Sta. 0+050 Backing Up Water

To address this, a HEC-RAS model was developed for the upstream portion of the spillway using the surveyed cross sections. Manning's *n* values of 0.027 for the spillway bed and 0.05 for the banks were used, consistent with those applied in the 2022 DSR.

The analysis determined that a reservoir level of 1,368.79 m is required to safely pass the peak IDF flow of 4.53 m^3/s. The minimum freeboard during the IDF is 490 mm, occurring on the right spillway bank at station 0+057. At this location, the maximum flow rate that can be conveyed without overtopping the spillway bank is 21 m^3/s, approximately 4.6 times the IDF. With 400 mm of freeboard on the spillway banks, the maximum allowable flow rate is 7.3 m^3/s.

To assess the influence of surface roughness, an additional model was completed using a Manning's *n* value of 0.045 for the spillway bed to reflect the effect of longer grass cover (approximately 100 mm). This scenario reduced the spillway capacity to 5.5 m^3/s while maintaining 400 mm of freeboard. Grass height, therefore, has a measurable effect on spillway hydraulics, with taller, ungrazed vegetation and brush producing higher resistance and reducing conveyance. Upstream of the barbed wire fence, where cattle do not graze, shrubbery was noted and grass was observed to be longer than within the active spillway channel (see Figure 2), which could locally reduce hydraulic capacity.

Figure 2: Vegetation Grown in Spillway Flat Section

The results indicate that the spillway appears to have sufficient hydraulic capacity to pass the current IDF under typical conditions. However, vegetation growth, uneven channel bed and surface roughness can reduce the spillway's effective capacity. Vegetation should be managed as part of ongoing maintenance to retain the spillway's capacity.

SPILLWAY CAPACITY

Despite the model indicating adequate capacity, site observations identified potential flow-limiting obstructions at the spillway inlet. Figure 3 shows a barbed-wire fence to contain cattle and metal blades (likely a make-shift trash rack) installed across the mouth of the spillway. These features could trap floating debris and significantly reduce the spillway's discharge capacity. Additionally, shrubbery and long grass observed in the flat upstream section of the spillway further reduce its capacity.

Figure 3: Flow Obstructions at Spillway Inlet

Such obstructions could explain past overtopping events despite the modelled capacity being adequate to handle the IDF. Hydraulic performance may be improved by:

- Removing fences and obstructions at the spillway entrance to prevent debris accumulation,
- Clearing vegetation and regrading portions of the spillway bed to improve flow conveyance, and
- Maintaining a clear channel to reduce flow restrictions during high inflows.

CAPACITY OF CULVERT CROSSINGS

Two culvert crossings exist along the spillway and were analyzed in Culvert Master:

- At station 0+234, a 1,200 mm culvert beneath the dam access road, and
- At the downstream end across Range Road 302A, one 900 mm and one 750 mm culvert.

Figure 4: Upstream Dam Access Road Culvert Crossing (Sta. 0+234)

The upstream culvert crossing shown in Figure 2 is likely to overtop during an IDF event as the maximum flow rate with no freeboard is approximately 4.0 m^3/s. However, overtopping of this crossing will not affect the spill capacity of the reservoir due to its lower elevation.

Figure 5: Downstream Range Road 302A Culvert Crossing

The downstream Range Road 302A crossing has a maximum capacity of 1.96 m^3/s with 400 mm freeboard and 2.65 m^3/s at the top of the road. As this is only 58% of the peak IDF, this crossing will likely overtop during the design event. Rating curves for both culverts are included in the appendices.

DAM FREEBOARD

Freeboard requirements were calculated using the wind speed return events from Alberta Transportation (AT, 2007) for station 3035206 (Pincher Creek), which has the largest calculated wind events of the nearby wind stations. No wind reduction factor was applied for design wind direction, resulting in conservative wave heights. Reservoir depth was estimated by dividing the reservoir's storage at FSL by the surface area at FSL; values for the storage volume and surface area were taken from the 2022 DSR. The top of dam elevation used was the lowest crest elevation of the three dam cross sections surveyed by MPE.

For a 'Low' consequence dam such as Cridland Dam, the freeboard must be high enough to protect against the 1:1,000 year 1-hr wind event at FSL and the 1:100 year 1-hr wind event during the IDF. The calculated freeboard requirements for Cridland Dam are summarised in Table 1 below. Sample freeboard calculations can be found at the end of this memorandum.

Table 1: Required Freeboard for Cridland Dam

Scenario	Reservoir Elevation	Wave Run-up + Set-up	Total Elevation	Top of Dam	Remaining Freeboard
	m	m	m	m	m
FSL w/ 1:1000 wind	1368.00	0.56	1368.56	1369.87	1.31
IDF w/ 1:100 wind	1368.79	0.51	1369.30	1369.87	0.57

Based on these calculations, Cridland Dam has sufficient freeboard to protect against wave action during normal operations and during passage of the IDF.

HYDROTECHNICAL CONCLUSION

According to the 2022 DSR, Cridland Dam has overtopped six times in the past 50 years – in 1975, 1995, 2008, 2009, 2010, and 2014. However, in the 1999 Cridland Dam DSR, it indicated the reservoir filled and spilled but did not overtop in 1995. Therefore, there could be some confusion on whether the dam over topped or it was primarily spillway discharge.

All events but the 1975 flood occurred after the dam was raised to its current elevation in 1980 according to the 1999 DSR. In 1977 repairs to the spillway channel were completed repairing damage from the 1975 flood. Based on the findings of this memorandum, the dam currently has 0.58 m of excess freeboard beyond what is required to protect against wave action during the IDF spill event. This presents a contradiction, as overtopping should not have occurred under these conditions.

There are several possible explanations for this discrepancy:

- **IDF Underestimation:** The 2022 DSR estimated that the 2014 flood event, which overtopped the dam, had a return period between 5 and 50 years, lower than the 1:100-year IDF. Since overtopping has occurred six times in the past 50 years, it is unlikely that every event exceeded the IDF, indicating that the design flood is possibly underestimated. An underestimated IDF could result from underestimating one or more variables used in the calculations, such as the design rainfall volume, the catchment area of the reservoir, and the percentage of rainfall that flows into the reservoir.

- **Spillway Obstructions:** Metal blades observed at the spillway entrance during inspection were assumed to be a trash rack. It is unclear when these were installed, however it would reduce the spillway's hydraulic capacity and raise reservoir levels during high flows by trapping debris. Additionally, long grass and brush growth in the 90 m flat upper section of the spillway further increases roughness and resistance, lowering the spillway's discharge capacity.

  The 1999 DSR noted, that in 1989 there was timber debris accumulated at the spillway inlet with heavy vegetation in the channel. This may have reduced the capacity of the spillway during the 1995 event where the spillway experienced erosion damage. According to the 2010 DSR, the spillway was then widened from 5m to 10m in 2003 to reduce flow velocity and increase spill capacity. As-built record drawings of the 2003 spillway upgrades were not located in the files.

  While these factors alone may not fully explain the repeated overtopping events, the overgrown vegetation, trash rack and build up of debris probably contributed to decreased spill capacity during flood conditions.

- **Larger-than-estimated flood events:** It is also possible that one or more overtopping events were caused by floods exceeding the current IDF estimate.

Hydraulic modeling conducted for this memorandum shows that the current spillway capacity at a reservoir elevation of 1369.36 m (the maximum level that maintains freeboard) is approximately 20 m^3/s. To cause the dam to overtop, reservoir inflows would need to exceed this rate.

The spillway capacity can be enhanced by modifying the existing spillway structure. Removing the weir at station 0+050 would reduce the reservoir elevation needed to pass the IDF by approximately 250 mm and increase the maximum spillway capacity to 30.5 m^3/s.

A larger increase in capacity could be achieved by excavating the flat 90 m section at the start of the spillway and increasing the bed slope to 1.24% as shown in the attached conceptual drawings. This work, along with clearing brush along the spillway and removing the fence and trash rack, would reduce flow restrictions and enhance hydraulic efficiency. With these modifications, the spillway capacity would increase to approximately 70 m^3/s with 400 mm of freeboard. Such upgrades would likely mitigate the overtopping issue without the need for further hydrological study.

Neither culvert crossing downstream of the spillway crest limits the spillway's capacity to pass the IDF due to their lower elevations, however, overtopping the existing roads is expected. The upstream culvert can pass approximately 4.0 m^3/s before overtopping. To improve freeboard, an additional 600 mm culvert could be installed, or the structure could be replaced with a 2.0 × 1.8 m pipe arch to pass the IDF. The downstream culvert cannot pass the IDF without overtopping. While some attenuation may occur in the natural terrain upstream, this has not been quantified. Passing the IDF through the downstream crossing would require either installing two additional 900 mm culverts, one 1,500 mm culvert, or replacing the current culverts with two 1,500 mm culverts.

RECOMMENDATIONS

To lower the risk of future overtopping at Cridland Dam, it is recommended that MDPC implement the following measures:

- **Remove Hydraulic Obstructions:** Eliminate the weir at Sta. 0+050, remove the barbed wire fence and trash rack at the spillway entrance, and regularly remove debris to prevent flow blockages.
- **Vegetation Management:** To reduce flow resistance and improve hydraulic efficiency, routinely cut grass short in the spillway channel and clear brush along the 90 m flat section.

These actions could be sufficient to prevent future overtopping if past events were primarily due to spillway obstructions.

If MDPC aims to increase the confidence and safety margin of the spillway capacity, it is advisable to excavate the spillway bed slope to remove the flat 90 m section as shown in the appended conceptual drawings. This would create a continuous slope of approximately 1.24%, maintain the spillway crest elevation, and increase the spillway capacity to about 70 m^3/s with 400 mm freeboard, which greatly exceeds the IDF estimate in the 2022 DSR.

If MDPC prefers to prevent overtopping of the existing roads during an IDF event, additional culvert recommendations are as follows:

- At the upstream culvert crossing, install an additional 600 mm culvert or replace the existing crossing with a 2.0 × 1.8 m arch culvert.

- At the downstream culvert crossing, enhance crossing capacity by installing one of the following: two additional 900 mm culverts, one additional 1,500 mm culvert, or replace the existing culverts with two new 1,500 mm culverts.

Respectfully submitted,

MPE a division of Englobe

Prepared by:
Timothy Brooks, E.I.T.
Water Resource Engineer

PROFESSIONAL ENGINEER ALBERTA
DYLAN L. POSTMAN
ID 226104

December 5, 2025

PERMIT TO PRACTICE
MPE, a division of Englobe Corp.
Signature
APEGA ID 106756
Date December 5, 2025
PERMIT NUMBER: P 7841
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Reviewed by:
Dylan Postman, P.Eng.
Project Manager

Attachment: Cridland Dam and Spillway Drawings, HEC-RAS Model Outputs, Sample Freeboard Calculations, Culvert Rating Curves

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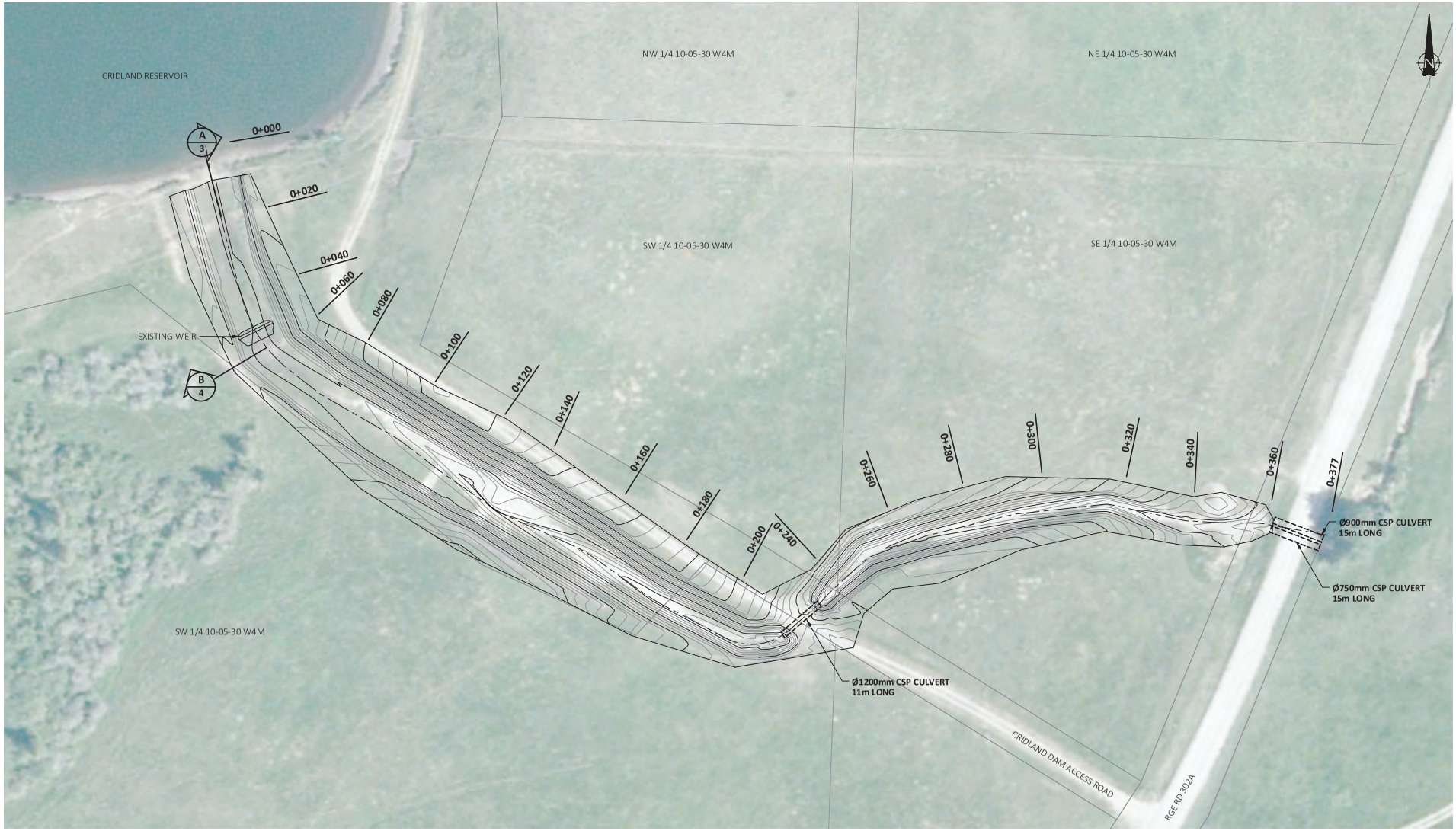
MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
SITE PLAN

SCALE:	1:1000	DATE:	JULY 2025	JOB:	1770-037-00	FIGURE:	1



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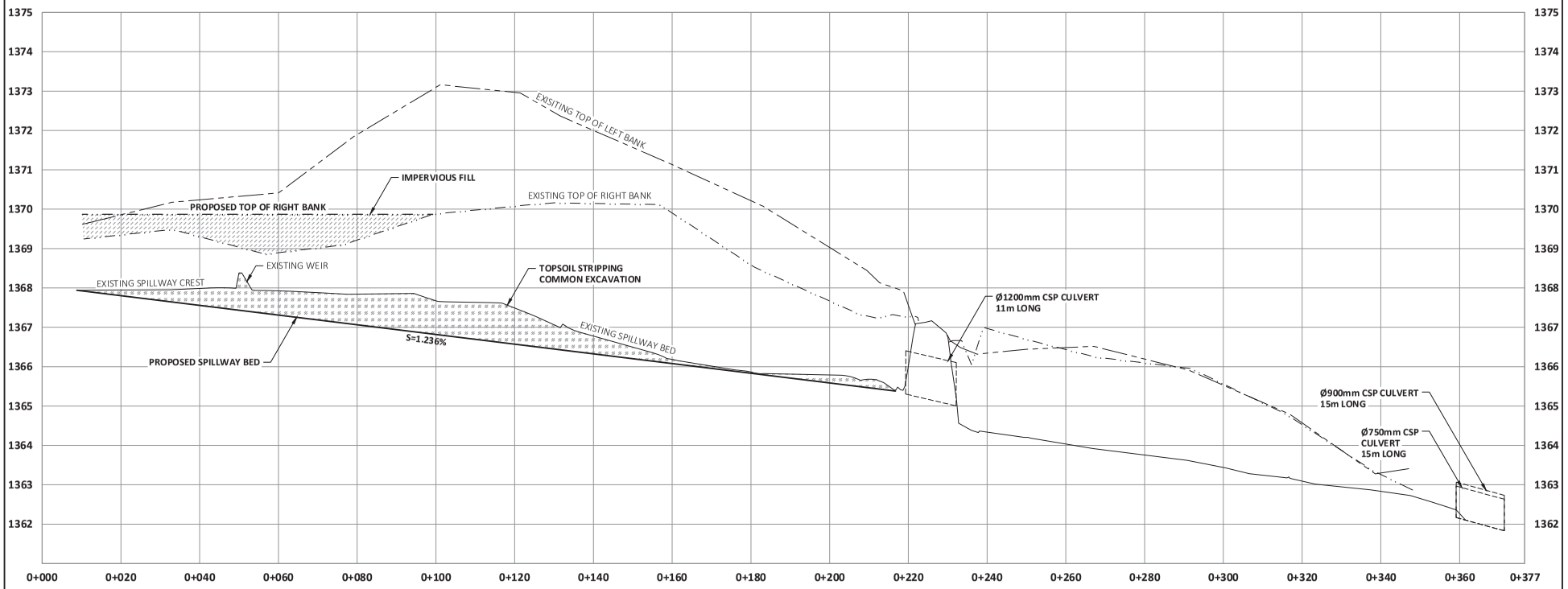
MUNICIPAL DISTRICT OF PINCHER CREEK			
CRIDLAND DAM HYDROLOGY ASSESSMENT EXISTING SPILLWAY PLAN			
SCALE: 1:1000	DATE: JULY 2025	JOB: 1770-037-00	FIGURE: 2



A
2

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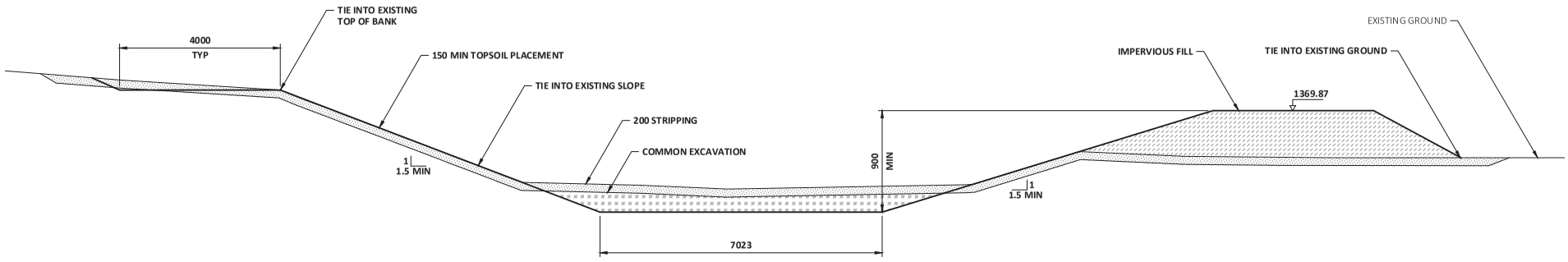
MUNICIPAL DISTRICT OF PINCHER CREEK

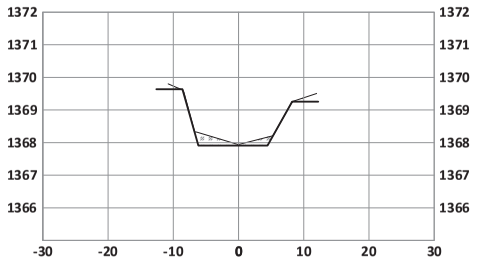
CRIDLAND DAM HYDROLOGY ASSESSMENT
SPILLWAY CENTERLINE PROFILE

SCALE: 1:1000	DATE: JULY 2025	JOB: 1770-037-00	FIGURE: 3



B
2

a division of Englobe		MUNICIPAL DISTRICT OF PINCHER CREEK CRIDLAND DAM HYDROLOGY ASSESSMENT PROPOSED SPILLWAY REHABILITATION TYPICAL SECTION	
SCALE: 1:100	DATE: JULY 2025	JOB: 1770-037-00	FIGURE: 4



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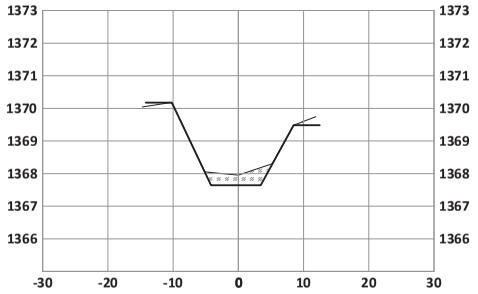

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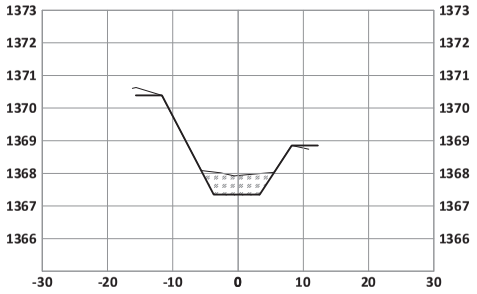

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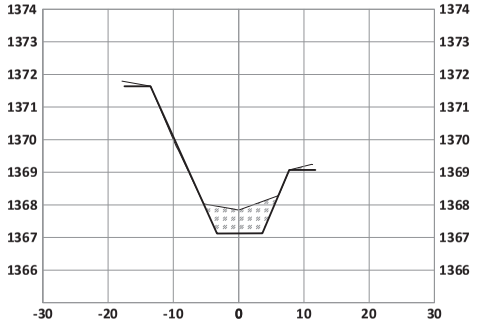

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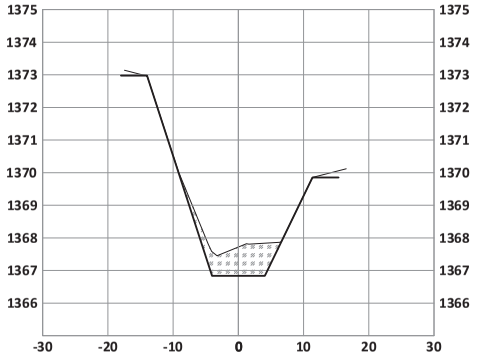

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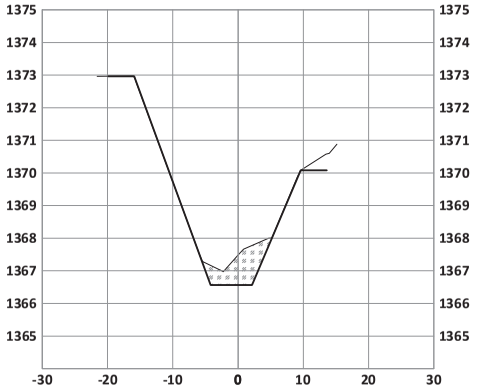

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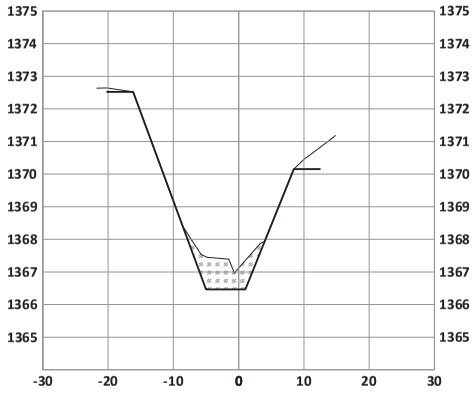
MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
PROPOSED SPILLWAY REHABILITATION
SECTIONS 1 OF 2

SCALE: 1:750	DATE: JULY 2025	JOB: 1770-037-00	FIGURE: 5



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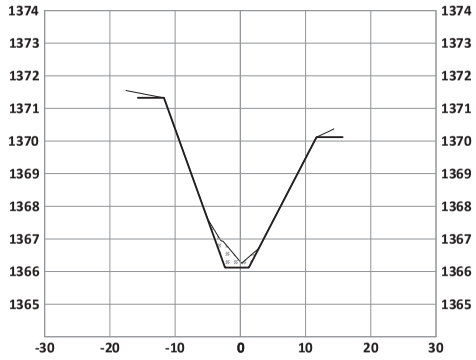

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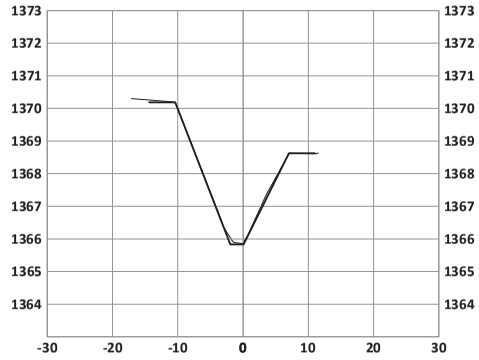

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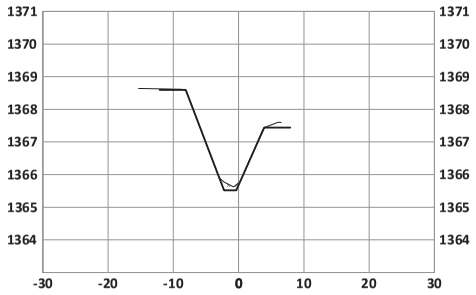

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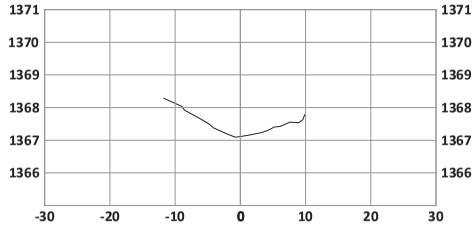

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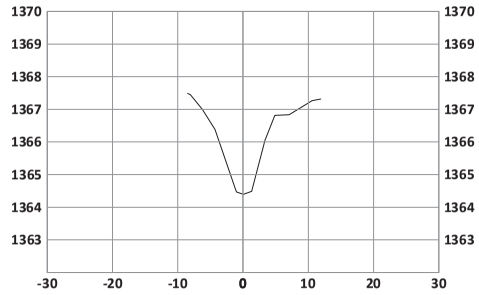

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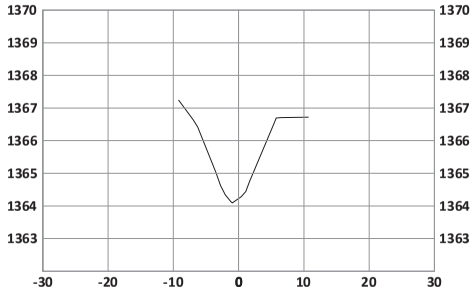
MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
PROPOSED SPILLWAY REHABILITATION
SECTIONS 2 OF 2

SCALE: 1:750	DATE: JULY 2025	JOB: 1770-037-00	FIGURE: 6



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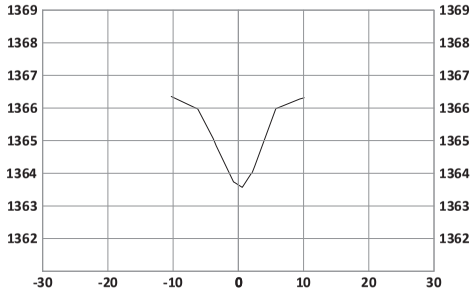

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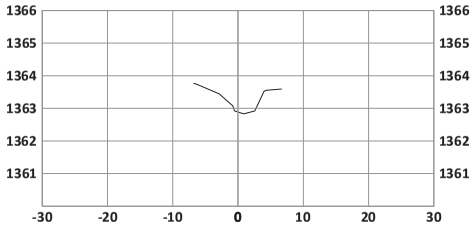

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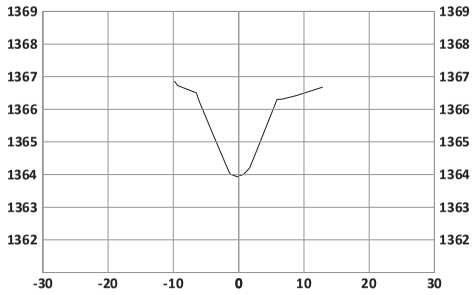

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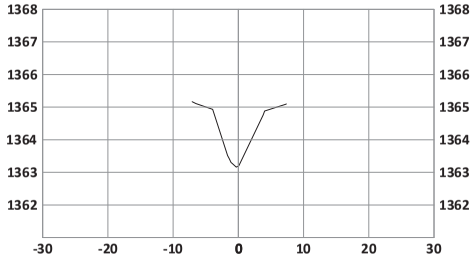

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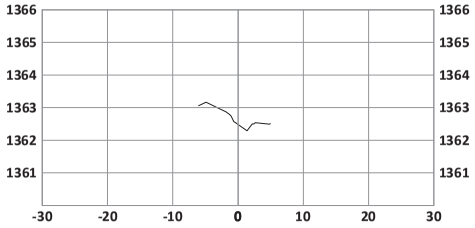

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MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
PROPOSED SPILLWAY REHABILITATION
SECTIONS X OF X

SCALE: 1:750	DATE: JULY 2025	JOB: 1770-037-00	FIGURE: 7

BOREHOLE LOCATION (NAD83 UTM12 COORDINATES)			
BH ID	NORTHING	EASTING	ELEVATION
25BH001	5473057.1	285040.5	1369.9
25BH002	5473080.6	285020.4	1369.8
25BH003	5473103.6	285002.1	1369.9

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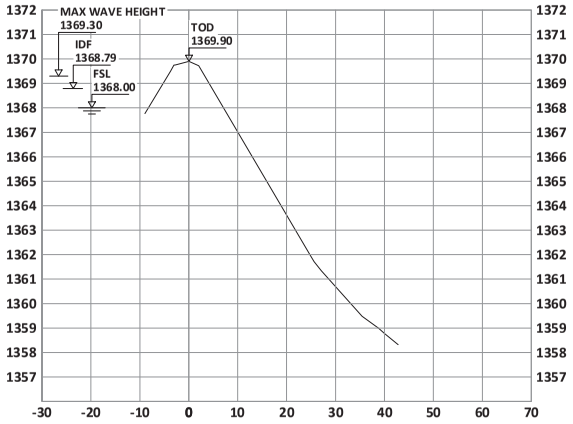
CRIDLAND DAM HYDROLOGY ASSESSMENT
CRIDLAND DAM PLAN

SCALE:	1:500	DATE:	JULY 2025	JOB:	1770-037-00	FIGURE:	8



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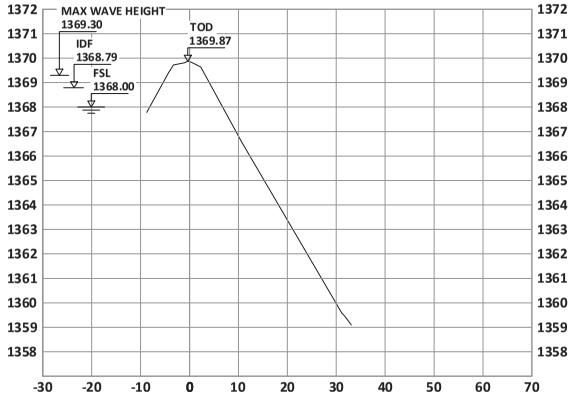

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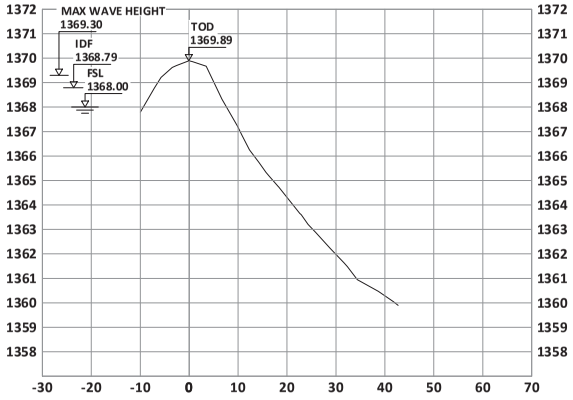

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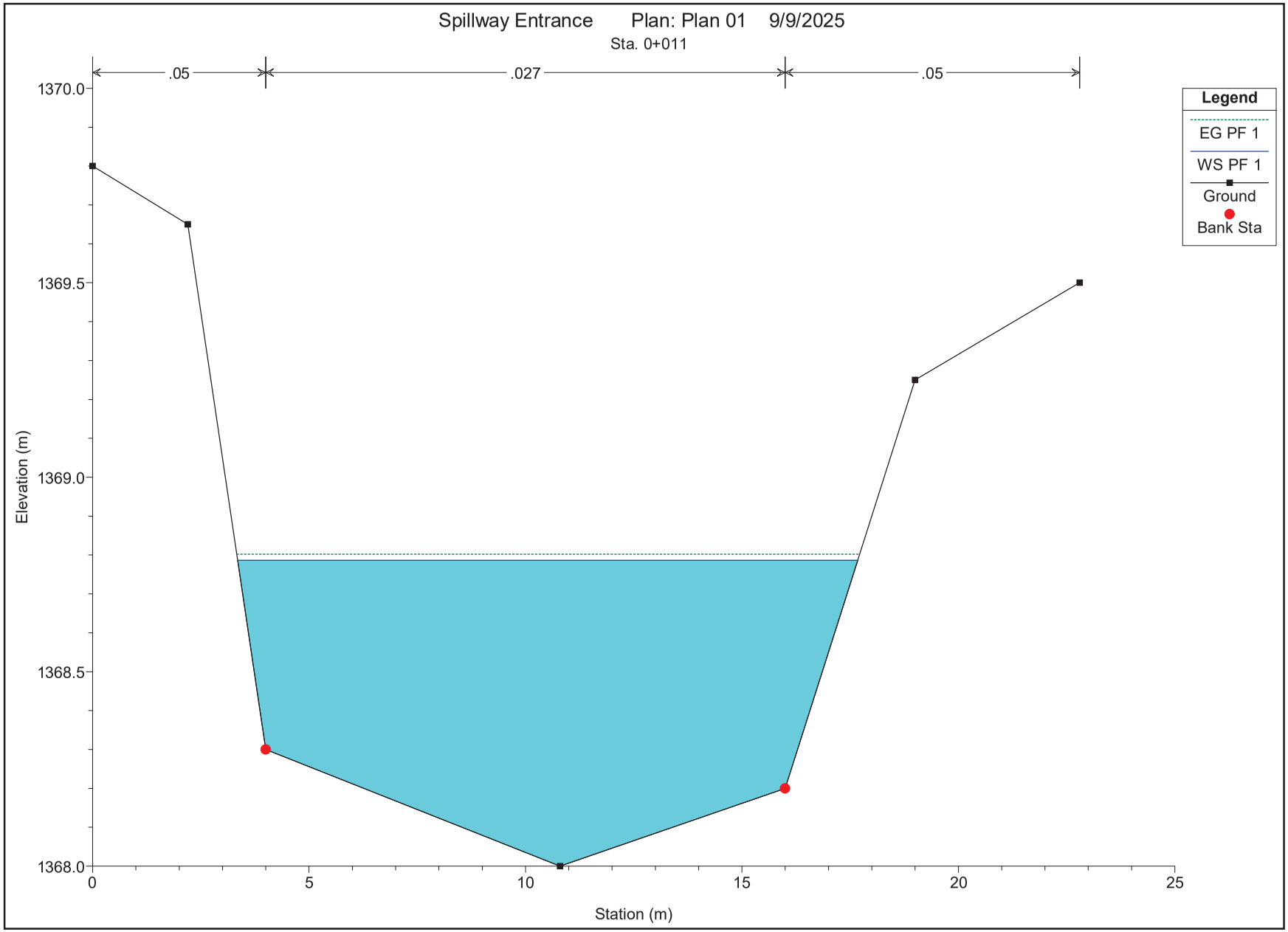
MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
DAM SECTIONS

SCALE:	1:1000	DATE:	JULY 2025	JOB:	1770-037-00	FIGURE:	9


Spillway Entrance Plan: Plan 01 9/9/2025
Sta. 0+011
.05
.027
.05
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
1370.0
1369.5
1369.0
1368.5
1368.0
Elevation (m)
0
5
10
15
20
25
Station (m)

Plan: IDF Current Conditions Cridland Spillwa Entrance RS: 87 Profile: PF 1

E.G. Elev (m)	1368.80	Element	Left OB	Channel	Right OB
Vel Head (m)	0.02	Wt. n-Val.	0.050	0.027	0.050
W.S. Elev (m)	1368.79	Reach Len. (m)	20.00	22.00	24.00
Crit W.S. (m)		Flow Area (m2)	0.16	7.90	0.49
E.G. Slope (m/m)	0.000400	Area (m2)	0.16	7.90	0.49
Q Total (m3/s)	4.53	Flow (m3/s)	0.02	4.43	0.08
Top Width (m)	14.32	Top Width (m)	0.65	12.00	1.68
Vel Total (m/s)	0.53	Avg. Vel. (m/s)	0.13	0.56	0.17
Max Chl Dpth (m)	0.79	Hydr. Depth (m)	0.24	0.66	0.29
Conv. Total (m3/s)	226.4	Conv. (m3/s)	1.1	221.2	4.2
Length Wtd. (m)	22.00	Wetted Per. (m)	0.81	12.01	1.78
Min Ch El (m)	1368.00	Shear (N/m2)	0.76	2.58	1.09
Alpha	1.09	Stream Power (N/m s)	0.10	1.45	0.18
Frctn Loss (m)	0.01	Cum Volume (1000 m3)	0.01	0.44	0.01
C & E Loss (m)	0.00	Cum SA (1000 m2)	0.07	0.90	0.08

Cridland Dam (IDF) - Freeboard Calcuations

WIND DATA (Data from AT, 2007) Cridland Dam				
Station Used :	19 Pincher Creek			
1:2 Wind Speed (km/h)	115	Design Wind Direction	SW	(AT, 2007)
1:10 Wind Speed (km/h)	122	Wind Reduction Factor	1	(AT, 2007)
1:100 Wind Speed (km/h)	129	Overwater Factor	1.2	(CDA, 2007)
1:1000 Wind Speed (km/h)	137	5% Overtopping Height (H'_S)	1.37 H_s	(CDA, 2007)

RESERVOIR DATA Cridland Dam	
Longest Fetch, F (km)	0.42
Effective Fetch, F_E (km)	0.239
Embankment Slope (XH : 1V)	4
Reservoir Depth (m)	6.61

Dam Face Angles

Φ 14.04

Cot(Φ) X/1

Wave Calculations Cridland Dam				
Criteria	**AEP Return Period**			
	1:2	**1:10**	**1:100**	**1:1000**
Overwater Wind Speed, U (km/h)	138.00	146.40	154.80	164.40
Overwater Wind Speed, U (m/s)	38.33	40.67	43.00	45.67
Wind Stress Factor, U_A (m/s)	62.96	67.71	72.51	78.08
Significant Wave Height, H_S (m)	0.66	0.71	0.76	0.82
Design Wave Height H'_S, (m)	0.90	0.97	1.04	1.12
Wave Period, T (sec)	1.86	1.90	1.95	2.00
Wavelength, L (m)	5.39	5.66	5.92	6.22
Wave Run-up, R_S (m)*	0.44	0.47	0.50	0.53
Wave Setup, S (m)**	0.01	0.01	0.01	0.02
Freeboard Required (m), Run-up + Setup	**0.45**	**0.48**	**0.51**	**0.55**
Minimum Riprap D_{50} (mm)	**225**	**275**	**275**	**300**

** S Based on a reservoir length equal to the effective fetch from Wind Setup Table below

Wind Setup Sensitivity Analysis				
Fetch (km)	**Wind setup (m)**			
	1:2	**1:10**	**1:100**	**1:1000**
0.5	0.02	0.03	0.03	0.03
1	0.05	0.05	0.06	0.07
3	0.14	0.15	0.17	0.20
0.239	0.01	0.01	0.01	0.02

Based on the wind setup sensitivity analysis, the fetch length length has minimal impact on the wind setup result. Therefore the effective fetch of Cridland Dam was used for the wind set-up calculation

WAVE FORMULAS

$$S = \frac{U^2 * F_E}{4850 * d}$$ CDA, 2007

$$H_s = 1.616x10^{-2} * U_A * F_E{}^{0.5}$$ CDA, 2007

$$T = 6.238x10^{-1}(U_A * FE)^{1/3}$$ CDA, 2007

$$U_a = 0.71 * U^{1.23}$$ CDA, 2007

$$H'_S = 1.37H_s$$ CDA, 2007

$$L = 1.56T^2$$ CDA, 2007

$$R_s = \frac{H'_s}{0.4 + \left(H'_s/L\right)^{0.5} * \cot(\theta)}$$ USBR, 1981*

* Runup (R_S) assumes a riprap slope, if a smooth slope is present run-up must be mutlitied by up to 1.5 depending on smoothness of surface.

$$D_{50} = 0.57 * \frac{H_S}{cot^{\frac{1}{3}}(\theta)}$$ FHWA, 2000

* D_{50} size is estimated using a rock weight of 2650 kg/m^3

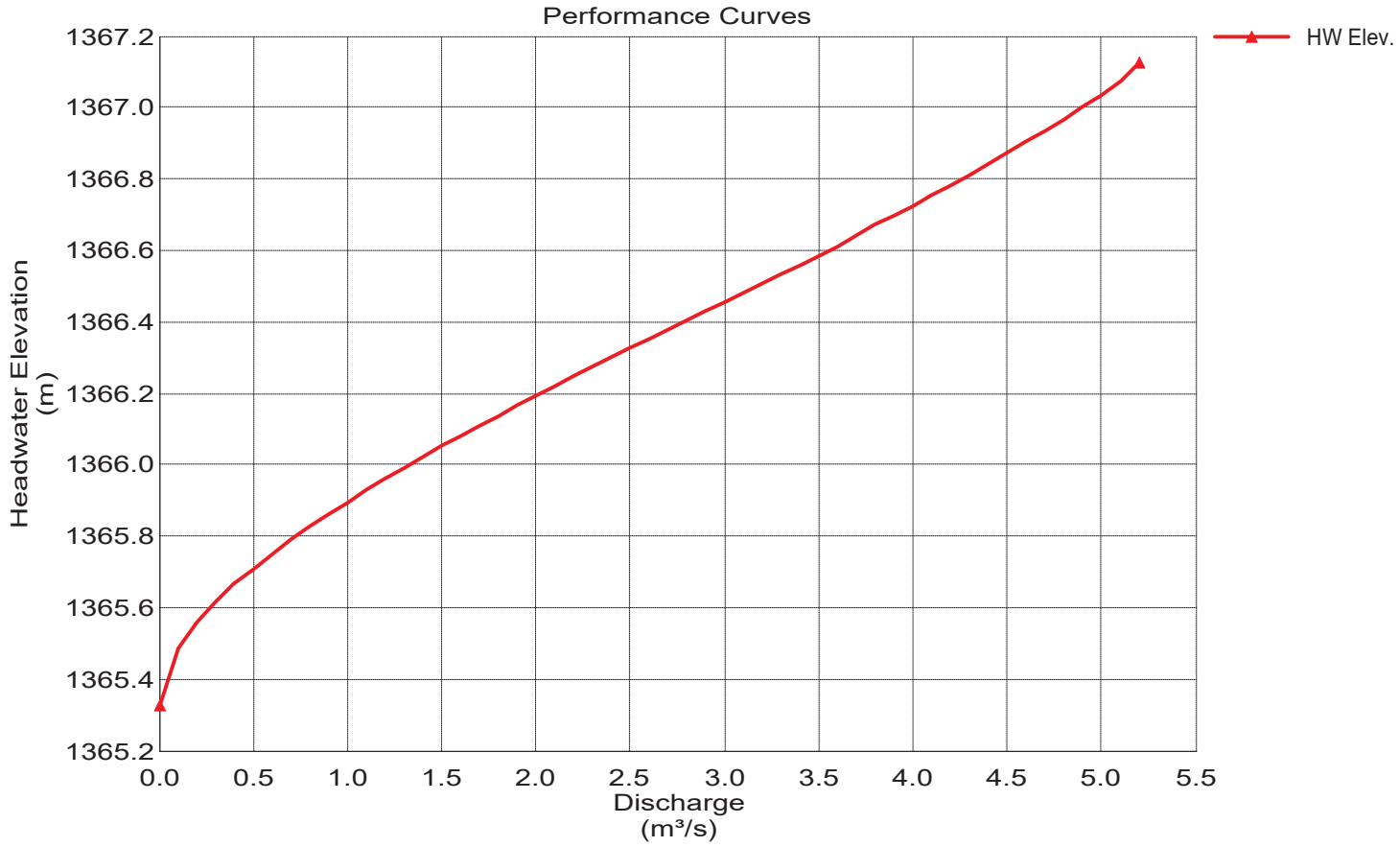
References Used:

1. Hydrotechnical Considerations for Dam Safety Design, Canadian Dam Association (CDA); 2007
2. Freeboard Criteria and Guidelines for Computing Freeboard Allowances for Storage Dams; United States Bureau of Reclamation (USBR), 1981
3. Shoreline Protection Manual; United States Army Corps of Engineers (USACE), 2003
4. Analysis of Alberta Hourly Wind Data; Alberta Transportation (AT), 2007
5. Design of Riprap Revetment, Federal Highway Administration (FHWA), 2000

ASSUMPTIONS AND ADDITIONAL INFORMATION
Fetch for wind height calculations is considered to be the longest distance between the dam and the opposing shoreline. (2007)
Effective Fetch for narrow reservoirs is calculated by drawing 9 radials from a point on the Main Dam to the opposing shoreline at 3 degree intervals. The length of these radials were measured and arithmetially averaged.
Effective Fetch for wind setup can be longer and should be assesed with a sensitivity analysis for long reservoirs.
Reservoir Depth (d) refers to the average depth of the reservoir.
Riprap Sizing rounded to nearest 25 mm. Wind speed reduction was considered for riprap sizing.

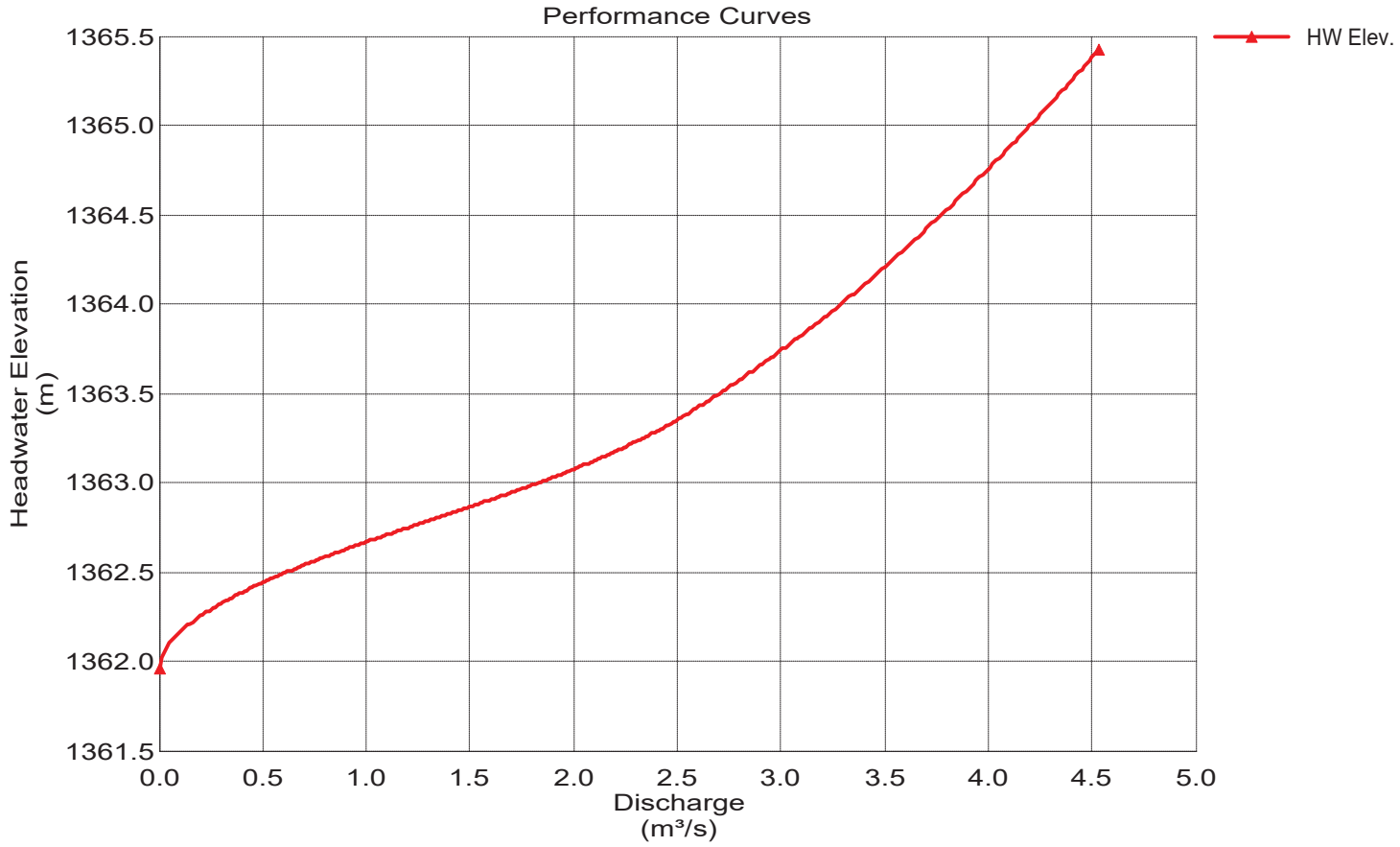
Performance Curves Report
Upstream Culvert

Range Data:				
	Minimum	Maximum	Increment	
Discharge	0.0000	5.2000	0.1000	m³/s



Performance Curves Report
Downstream Culverts

Range Data:				
	Minimum	Maximum	Increment	
Discharge	0.0000	4.5300	0.0100	m³/s



a division of Englobe

MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM

GEOTECHNICAL INVESTIGATION REPORT

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Project #: 1770-037

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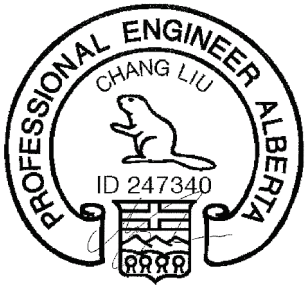
Respectfully submitted,

MPE a division of Englobe.

Prepared by:



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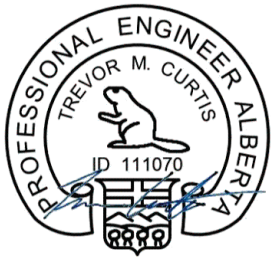

2025-08-27

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Date 2025-08-27
PERMIT NUMBER: P 7841
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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1.0 INTRODUCTION

MPE a division of Englobe (MPE) was retained by the Municipal District of Pincher Creek (MD, Client) to investigate the existing Cridland Dam approximately 13 km south of the Town of Pincher Creek. It is understood that the MD is looking to address safety concerns and dam safety deficiencies surrounding the existing Cridland Dam. Authorization to proceed with the work outlined in the proposal by MPE was received by Mr. David Desabrais, Utilities & Infrastructure Manager of the MD on May 16, 2025.

2.0 SCOPE OF WORK

Based on requirements from the client and previous discussions, the geotechnical investigation and study includes:

- A geotechnical site characterization to verify and quantify the material properties of the site soils.
- Stability analysis of the reservoir embankments in various scenarios.
- Geotechnical reviews and recommendations.

MPE also conducted a survey of the dam from which the topography of the dam and reservoir are shown on **Figure 2** in **Appendix B**.

The following documents were provided to facilitate the reporting and design of the project, applicable data extracted from the reports is included in **Appendix F**.

- Dam Safety Review for Cridland (Burmis) Dam, prepared by UMA Engineering Ltd. (UMA 1999).
- 2010 Dam Safety Reviews – Cridland Dam, Foothill Lake Dam, Fish Creek Dam, Sandy Lake Dam; prepared by Genivar Inc. (Genivar 2011).
- 2021 Dam Safety Reviews – Cridland Dam, Therriault Community Dam, Sandy Lake Project Dam, Fish Lake Project Dam, Foothill Lake Community Dam; prepared by SNC-Lavalin Inc. (SNC 2022).
- Various memorandums from the Government of Canada's Prairie Farm Rehabilitation Administration (PRFA) between 1993 and 1996 for the recommendations for noted issues and recommended rehabilitation of Cridland Dam.

3.0 BACKGROUND

The existing Cridland Dam was located within LSD NW-10-005-30-W4M. The topography surrounding the site was relatively flat with drainage from west to east towards downstream of the dam.

3.1 DAM SAFETY REQUIREMENTS

The Canadian Dam Association (CDA) defines a dam as a barrier used for water retention capable of holding at least 30,000 m^3 of liquid that is at least 2.5 m high. The embankment height of the existing Storage Cell exceeds these limits and must therefore be designed to CDA standards (CDA, 2013). In Alberta, dams and canals are defined and regulated by the Water Act (Alberta Environment, 2018a), and are subject to the Alberta Dam and Canal Safety Directive (Alberta Environment 2018b). The prevailing

Dam Safety Guidelines are those by the CDA (CDA 2007, 2013). This geotechnical design report has been prepared with consideration of the applicable regulations, directives, CDA Guidelines (2013) and related CDA technical bulletins.

The dam consequence classification is likely to be "Low" to "Significant"; MPE has assumed a dam consequence classification of "Significant" based on the potential damage to the environment, surrounding properties and infrastructure.

3.2 DESIGN STANDARD

The accepted factors of safety as per the Alberta Dam and Canal Safety Directive (Alberta Environment, 2018) and CDA (2013) consider the reliability of inputs to the stability analysis, the probability of the loading condition, and the consequences of potential failure. These accepted factor of safety (FS) values are provided in Table 1.

Table 1 – Target Factors of Safety for Slope Stability

Loading Condition	Minimum Factor of Safety	Slope
End of construction before reservoir filling	1.3	Upstream and Downstream
Long term (steady-state seepage, normal reservoir level)	1.5	Downstream
Full or partial rapid drawdown	1.2 – 1.3	Upstream
Pseudo-static	1.0	Upstream and Downstream
Post-earthquake	1.2 – 1.3	Upstream and Downstream

3.3 HISTORICAL RESERVOIR INFORMATION

Based on the provided information, the Cridland Dam was originally constructed in 1958 by Prairie Farm Rehabilitation Administration with the ownership passed to the MD in 1968. The dam was raised by about 1.7 m sometime between 1975 to 1980, no construction records were available for the original construction and the dam raising between 1975 to 1980.

Between 1993 and 1996, PRFA conducted several inspections of the Cridland Dam and encountered seepage along the downstream slope, a shallow slide area with two seepage outlets were noted above the outlet conduit, likely due to granular layers in the embankment fill or poor contact between the original dam crest and fill used in the raising of the dam crest. The initial recommendation of PRFA was to lower the reservoir level and perform ongoing seepage monitoring, but the lowering of the reservoir level was rejected by the MD.

A geotechnical investigation was also conducted in 1994 along with the field inspections by PRFA and a total of four boreholes were drilled along the top of dam embankments. The geotechnical investigation encountered embankment fill with 11% to 30% fines, 32% to 40% sand, and 30% to 53% gravel 30% to 50%. It was recommended by PFRA to replace the top 7-8 m of the upstream portion of the embankment with impervious fill. It was understood that the reservoir was drained following the geotechnical investigation, a flood event in 1995 had filled and spilled the reservoir, but the reservoir was again drained after the flood and left empty.

Additional inspections were conducted by PFRA after the reservoir was drained, and a new recommendation was made to install a PVC pipe in the existing CSP outlet, install new concrete inlet / outlet structures, and construct a granular filter blanket around the seepage areas surrounding the outlet. A complete design and tender package was submitted by PRFA in 1996, but no work was completed, and the reservoir was left empty.

In the 1998 Dam Safety Review (DSR) by UMA Engineering Ltd. (UMA 1999) indicated that the embankment had failed by piping due to the observed seepages along the downstream slope. The dam was concluded to be unsafe, and recommendations were made to leave the reservoir empty, and to either reconstruct the dam and outlet or decommission it. The DSR had classified the dam as “High Risk” consequence, and indicated a dam height of 11.2 m with a Full Supply Level (FSL) of 1370.1 m.

The 2010 DSR by Genivar Inc. (Genivar 2011) had indicated that the dam had undergone rehabilitation work in 2003. A PVC pipe was inserted into the 600 mm CSP outlet pipe, the spillway was widened from 5 m to 10 m and the upstream face of the dam and sections of the reservoir were riprapped. The DSR also indicated that in comparison with original PFRA design drawings, the existing top of dam is 1.4 m lower when surveyed in 2010 with a new dam height of 9.8 m at an elevation of approximately 1370.0 m. The FSL of the dam was also lowered 2.1 m to an elevation of 1368.0 m, and it was recommended to reclassify the dam as “Low Risk” consequence. The DSR had found the rehabilitated embankment to be structurally stable, but indicated that some areas of the reservoir shoreline and spillway channel were eroded and needed stabilizing.

The most recent 2021 DSR for Cridland Dam was conducted by SNC-Lavalin Inc. (SNC 2022). The DSR indicated that the reservoir bank stabilization and spillway erosion repairs were still outstanding, and a spring and seepage were observed at the toe of the downstream slope. The DSR also indicated that no instrumentation were observed on or around the dam, and the existing geotechnical information for the dam is considered inadequated. A new geotechnical investigation was recommended to collect information on the embankment / foundation soils, and pore water pressures to address the minimum FOS being below the CDA requirement of 1.5.

3.4 GEOLOGY

3.4.1 Surficial Geology

MPE reviewed mapping published by the Alberta Geological Survey (AGS). According to the surficial geology map (Alberta Geological Survey, 2013) the site surficial geology is classified as Stagnant Ice Moraine deposits bordered by Moraine deposits. The AGS defines the deposits as follows:

Stagnant Ice Moraine*: Sediments resulting from the collapse and slumping of englacial and supraglacial debris due to the melting of buried stagnant ice at the glacier margin; sediment is mainly till but locally includes stratified glaciolacustrine or glaciofluvial sediments; characterized by low- to high-relief hummocky topography.*

Moraine*: Diamicton (till) deposited directly by glacial ice with a mixture of clay, silt, and sand, as well as minor pebbles, cobbles, and boulders; characterized by a lack of distinctive topography. Locally, this unit may contain blocks of bedrock, stratified sediment, or lenses of glaciolacustrine and/or glaciofluvial sediment.*

3.4.2 Bedrock Geology

MPE reviewed the bedrock geology (Alberta Geological Survey, 2013) and the site bedrock geology is indicated as belonging to the Pakowski Formation. The AGS defines the Pakowski Formation as follows:

Pakowski Formation: *Recessive, dark grey to greenish-grey mudstone and shale; minor, silty, thin- to medium-bedded sandstone; chert pebble bed at base; typically <25 m thick; marine.*

4.0 INVESTIGATION

The field program was carried out on June 4th, 2025, using a drill rig contracted from Chilako Drilling Services Ltd. of Coaldale, AB. The drill rig was equipped with solid stem continuous flight augers. Soil samples were retrieved at intervals of approximately 0.6 m. The soil was classified and logged by MPE's field representative, Mr. Curtis Tams. Standard Penetration Testing was generally performed at intervals of 1.5 m. Piezometers were installed in all three boreholes drilled. Water levels were measured in the boreholes during drilling and on June 17th, 2024, approximately 13 days after completion of drilling.

The existing dam and the surrounding site are shown on **Figure 1, Appendix B** and borehole locations are labeled on **Figure 2**. The borehole locations were obtained by site survey and the coordinates are shown on the borehole logs. The borehole elevations were obtained from MPE's survey.

Laboratory testing was completed on selected soil samples to aid in the determination of engineering properties. Testing included natural moisture content, Atterberg limits, and grain size. The test results are summarized on the borehole logs included in **Appendix C**. Individual test reports for laboratory results are included in **Appendix D**.

The results of the field and laboratory work, and geotechnical recommendations for design and construction of the proposed development are included in this report.

5.0 SITE CONDITIONS

5.1 SITE INSPECTION

A site visit was conducted by MPE on April 1st, 2025. Based on the site inspection, the upstream embankment of the dam was riprapped to the water level. Minor erosion and scouring was noted along the southern shores of the reservoir. The downstream embankment was vegetated with grass, and small shrubs and trees were also noted along the embankment. A spring with active seepage was noted along the southern abutment of the dam. A shallow slide was noted directly above the spring, with a slide area of approximately 10 m^3. The downstream embankment was also noted to be relatively moist, and the area downstream of the dam embankment was noted to be marshy and heavily treed. The dam embankment did appear relatively stable except for the shallow slide along the southern abutment.

5.2 SOIL STRATIGRAPHY

The soil conditions encountered on site generally comprised of clay fill overlying clay till and siltstone bedrock. Sand seams and sand layers with varying thicknesses were encountered between the clay fill and clay layers. The clay fill is suspected to be comprised of clay or clay till materials due to the similarities between the fill layers and the soils below the fill. The main distinction between fill and till layers was the difference in soil moisture and gravel content within the fill.

A summary of the soil layers encountered is provided below. For a more detailed view of the soil conditions, refer to the borehole logs in **Appendix C**. A description of the terms and symbols used on the borehole logs is also included in **Appendix C.**

5.2.1 Fill

Fill was encountered at surface in all boreholes drilled. Clay fill was encountered in 25BH001 and 25BH003, extending to a depth of 4.5 m below ground surface (mbgs) and 7.6 mbgs, respectively. Clay and sand fill was encountered in 25BH002, extending to a depth of 9.5 mbgs. Based on the site topography and the record drawings, the fill was likely sourced from the surrounding in-situ soils. Construction records of the dam constructions and rehabilitations were not available for review. The fill was generally described as silty, sandy, some gravel and trace cobbles, stiff to very stiff, low plastic, brown and moist. with trace to some sand, light brown, and moist. In 25BH002, the fill was described as clay and sand fill. Groundwater seepage was encountered in all three boreholes within the clay fill.

Moisture contents taken from fill samples ranged between 6% and 12%. SPTs within the clay fill resulted in N values of 7 to 27 blows, indicating a firm to very stiff consistency. Atterberg Limit tests conducted on clay fill samples indicated Liquid Limits between 24% and 29%, and plastic limits between 10% to 15%, indicating that the clay fill was low plastic. Grain size analyses conducted on the clay fill samples indicated gravel content of 2% to 17%, sand content of 36% to 51%, silt content of 19% to 38%, and clay content of 13% to 24%.

5.2.2 Till

Till was encountered in all boreholes drilled. Clay till was encountered in 25BH002 and 25BH003, extending beyond the maximum drilled depths of 18.6 and 15.7 mbgs, respectively. In 25BH001, the clay and sand till extended to the underlying siltstone bedrock at 8.0 mbgs. The till was generally described as silty, sandy, trace gravel, was moist, stiff to hard, low plastic, dark brown or grey and moist. The local till is also known to contain cobbles and coarse-grained deposits, increased gravel and sand content was encountered in 25BH002 at 16.8 mbgs.

Moisture contents taken from till samples ranged between 9% and 24%. SPTs within the till resulted in N values of 4 to 54 blows, indicating a soft to hard consistency. Atterberg Limit tests conducted on till samples indicated Liquid Limits between 25% and 28%, and plastic limits between 11% to 13%, indicating that the till was low plastic. One grain size analysis conducted on the till samples indicated gravel content of 1%, sand content of 61%, silt content of 26%, and clay content of 12%.

5.2.3 Bedrock

Siltstone bedrock was encountered in 25BH001 below the clay and sand till from 8.0 mbgs to 10.9 mbgs. The siltstone was described as containing some silt, trace clay, was slightly weathered, medium plastic, extremely weak, light grey and damp.

Moisture contents taken from the siltstone samples ranged between 14% and 15%. SPTs within the siltstone resulted in N values of 72 blows for 300 mm of penetration to 50 blows for 75 mm of penetration.

5.3 GROUNDWATER CONDITIONS

At the time of drilling, groundwater seepage was encountered in all boreholes within the fill. Sloughing was also encountered in 25BH001 and minor sloughing was encountered in 25BH002 and 25BH003. Piezometers were installed in all boreholes upon completion. Groundwater readings were taken on June 17th, 2025, 13 days after completion of drilling. The groundwater readings are summarized in Table 2.

Table 2 – Groundwater Elevation – Measured June 17th, 2025

Borehole No.	Depth of Standpipe (m)	Depth of Groundwater (m)	Elevation of Borehole (m)	Elevation of Groundwater (m)
25BH001	7.0	4.0	1369.9	1365.8
25BH002	9.1	3.2	1369.8	1366.6
25BH003	14.9	7.2	1369.9	1362.8

Groundwater levels are expected to fluctuate seasonally and in response to climatic conditions. If groundwater conditions encountered during construction are observed to be drastically different from this report, MPE should be notified so that the implications of the changes can be reviewed.

6.0 ANALYSIS

6.1 STABILITY ANALYSIS

The intended goal of the stability analysis for this project is to confirm that the existing reservoir embankments meet the minimum factors of safety (FS) described previously in **Section 3.2** or what option(s) are available to satisfy this requirement. The FS is the ratio of soil shear strength to shear stress along a failure plane within the slope, perpendicular to the axis of the dam. A FS of 1.0 is defined as reaching limit equilibrium and therefore the slope being analyzed is in a state of failure or deformation. A FS larger than 1.0 is theoretically indicative of a stable slope. A FS between 1.0 and 1.5 in the long term is typically not considered safe due to the possible variability in conditions present across the site.

The cross sections used in the stability and seepage analyses was developed from the survey data combined with the record drawings. The dam section with the greatest embankment height was chosen in order to assess the stability of the existing dam**.**

Soil profiles were created from the borehole information across the site, and with comparison to the geotechnical investigation in 1994 and historical records. The material properties for the stability models were based on information discussed in the previous sections and the stability models are shown in in **Appendix E**.

6.1.1 Critical Sections

A topographic site plan of the project area associated with the existing dam was surveyed by MPE in June 2025. The survey combined with LiDAR information of the surrounding areas were used to create the critical cross-sections used in the stability and seepage analyses. Three cross sections were constructed using the survey and LiDAR data, as shown on **Figures 2 and 3** in **Appendix B**. The cross section at 0+044.14 were chosen as Section B for slope modeling as the critical cross section due to the thickest fill depth observed in 25BH002. The cross section at 0+019.70 were also chosen as Section A due to the changed soil stratigraphy observed in 25BH001.

The embankment heights for these cross sections were relatively similar, with top of dam at 1369.9m based on the MPE survey. The upstream slope was at 4.0H:1V to an inlet invert of 1359.99 m according to the Dam Section in Drawing No. 004 in UMA 1999. The downstream slope was surveyed by MPE and was at inclinations of approximately 3.0H:1V to varied elevations of 1358 to 1360 m. The sections are also shown in **Figures E 1.1 to E 2.6** in **Appendix E** with the slope modeling results.

6.1.2 Soil Strength and Seepage Parameters

Soil strength parameters were based on field and laboratory index testing conducted on samples collected from the site. The effective friction angles of the fine-grained materials were estimated using various data including Atterberg limit tests, hydrometer tests, in-situ testing, and experience with similar materials. Soil strength parameters selected for the analyses contained within this report are shown in Table 3 below.

Table 3 – Material Strength and Seepage Properties

Soil Unit	Bulk Unit Weight (kN/m^3)	Effective Cohesion (kPa)	Effective Angle of Friction (°)	Hydraulic Conductivity (m/s)	Strength Type
Clay Fill	19	0	28	5.5e-05	Mohr-Coulomb
Clay and Sand Fill	19	0	28	5.5e-05	Mohr-Coulomb
Clay and Sand Till	20	3	28	1.0e-06	Mohr-Coulomb
Clay Till	20	3	28	1.0e-07	Mohr-Coulomb
Siltstone	21	100	0	1.0e-10	Undrained

Values selected were intended to be representative of site conditions and reasonably conservative. The cohesion used in the model is interpreted from site soil conditions and considered conservative; this is typical in slopes where cohesion may degrade due to environmental effects over time. For the effective internal friction angle, representative values for each material were selected deemed reasonable for the soil description and available test results carried out on the respective soils.

The provided design geometry satisfies current guidelines (CDA, 2013). The stability model is sensitive to soil strength parameters, so the design strength parameters represent conservative values which are considered suitable based on laboratory testing and experience with similar soils.

6.1.3 Seepage Model

The geotechnical modelling computer program SLIDE, by RocScience, version 9.037, was utilized to complete the steady state and transient seepage analyses for this project to determine the phreatic surface in the embankment for stability modelling.

The Cridland Dam has a FSL of 1368.0 m. Steady-state seepage was conducted using the FSL to assess the long-term stability upstream and downstream, and a transient seepage analysis was conducted to assess the upstream stability during rapid drawdown. Based on the historical records and drawings, the dam does contain an outlet pipe at the toe of the upstream embankment. It is understood that the dam is usually left at FSL and not emptied. Rapid drawdown was assessed using an assumed draw down of 200 days due to the outlet pipe size, for a reservoir water surface elevation drop from 1368.0 m to a completely empty reservoir elevation of 1360.0 m. The material properties for the seepage model were

based on information discussed in the previous sections, and compared with groundwater conditions observed in **Section 5.4**.

6.1.4 Seismic Loading Condition

Seismic stability was modelled by performing a pseudo-static analysis for the design earthquake, as recommended by the CDA. The analysis for pseudo-static seismic conditions applies a horizontal force (seismic coefficient, K_H) to the stability model to simulate earthquake loading. The seismic coefficient is taken as a fraction of the Peak Ground Acceleration (PGA) for the site, for a given design earthquake. The design earthquake for Low Consequence dams has an Annual Exceedance Probability of 1:100. The National Building Code of Canada Seismic Hazard Calculator was used to obtain a site-specific PGA value of 0.019g for the 1:100-year event. The site PGA is for a "Stiff Soil" condition (National Building Code of Canada 2020 Site Classification D).

For the determination of the horizontal seismic coefficient, PGA was reduced by half. A lateral seismic coefficient of **0.0095g** was therefore used to complete the pseudo-static limit equilibrium analysis. It should be noted that this reduced seismic demand allows for up to 1 m of movement during the design seismic event.

6.1.5 Stability Models and Results

The GLE/Morgenstern-Price method was used to complete the analysis due to its ability to accommodate differing slip surface shapes, varied side force orientations, and because it satisfies force and moment equilibrium. Slip surfaces shallower than 2.0 m have been filtered out from the results.

The results of the loading conditions are summarized in Table 4 and are included in **Appendix E**.

Table 4 – Stability Results Summary

Loading Condition	Minimum FS Required by CDA	Section A, FS	Section B, FS
Long-Term (Steady State) Downstream	1.5	1.20	1.19
End of Construction Upstream	1.3	2.46	2.20
End of Construction Downstream	1.3	1.89	1.61
Rapid Drawdown Upstream	1.2	1.84	2.03
Pseudo-Static Seismic Downstream	1.0	1.16	1.16
Pseudo-Static Seismic Upstream	1.0	2.05	2.34

7.0 GEOTECHNICAL REVIEW

7.1 GEOTECHNICAL ASSESSMENT

As stated in Section 6.1.1, the upstream slope consists of a 4.0H:1V or flatter slope up to the crest elevation of 1369.9 m. The downstream slope was surveyed at 3H:1V at the sections analyzed. It is understood that the dam consists of fill with varied clay and sand content. No construction records were available for review, but the fill is likely excavated from the reservoir footprint.

Based on the field investigation and laboratory soil testing, the results showed that the embankment consisted of stiff to very stiff, low plastic fill similar to the on-site till with SPTs N-values ranging from 7-27 blows. Grain size analyses conducted on the clay fill samples indicated gravel content of 2% to 17%, sand content of 36% to 51%, silt content of 19% to 38%, and clay content of 13% to 24%. Based on the higher gravel and sand content, and the relatively low clay content, the fill is considered marginally suitable for embankment construction.

During the site inspection on April 1, 2025, a spring was observed along the southern downstream abutment of the dam. Based on the higher coarse-grained content from the laboratory soil testing, it is likely that preferential flow paths were created within the dam, which could in time lead to loss of material and embankment instability. In addition, historical records have also shown that the PRFA had concerns regarding the high coarse-grained content of the embankment fill, and requested the MD to replace the top 7-8 m of the upstream portion of the embankment with impervious fill. Groundwater seepage was also encountered in all three boreholes within the fill.

Based on the stability analysis, the existing embankment do not meet CDA (CDA, 2013) factors of safety under long term steady state condition for the downstream slope. Until stabilization measures can be implemented, the following recommendations can be followed:

- Quarterly inspections of the dam to ensure there are no slope stability issues for the dam embankments.
- Advanced laboratory testing was not included in this investigation, advanced laboratory testing can provide in-situ soil strength and seepage parameters for a more accurate stability analysis.
- Lowering the FSL to 1362.0 m, preliminary analysis indicates lowering the FSL to 1362.0 m would satisfy the CDA requirement of Long-Term (Steady State) Downstream FS of 1.5.

7.2 DAM SAFETY REQUIREMENTS

Based on MPE's visual assessment and engineering judgement, a dam Consequence Classification of "Low" is considered appropriate for the dam, in agreeance with Genivar 2011 and SNC 2022. This should be verified through inundation analysis and qualitative review. As per the 2018 Alberta Dam & Canal Safety Directive (the Directive), a number of requirements will need to be met for the operational life of the structure. For a comprehensive list of requirements, refer to the Directive.

At a minimum, the MD should prepare the following documents:

1. Emergency Preparedness Plan (EPP) and Emergency Response Plan (ERP)
2. Operations, Maintenance, and Surveillance (OMS) Manual.
3. Quarterly Inspection Reports.

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Government of Canada, Geotechncial Div., Saskatoon (December 14, 1993). C*ridland Dam - Slide Area Concentrated Seepage*.

Government of Canada, PFRA Engineering and Sustainability Service (September 8, 1994). *Cridland Dam - Recommendations for Rehabilitation.*

Government of Canada, Geotechncial Div., Saskatoon (January 11, 1995). *Cridland Dam - Geotechnical Investigation.*

Government of Canada, PFRA Engineering and Sustainability Service (June 22, 1995). *Cridland Dam Rehabilitation.*

APPENDIX A:

TERMS OF REFERENCE

TERMS OF REFERENCE FOR GEOTECHNICAL REPORTS ISSUED BY MPE A DIVISION OF ENGLOBE.

MPE has prepared the following Terms of Reference to assist in the interpretation and use of MPE's Geotechnical Reports. Note that the information contained herein is considered supplemental to the body of the report. In case of any discrepancy between this appendix and the body of the report, the report will take precedence.

1.1 Use of The Report

This geotechnical report has been prepared for and tailored to the needs of a specific client, project, site, and purpose. Any party relying on this report other than the client for which it was prepared does so at their own risk.

In order to properly understand the suggestions, recommendations, and opinions expressed in the Report, reference must be made to the whole of the report. MPE cannot be responsible for improper use of portions of the report without reference to the whole report.

1.2 Changing Project Details

Important changes to project details which are made after this report has been prepared could render this report obsolete, or reduce its relevancy. MPE's geotechnical engineer should be retained to review project changes. Examples of important changes may include but are not limited to the following:

- Site layout.
- Function of a proposed structure.
- Type of structure or materials used.
- Elevations, design grades, or drainage.
- Project ownership or design team.

1.3 Nature and Exactness of Descriptions

Classification and identification of soils and rocks are based upon commonly accepted systems and methods used in professional geotechnical practice. Classification and identification of geological units are judgemental in nature as to their type, condition, or characteristics. MPE does not warrant conditions represented in the Report as being exact.

Changes from one geological zone to another may be indicated on the logs as a distinct line, but may in fact be transitional. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.4 Changes in Subsurface Conditions

This report has been prepared based on conditions that existed at the time the work scope was undertaken. Do not rely on this report if it is judged that the reliability of the report has been affected by:

- The passage of time;
- Man made events such as construction on or adjacent to the site;
- Natural events such as flood, drought, seismic activity, erosion, groundwater fluctuations, slope instability, etc;

Please contact MPE to confirm that this report is still reliable following any changes to the site or if the passage of time raises any question whether changes may have occurred.

1.5 Findings and Recommendations are Professional Opinion

Site exploration and testing are performed only at specific locations. The exploration provides a valuable yet incomplete picture of the site. In many cases, MPE will review regional geology alongside borehole and laboratory data. Engineering judgement has been applied in the interpretation of the data in order to render an opinion about the rest of the site. Actual subsurface conditions may differ significantly from those identified in the report. MPE should be retained to provide geotechnical design review and construction monitoring in order to manage the risks associated with unanticipated conditions.

1.6 Recommendations Are Not Final

Many of the recommendations presented in this report are considered confirmation-dependent, as they are developed on engineering judgement and opinion based on an incomplete investigation of site conditions. As such, they should not be considered final.

MPE's recommendations can be finalized only after the actual site conditions are revealed during construction. MPE cannot assume responsibility or liability for this report's recommendations if MPE has not been retained to perform the necessary construction monitoring.

1.7 Do Not Redraw Borehole Logs

MPE has prepared the final borehole logs based on interpretation of field logs and lab data. To prevent errors and omissions, the logs included in this report should not be redrawn for inclusion in other design drawings. Only photographic or complete electronic reproduction of the original is acceptable. Note that separating logs from the report can elevate risk.

1.8 Design Parameters

Where MPE's Report includes design parameters which have been derived from a site investigation, those recommended parameters are based on engineering judgement and may take into account multiple factors. Third party designers who apply their own interpretation to MPE's borehole logs do so at their own risk. MPE cannot be liable for third party interpretations.

1.9 Protection of Exposed Ground

Weathering and disturbance can substantially alter the physical properties of soil or rock. In circumstances where the strength of soil or rock is to be relied upon (such as for foundation support, floor slabs, roads, excavation or embankment sideslopes, etc.), it must be protected against weathering and disturbance at all times. Weathering includes freezing, wetting, or drying conditions.

1.10 Groundwater Fluctuation

MPE's site investigation should not be considered an exhaustive study of groundwater conditions. Groundwater levels will fluctuate, and MPE's boreholes may not have penetrated all natural flow paths. Groundwater conditions encountered during construction may differ dramatically from this report. Local experience and sound judgement will be required in the development of care-of-water procedures.

1.11 Support of Adjacent Structures

The influence that construction activity can have on adjacent structures or facilities should be considered by the owner, architect, prime engineer, contractor, or developer. MPE's geotechnical engineers should be consulted if adverse conditions are suspected.

Support of ground and structures adjacent to the proposed construction, which may be impacted by construction, is required.

APPENDIX B:

FIGURES

a division of Englobe

MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
SITE PLAN

SCALE:	1:1000	DATE:	JULY 2025	JOB:	1770-037-00	FIGURE:	1

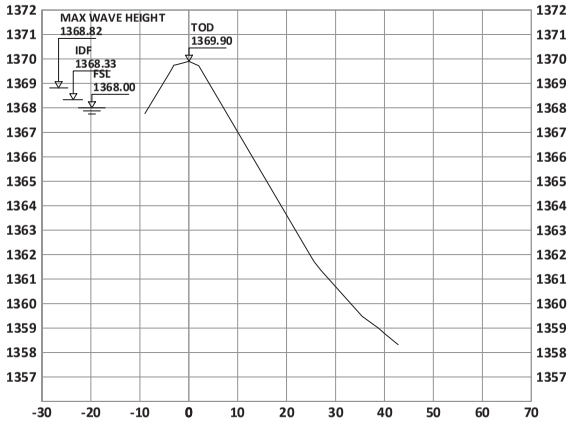
BOREHOLE LOCATION (NAD83 UTM12 COORDINATES)			
BH ID	NORTHING	EASTING	ELEVATION
25BH001	5473057.1	285040.5	1369.9
25BH002	5473080.6	285020.4	1369.8
25BH003	5473103.6	285002.1	1369.9

MPE
a division of Englobe

MUNICIPAL DISTRICT OF PINCHER CREEK

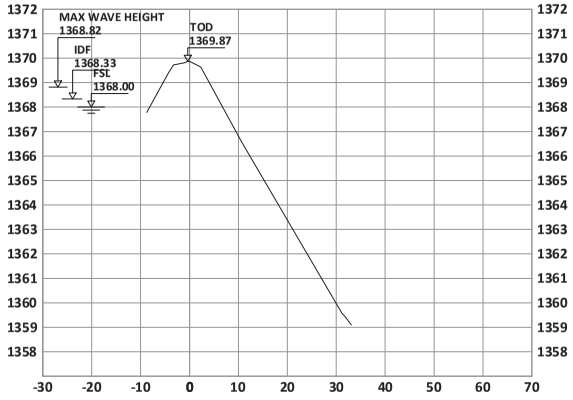
CRIDLAND DAM HYDROLOGY ASSESSMENT
CRIDLAND DAM PLAN

SCALE:	1:500	DATE:	JULY 2025	JOB:	1770-037-00	FIGURE:	2



STA 0+020 - 25BH001

A
7



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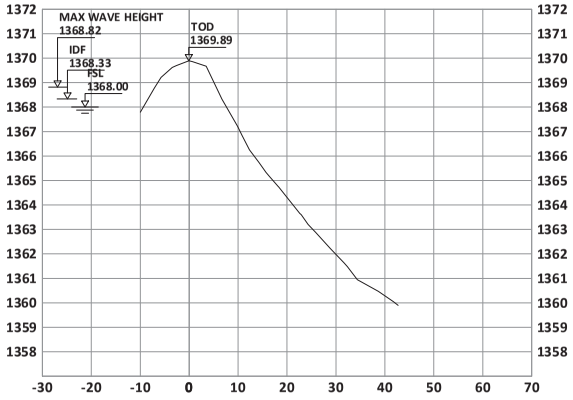

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a division of Englobe

MUNICIPAL DISTRICT OF PINCHER CREEK

CRIDLAND DAM HYDROLOGY ASSESSMENT
DAM SECTIONS

SCALE:	1:1000	DATE:	JULY 2025	JOB:	1770-037-00	FIGURE:	3

APPENDIX C:

BOREHOLE LOGS

a division of Englobe

BOREHOLE No : 25BH001

CLIENT	MD of Pincher Creek	PROJECT NAME	Cridland Dam Geo & Hydro Assess
PROJECT NUMBER	1770-037-00	PROJECT LOCATION	Pincher Creek, AB
DATE STARTED	2025/06/04 COMPLETED 2025/06/04	GROUND ELEVATION	1369.9m N 5473057 E 285040
DRILLING CONTRACTOR	Chilako Drilling Services Ltd.	GROUND WATER ELEVATION / DEPTH	1365.8 m 4.03 m
DRILLING METHOD	8" HSA	DATE GROUND WATER RECORDED	2025/06/17

Depth (m)	Soil Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	REMARKS	Elevation (m)
0	CLAY FILL, silty, sandy, some gravel, trace cobbles, moist, stiff, low plastic, brown, trace oxide specks						1369
1			SPT1	12	12.2	1.5 m - Gravel = 2.1% Sand = 36.0% Silt = 38.3% Clay = 23.6% 1.5 m - LL = 28% PL = 11% PI = 17%	
2							1368
3			ST1			3 m - Shelby Tube refusal to cobbles, poor recovery	1367
4			SPT2	9	8.2		1366
5	CLAY AND SAND TILL, silty, some fine gravel, very moist, firm, low plastic, dark brown, trace oxidation staining ...4.6 m - SEEPAGE		SPT3	6	13.7		1365
6			SPT4	4	15.0	6.1 m - Gravel = 0.7% Sand = 61.4% Silt = 25.7% Clay = 12.2%	1364
7							1363
8	...7.6 m - becoming moist, stiff, brown SILTSTONE, some silt, trace clay, slightly weathered, light grey, damp, medium plastic, extremely weak, blocky, thinly laminated, unoxidized		SPT5	14	18.5		1362
9			SPT6	72	15.3		1361
							1360

MOISTURE CONTENT
PLASTIC - LIQUID
SPT (N) Blows/300 mm
10 20 30 40
100 200 300 400
POCKET PEN, qu (kPa)

Standpipe/ Instrument

Notes:

Seepage encountered at 4.6 m, borehole sloughed in to 7.0 m upon completion. Slotted 50 mm PVC standpipe installed to a depth of 6.1 m. Water level read at 4.03 m on June 17, 2025.

Logged By: C. Tams

Reviewed By: C. Liu

2025/07/23

a division of Englobe

BOREHOLE No : 25BH001

CLIENT	MD of Pincher Creek	PROJECT NAME	Cridland Dam Geo & Hydro Assess
PROJECT NUMBER	1770-037-00	PROJECT LOCATION	Pincher Creek, AB
DATE STARTED	2025/06/04 COMPLETED 2025/06/04	GROUND ELEVATION	1369.9m N 5473057 E 285040
DRILLING CONTRACTOR	Chilako Drilling Services Ltd.	GROUND WATER ELEVATION / DEPTH	1365.8 m 4.03 m
DRILLING METHOD	8" HSA	DATE GROUND WATER RECORDED	2025/06/17

Depth (m)	SOIL SYMBOL	Soil Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	MOISTURE CONTENT / PLASTIC - LIQUID / SPT (N) Blows/300 mm (10 20 30 40) / POCKET PEN, qu (kPa) (100 200 300 400)	REMARKS	Standpipe/ Instrument	Elevation (m)
11		SILTSTONE, some silt, trace clay, slightly weathered, light grey, damp, medium plastic, extremely weak, blocky, thinly laminated, unoxidized		SPT7	50	14.1	●	10.7 m - Auger refusal ~~10.93 m - SPT Refusal~~ 50 blows for 3"		1359
		10.7 m - becoming unweathered, very weak End of Borehole @10.9 m								
12										1358
13										1357
14										1356
15										1355
16										1354
17										1353
18										1352
19										1351
										1350

Notes:

Seepage encountered at 4.6 m, borehole sloughed in to 7.0 m upon completion. Slotted 50 mm PVC standpipe installed to a depth of 6.1 m. Water level read at 4.03 m on June 17, 2025.

Logged By: C. Tams

Reviewed By: C. Liu

2025/07/23

a division of Englobe

BOREHOLE No : 25BH002

CLIENT	MD of Pincher Creek	PROJECT NAME	Cridland Dam Geo & Hydro Assess
PROJECT NUMBER	1770-037-00	PROJECT LOCATION	Pincher Creek, AB
DATE STARTED	2025/06/04 COMPLETED 2025/06/05	GROUND ELEVATION	1369.8m N 5473081 E 285020
DRILLING CONTRACTOR	Chilako Drilling Services Ltd.	GROUND WATER ELEVATION / DEPTH	1366.6 m 3.21 m
DRILLING METHOD	8" HSA	DATE GROUND WATER RECORDED	2025/06/17

Depth (m)	Soil Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	REMARKS	Elevation (m)
0	CLAY AND SAND FILL, some silt, some coarse gravel, trace cobbles, moist, very stiff, low plastic, brown, trace oxidation staining, trace white precipitates						1369
1			SPT1	18	11.7		
2							1368
3			ST1				1367
4			SPT2	17	7.3	3.45 m - Gravel = 17.1% Sand = 50.7% Silt = 19.4% Clay = 12.8%	1366
5			SPT3	18	7.6		1365
6	...5.5 m - becoming some gravel to gravelly		SPT4	17	9.5	6.1 m - LL = 29% PL = 15% PI = 14%	1364
7							1363
8	...7.6 m - SEEPAGE, becoming stiff		ST2 SPT5	13	9.9	7.6 m - Shelby Tube refusal to gravel, poor recovery	1362
9	CLAY TILL, silty, sandy, trace coarse gravel, moist, stiff, low plastic, dark brown to grey mottling, some oxidation staining, trace coal specks, trace white precipitates		SPT6	12	14.2		1361
							1360

MOISTURE CONTENT
PLASTIC - LIQUID
SPT (N) Blows/300 mm
10 20 30 40
100 200 300 400
POCKET PEN, qu (kPa)

Standpipe/ Instrument

Notes:

Seepage encountered at 7.6 m, minor sloughing observed upon completion. Slotted 50 mm PVC standpipe installed to a depth of 9.1 m. Water level read at 3.21 m on June 17, 2025.

Logged By: C. Tams

Reviewed By: C. Liu

2025/07/23

a division of Englobe

BOREHOLE No : 25BH002

CLIENT	MD of Pincher Creek	PROJECT NAME	Cridland Dam Geo & Hydro Assess
PROJECT NUMBER	1770-037-00	PROJECT LOCATION	Pincher Creek, AB
DATE STARTED	2025/06/04 COMPLETED 2025/06/05	GROUND ELEVATION	1369.8m N 5473081 E 285020
DRILLING CONTRACTOR	Chilako Drilling Services Ltd.	GROUND WATER ELEVATION / DEPTH	1366.6 m 3.21 m
DRILLING METHOD	8" HSA	DATE GROUND WATER RECORDED	2025/06/17

Depth (m)	Soil Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	REMARKS	Elevation (m)
11	CLAY TILL, silty, sandy, trace coarse gravel, moist, stiff, low plastic, dark brown to grey mottling, some oxidation staining, trace coal specks, trace white precipitates		SPT7	13		10.7 m - No recovery SPT7	1359
12	...12.2 m - becoming grey, trace oxide specks		SPT8	9	17.3		1358
13							1357
14			ST3				1356
			SPT9	12	16.2	14.2 m - LL = 25% PL = 11% PI = 14%	
15	...15.2 m - becoming very stiff		SPT10	17	17.5		1355
16							1354
17	...16.8 m - becoming hard, some coarse gravel and sand		SPT11	54	8.8		1353
18			SPT12	50	14.3	18.3 m - Auger refusal ~~18.58 m - SPT Refusal~~ 50 blows for 5"	1352
	End of Borehole @18.6 m						1351
19							1350

MOISTURE CONTENT
PLASTIC - LIQUID
SPT (N) Blows/300 mm
10 20 30 40
100 200 300 400
POCKET PEN, qu (kPa)

Standpipe/ Instrument

Notes:

Seepage encountered at 7.6 m, minor sloughing observed upon completion. Slotted 50 mm PVC standpipe installed to a depth of 9.1 m. Water level read at 3.21 m on June 17, 2025.

Logged By: C. Tams

Reviewed By: C. Liu

2025/07/23

a division of Englobe

BOREHOLE No : 25BH003

CLIENT	MD of Pincher Creek	PROJECT NAME	Cridland Dam Geo & Hydro Assess
PROJECT NUMBER	1770-037-00	PROJECT LOCATION	Pincher Creek, AB
DATE STARTED	2025/06/05 COMPLETED 2025/06/05	GROUND ELEVATION	1369.9m N 5473104 E 285002
DRILLING CONTRACTOR	Chilako Drilling Services Ltd.	GROUND WATER ELEVATION / DEPTH	1362.8 m 7.17 m
DRILLING METHOD	8" HSA	DATE GROUND WATER RECORDED	2025/06/17

Depth (m)	Soil Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	REMARKS	Elevation (m)
0	CLAY FILL, silty, sandy, some coarse gravel, trace cobbles, moist, very stiff, plastic, brown, trace oxide specks						1369
1			ST1				
2			SPT1	18	9.8	1.95 m - LL = 24% PL = 10% PI = 14%	1368
3			SPT2	27	5.7	3 m - Rock in SPT	1367
4							1366
5	...4.6 m - becoming stiff		SPT3	8	9.8		1365
6	...6.1 m - becoming firm ...6.3 m - SEEPAGE		SPT4	7	7.4		1364
7							1363
8	CLAY TILL, silty, sandy, trace fine gravel, moist, stiff, low plastic, grey		ST2				1362
			SPT5	9	14.2	8.05 m - LL = 28% PL = 13% PI = 15%	
9	...9.1 m - becoming very stiff, some brown mottling, trace oxide specks		SPT6	18	16.0		1361

MOISTURE CONTENT
PLASTIC - LIQUID
SPT (N) Blows/300 mm
10 20 30 40
100 200 300 400
POCKET PEN, qu (kPa)

Standpipe/ Instrument

Notes:

Seepage encountered at 6.3 m, minor sloughing observed upon completion. Slotted 50 mm PVC standpipe installed to a depth of 14.9 m. Water level read at 7.17 m on June 17, 2025.

Logged By: C. Tams

Reviewed By: C. Liu

2025/07/23

a division of Englobe

BOREHOLE No : 25BH003

CLIENT	MD of Pincher Creek	PROJECT NAME	Cridland Dam Geo & Hydro Assess
PROJECT NUMBER	1770-037-00	PROJECT LOCATION	Pincher Creek, AB
DATE STARTED	2025/06/05 COMPLETED 2025/06/05	GROUND ELEVATION	1369.9m N 5473104 E 285002
DRILLING CONTRACTOR	Chilako Drilling Services Ltd.	GROUND WATER ELEVATION / DEPTH	1362.8 m 7.17 m
DRILLING METHOD	8" HSA	DATE GROUND WATER RECORDED	2025/06/17

Depth (m)	Soil Description	Sample Type	Sample Number	SPT (N)	Moisture Content (%)	REMARKS	Elevation (m)
11	CLAY TILL, silty, sandy, trace fine gravel, moist, stiff, low plastic, grey		SPT7	18	23.5		1359
12			ST3				1358
13							1357
14	...13.7 m - becoming stiff		SPT8	9	23.0		1356
15			SPT9	15	19.6		1355
	End of Borehole @15.7 m						
16							1354
17							1353
18							1352
19							1351

MOISTURE CONTENT
PLASTIC - LIQUID
SPT (N) Blows/300 mm
10 20 30 40
100 200 300 400
POCKET PEN, qu (kPa)

Standpipe/ Instrument

Notes:

Seepage encountered at 6.3 m, minor sloughing observed upon completion. Slotted 50 mm PVC standpipe installed to a depth of 14.9 m. Water level read at 7.17 m on June 17, 2025.

Logged By: C. Tams

Reviewed By: C. Liu

2025/07/23

EXPLANATION OF SYMBOLS AND TERMS

The symbols and terms used on the test hole logs to summarize the results of the field investigation and the laboratory testing are described on the following sheets.

Soils are classified and described according to their engineering properties and behaviour. The descriptions applied to the various soil units as shown on the logs follow the Unified Soil Classification system with slight modification to recognize inorganic clays to medium plasticity (CI). Such descriptions are judgmental in nature and may differ in detail from that actually encountered in the field. The descriptions noted in the logs from test holes are based solely on inspections of soil and rock samples recovered or cuttings observed. The actual nature of the materials between samples may vary.

Laboratory tests have been performed on the various samples noted, following standard testing procedures or protocol unless otherwise noted. The test results are intended to provide a general indication of some of the engineering properties of the material.

ABBREVIATIONS

w or MC	Moisture content (ASTM D2216)	PP	Pocket Penetrometer
W_P or PL	Plastic limit (ASTM D4318)	γ	Unit weight
W_L or LL	Liquid limit (ASTM D4318)	γ_d	Dry unit weight
I_P or PI	Plasticity Index	ρ	Density
NP	Non-plastic soil	ρ_d	Dry density
SH	Shelby tube sample	q_u	Unconfined compressive strength
AU	Auger sample	C_u	Undrained shear strength
B	Bulk Sample	SO_4	Concentration of water-soluble sulphates
UD	Undisturbed Sample	TCR	Total Core Recovery
RC	Rock Core Sample	RQD	Rock Quality Index
SPT	Standard Penetration Test	SCR	Solid Core Recovery
VST	Vane Shear Test	FI	Fracture Index
JSI	Jar Slake Index (I_j)		

SIZE RANGES OF SOIL COMPONENTS	
Component	Size Range mm (US Sieve)
Boulders	Over 300 (12 inch)
Cobbles	75 (3 inch) to 300 (12 inch)
Gravel:	
Coarse	19 (3/4 inch) to 75 (3 inch)
Fine	5 (#4) to 19 (3/4 inch)
Sand:	
Coarse	2 (#10) to 5 (#4)
Medium	0.4 (#40) to 2 (#10)
Fine	0.08 (#200) to 0.4 (#40)
Clay and Silt	Less than 0.08 (#200)

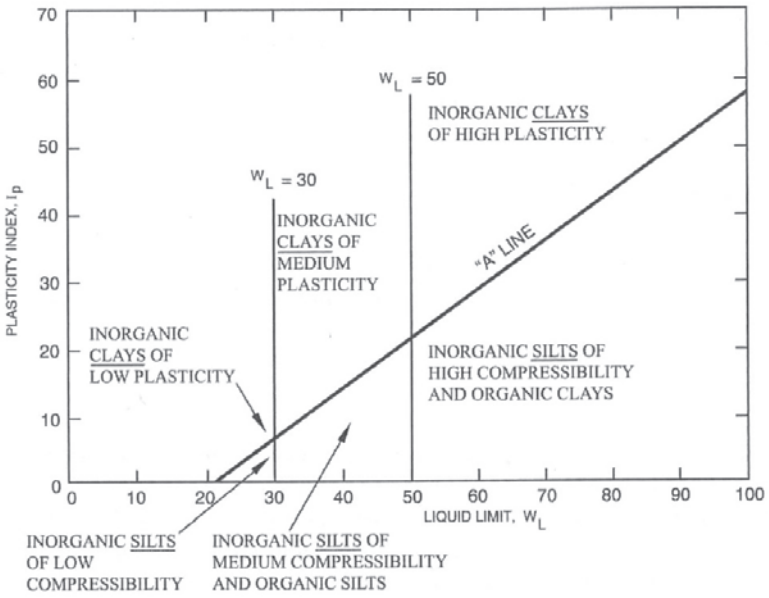
SECONDARY CONSTITUENTS	
Term	Percentage
and	35% - 50%
y/ey	20% - 35%
some	10% - 20%
trace	0 – 10%

CONSISTENCY OF FINE GRAINED SOILS			
Term	Undrained Shear Strength (kPa)	SPT N	Description
Very soft	< 12	< 2	Easily penetrated with fist
Soft	12 – 25	2 – 4	Easily penetrated with thumb
Firm	25 – 50	4 – 8	Moderate effort to penetrate with thumb
Stiff	50 – 100	8 – 15	Great effort to indent with thumb
Very Stiff	100 – 200	15 – 30	Easily indented with thumbnail
Hard	> 200	> 30	Effort required to indent with thumbnail

DENSITY OF COARSE GRAINED SOILS		
Term	SPT N	Approx. Relative Density (%)
Very loose	0 – 4	0 – 15
Loose	4 – 10	15 – 35
Compact	10 – 30	35 - 65
Dense	30 – 50	65 – 85
Very Dense	> 50	85 - 100

UNIFIED SOIL CLASSIFICATION SYSTEM (MODIFIED)

MAJOR DIVISION			GROUP SYMBOL	TYPICAL DESCRIPTION	LABORATORY CLASSIFICATION CRITERIA	
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils	Strong colour or odor and fibrous texture	
COARSE-GRAINED SOILS MORE THAN HALF BY WEIGHT LARGER THAN 75 µm	GRAVELS MORE THAN HALF THE COARSE FRACTION LARGER THAN 4.75 mm	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well-graded gravels, gravel-sand mixtures	$C_U=D_{60}/D_{10}$ >4	$C_C=(D_{30})^2/D_{10} \times D_{60}$ 1 to 3
			GP	Poorly graded gravels, gravel-sand mixtures	Not meeting all above requirements	
		GRAVELS WITH FINES (MORE THAN 12% FINES)	GM	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below "A" line or PI < 4	
			GC	Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above "A" line or PI > 7	
	SANDS MORE THAN HALF THE COARSE FRACTION LARGER THAN 4.75 mm	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well-graded sands, gravelly sands	$C_U=D_{60}/D_{10}$ >6	$C_C=(D_{30})^2/D_{10} \times D_{60}$ 1 to 3
			SP	Poorly graded sands or gravelly sands	Not meeting all above requirements	
		SANDS WITH FINES (MORE THAN 12% FINES)	SM	Silty sands, sand-silt mixtures	Atterberg limits below "A" line or PI < 4	
			SC	Clayey sands, sand-clay mixtures	Atterberg limits above "A" line or PI > 7	
FINE-GRAINED SOILS MORE THAN HALF BY WEIGHT SMALLER THAN 75 µm	SILTS BELOW "A" LINE ON PLASTICITY CHART; NEGLIGIBLE ORGANIC CONTENT		ML	Inorganic silts and very fine sands, rock flour, silty sands of slight plasticity	LL < 50	SEE PLASTICITY CHART BELOW
			MH	Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils	LL > 50	
	CLAYS ABOVE "A" LINE ON PLASTICITY CHART; NEGLIGIBLE ORGANIC CONTENT		CL	Inorganic clays of low plasticity, gravelly, sandy, or silty clays	LL < 30	
			CI	Inorganic clays of medium plasticity, silty clays	30 < LL < 50	
			CH	Inorganic clays of high plasticity	LL > 50	
	ORGANIC SILTS AND CLAYS BELOW "A" LINE ON PLASTICITY CHART		OL	Organic silts and organic silty clays of low plasticity	LL < 50	
			OH	Organic clays of high plasticity	LL > 50	



APPENDIX D:

LAB TESTING

MPE a division of Englobe
1, 3320 18 Avenue North
Lethbridge, Alberta T1H 5J3
Tel: (403)892-6036

ATTERBERG LIMITS

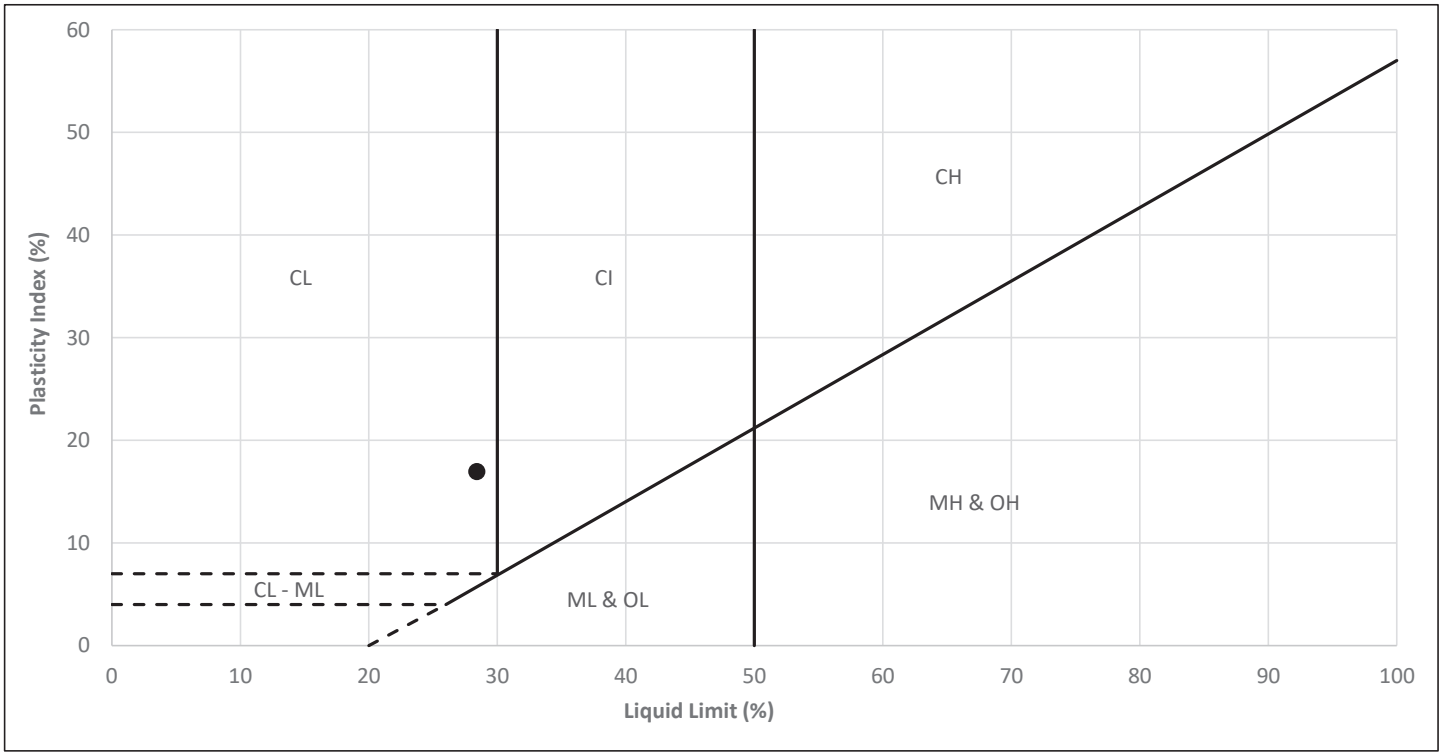
Project:	Cridland Dam Geo & Hydro Assess	**Sample #:**	1SPT1
Project No.:	1770-037-00	**Source:**	25BH001
Owner:	MD of Pincher Creek	**Sample Depth:**	1.5 m
File No.:	AL - 01	**Test Date:**	12-Jun-25

Tested in accordance with ASTM D4318 (Liquid Limit, Plastic Limit, and Plasticity of Soils). Additional test information available upon request.

Sample Description: Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays, lean clays

Liquid Limit (LL)	28.4
Plastic Limit (PL)	11.4
Plasticity Index (PI)	17.0

Soil Plasticity	Low
Soil Classification	CL



Comments:

Reviewed By: _____
Kasz Leavitt, P.Tech. (Eng.)

MPE a division of Englobe
1, 3320 18 Avenue North
Lethbridge, Alberta T1H 5J3
Tel: (403)892-6036

ATTERBERG LIMITS

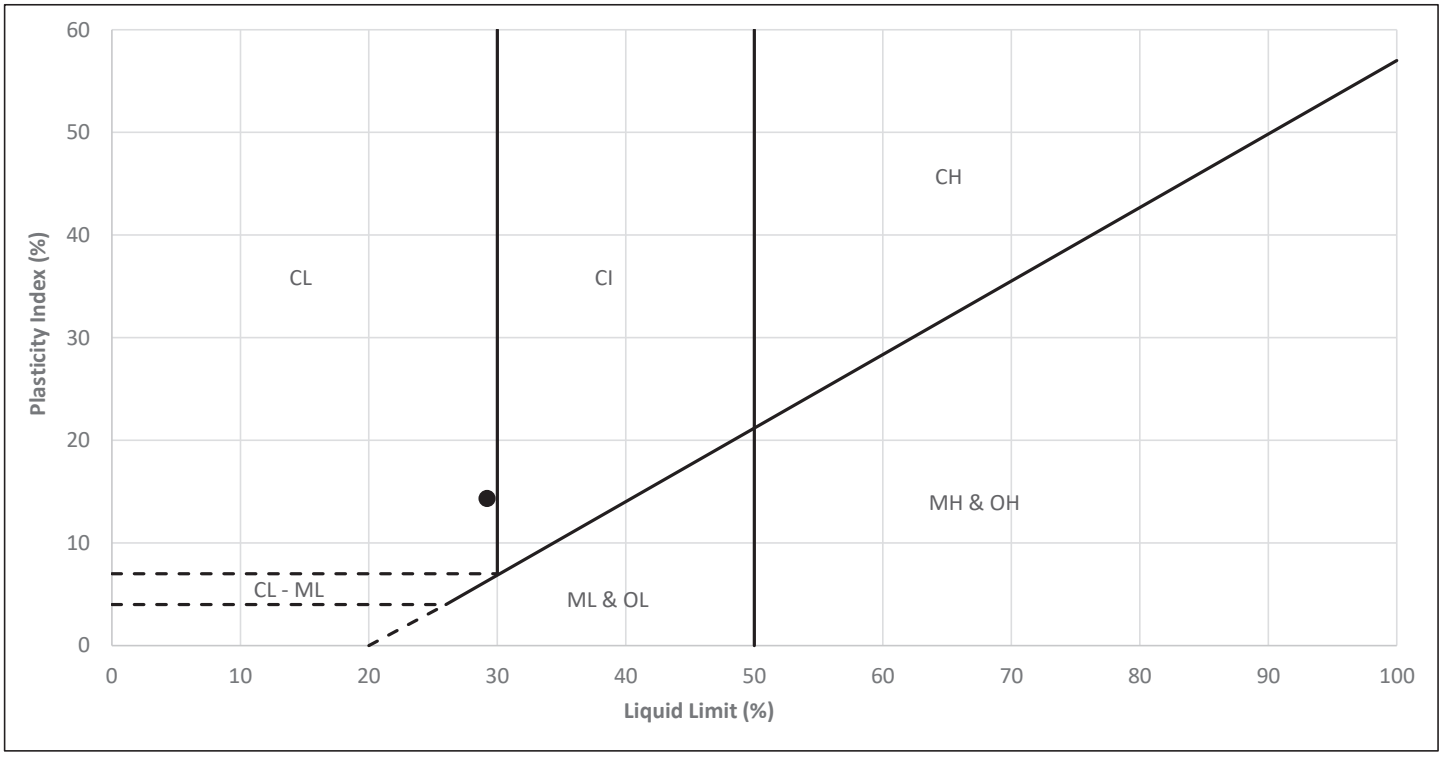
Project:	Cridland Dam Geo & Hydro Assess	**Sample #:**	2SPT4
Project No.:	1770-037-00	**Source:**	25BH002
Owner:	MD of Pincher Creek	**Sample Depth:**	6.1 m
File No.:	AL - 02	**Test Date:**	12-Jun-25

Tested in accordance with ASTM D4318 (Liquid Limit, Plastic Limit, and Plasticity of Soils). Additional test information available upon request.

Sample Description: Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays, lean clays

Liquid Limit (LL)	29.2
Plastic Limit (PL)	14.9
Plasticity Index (PI)	14.3

Soil Plasticity	Low
Soil Classification	CL



Comments:

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ATTERBERG LIMITS

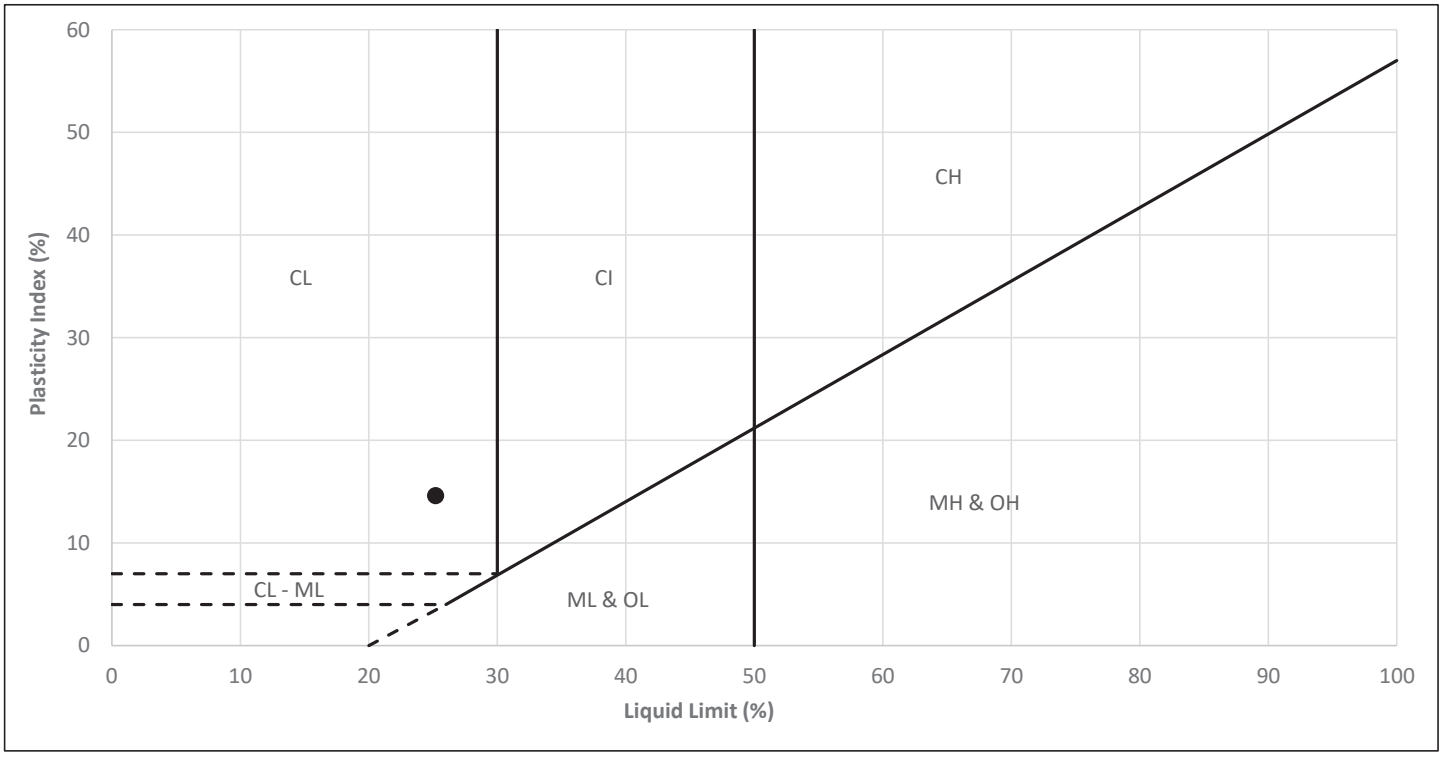
Project:	Cridland Dam Geo & Hydro Assess	**Sample #:**	2SPT9
Project No.:	1770-037-00	**Source:**	25BH002
Owner:	MD of Pincher Creek	**Sample Depth:**	14.2 m
File No.:	AL - 03	**Test Date:**	12-Jun-25

Tested in accordance with ASTM D4318 (Liquid Limit, Plastic Limit, and Plasticity of Soils). Additional test information available upon request.

Sample Description: Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays, lean clays

Liquid Limit (LL)	25.2
Plastic Limit (PL)	10.6
Plasticity Index (PI)	14.6

Soil Plasticity	Low
Soil Classification	CL



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ATTERBERG LIMITS

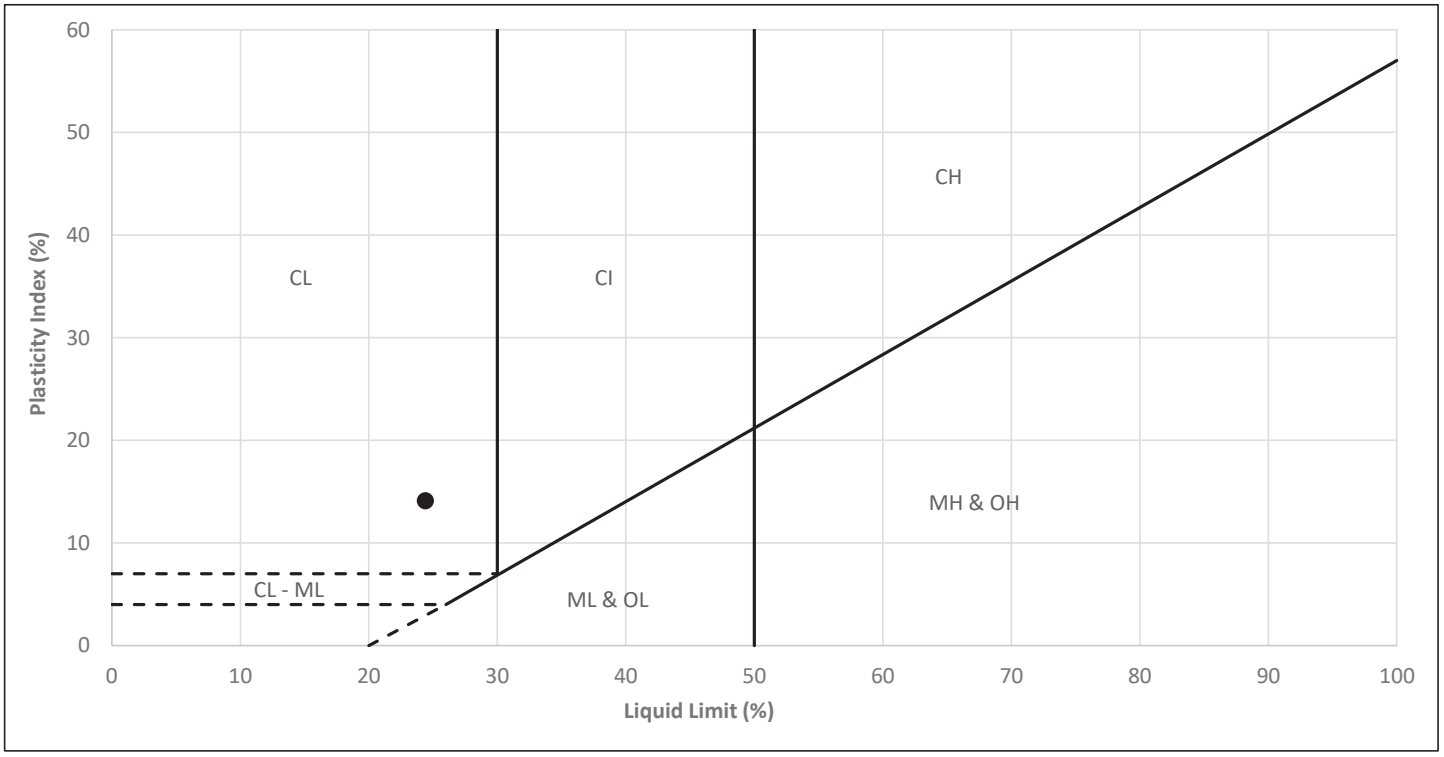
Project:	Cridland Dam Geo & Hydro Assess	**Sample #:**	3SPT1
Project No.:	1770-037-00	**Source:**	25BH001
Owner:	MD of Pincher Creek	**Sample Depth:**	1.5 m
File No.:	AL - 04	**Test Date:**	12-Jun-25

Tested in accordance with ASTM D4318 (Liquid Limit, Plastic Limit, and Plasticity of Soils). Additional test information available upon request.

Sample Description: Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays, lean clays

Liquid Limit (LL)	24.4
Plastic Limit (PL)	10.3
Plasticity Index (PI)	14.1

Soil Plasticity	Low
Soil Classification	CL



Comments:

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ATTERBERG LIMITS

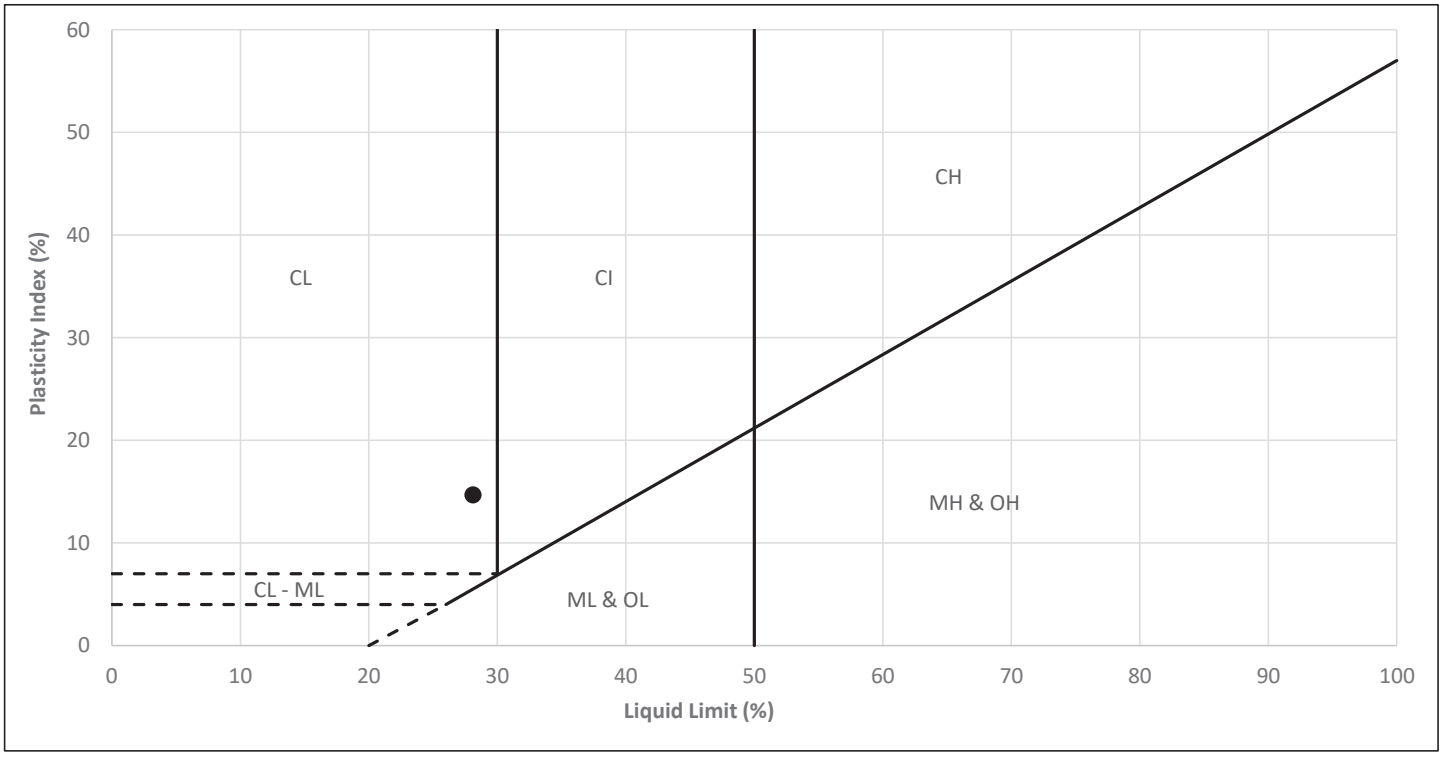
Project:	Cridland Dam Geo & Hydro Assess	**Sample #:**	3SPT5
Project No.:	1770-037-00	**Source:**	25BH003
Owner:	MD of Pincher Creek	**Sample Depth:**	8.1 m
File No.:	AL - 05	**Test Date:**	12-Jun-25

Tested in accordance with ASTM D4318 (Liquid Limit, Plastic Limit, and Plasticity of Soils). Additional test information available upon request.

Sample Description: Inorganic clays of low plasticity, gravelly clays, sandy clays, silty clays, lean clays

Liquid Limit (LL)	28.1
Plastic Limit (PL)	13.4
Plasticity Index (PI)	14.7

Soil Plasticity	Low
Soil Classification	CL



Comments:

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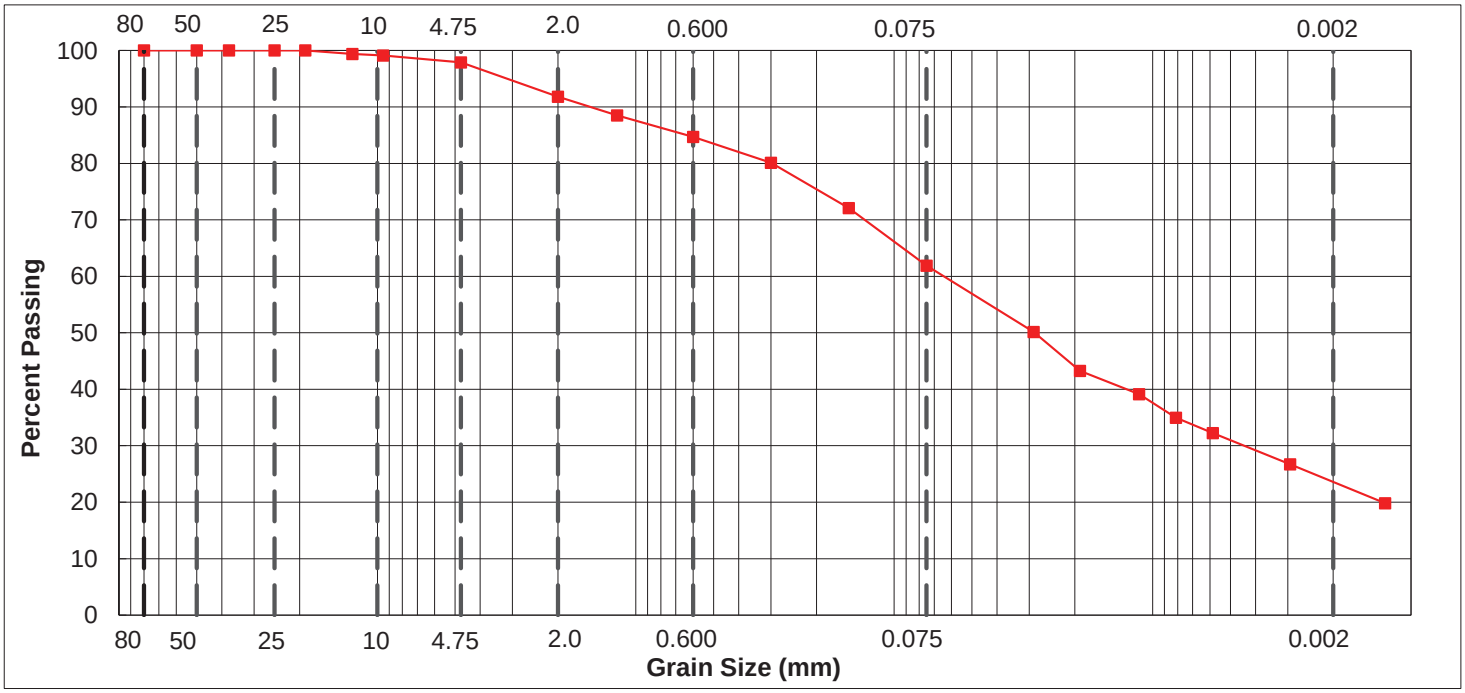
GRAIN SIZE ANALYSIS REPORT

Project:	Cridland Dam Geo & Hydro Assess	**Sample No.:**	1SPT1
Project No.:	1770-037-00	**Source:**	25BH001
Owner:	MD of Pincher Creek	**Sample Depth:**	1.5 m
File No.:	GSA - 1SPT1	**Date:**	23-Jun-25

Tested in accordance with AASHTO T 88 (Particle Size Analysis of Soils)

Grain Size (mm)	Percent Finer	Grain Size (mm)	Percent Finer
		0.600	84.7
80.0	100.0	0.300	80.1
50.0	100.0	0.150	72.1
37.5	100.0	0.075	61.9
25.0	100.0	0.0289	50.1
19.0	100.0	0.0191	43.2
12.5	99.4	0.0113	39.1
9.5	99.1	0.0081	35.0
4.75	97.9	0.0058	32.2
2.00	91.8	0.0029	26.7
1.180	88.5	0.0013	19.8

Material Description Proportion		
Type	**%**	**Particle Size Range**
Boulders	0.0	>300 mm
Cobbles	0.0	300 mm to 80 mm
Coarse Gravel	0.0	80 mm to 19 mm
Fine Gravel	2.1	19 mm to 4.75 mm
Coarse Sand	6.1	4.75 mm to 2.00 mm
Medium Sand	9.4	2.00 mm to 425 µm
Fine Sand	20.5	425 µm to 75 µm
Silt	38.3	75 µm to 2 µm
Clay	23.6	<2 µm



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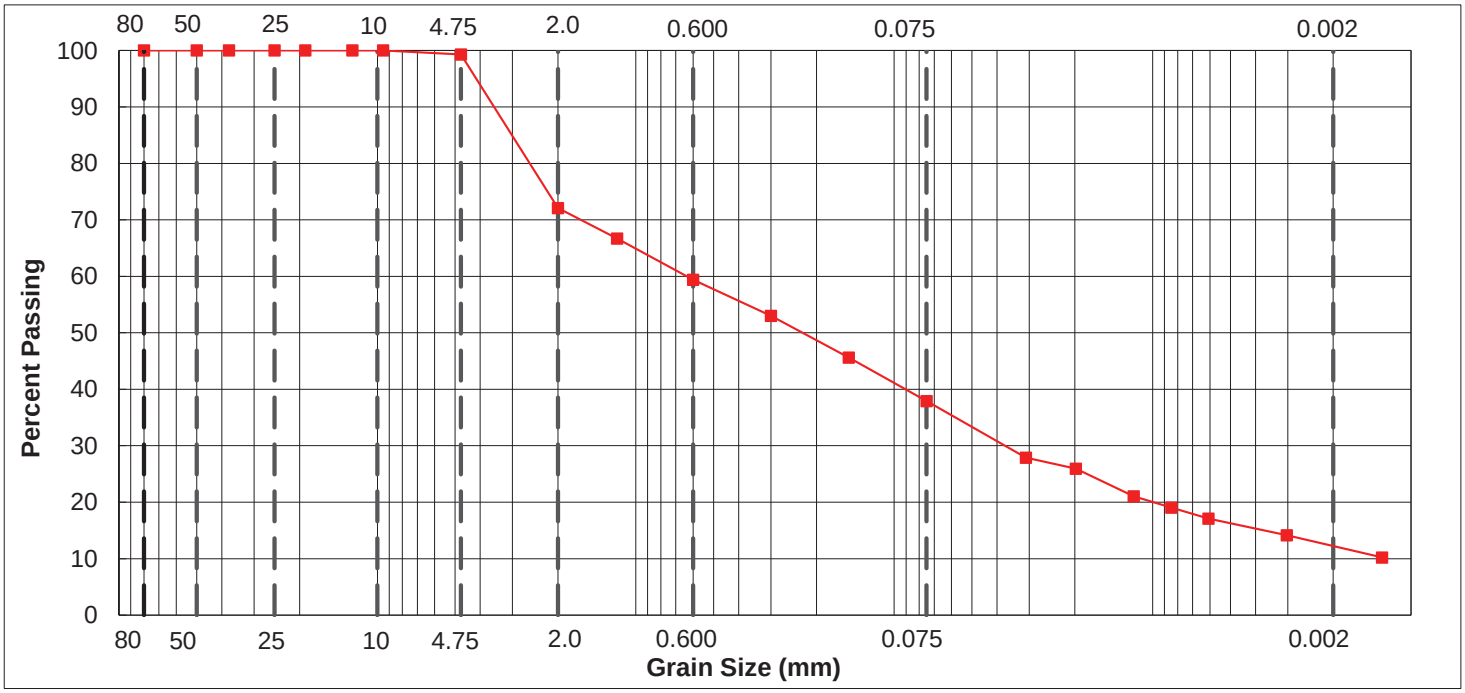
GRAIN SIZE ANALYSIS REPORT

Project:	Cridland Dam Geo & Hydro Assess	**Sample No.:**	1SPT4
Project No.:	1770-037-00	**Source:**	25BH001
Owner:	MD of Pincher Creek	**Sample Depth:**	3.0 m
File No.:	GSA - 1SPT4	**Date:**	23-Jun-25

Tested in accordance with AASHTO T 88 (Particle Size Analysis of Soils)

Grain Size (mm)	Percent Finer	Grain Size (mm)	Percent Finer
		0.600	59.4
80.0	100.0	0.300	53.0
50.0	100.0	0.150	45.6
37.5	100.0	0.075	37.9
25.0	100.0	0.0309	27.9
19.0	100.0	0.0198	25.9
12.5	100.0	0.0118	21.0
9.5	100.0	0.0085	19.1
4.75	99.3	0.0061	17.1
2.00	72.1	0.0030	14.2
1.180	66.7	0.0013	10.2

Material Description Proportion		
Type	**%**	**Particle Size Range**
Boulders	0.0	>300 mm
Cobbles	0.0	300 mm to 80 mm
Coarse Gravel	0.0	80 mm to 19 mm
Fine Gravel	0.7	19 mm to 4.75 mm
Coarse Sand	27.2	4.75 mm to 2.00 mm
Medium Sand	15.9	2.00 mm to 425 µm
Fine Sand	18.3	425 µm to 75 µm
Silt	25.7	75 µm to 2 µm
Clay	12.2	<2 µm



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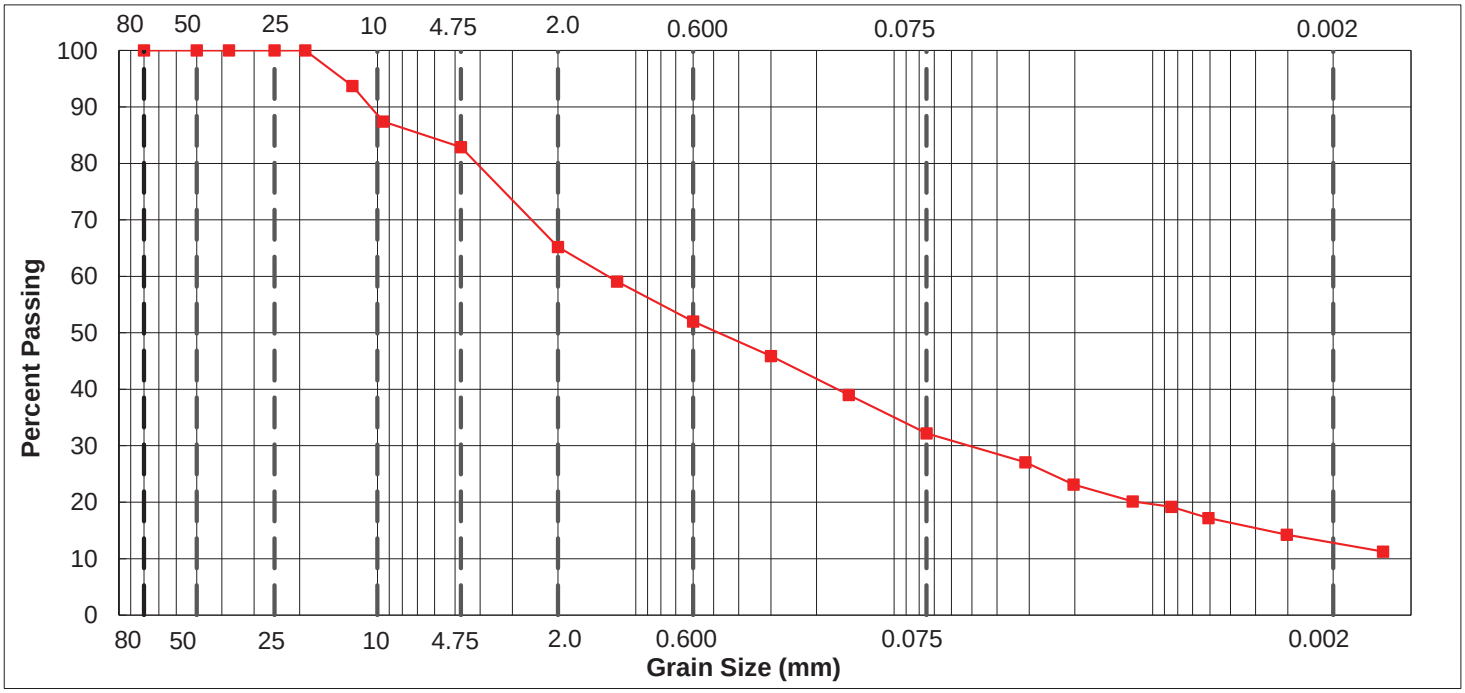
GRAIN SIZE ANALYSIS REPORT

Project:	Cridland Dam Geo & Hydro Assess	**Sample No.:**	2SPT2
Project No.:	1770-037-00	**Source:**	25BH002
Owner:	MD of Pincher Creek	**Sample Depth:**	6.1 m
File No.:	GSA - 2SPT2	**Date:**	23-Jun-25

Tested in accordance with AASHTO T 88 (Particle Size Analysis of Soils)

Grain Size (mm)	Percent Finer	Grain Size (mm)	Percent Finer
		0.600	52.0
80.0	100.0	0.300	45.9
50.0	100.0	0.150	39.0
37.5	100.0	0.075	32.2
25.0	100.0	0.0310	27.1
19.0	100.0	0.0202	23.1
12.5	93.7	0.0119	20.2
9.5	87.4	0.0085	19.2
4.75	82.9	0.0061	17.2
2.00	65.2	0.0030	14.2
1.180	59.1	0.0013	11.3

Material Description Proportion		
Type	**%**	**Particle Size Range**
Boulders	0.0	>300 mm
Cobbles	0.0	300 mm to 80 mm
Coarse Gravel	0.0	80 mm to 19 mm
Fine Gravel	17.1	19 mm to 4.75 mm
Coarse Sand	17.7	4.75 mm to 2.00 mm
Medium Sand	16.2	2.00 mm to 425 µm
Fine Sand	16.8	425 µm to 75 µm
Silt	19.4	75 µm to 2 µm
Clay	12.8	<2 µm



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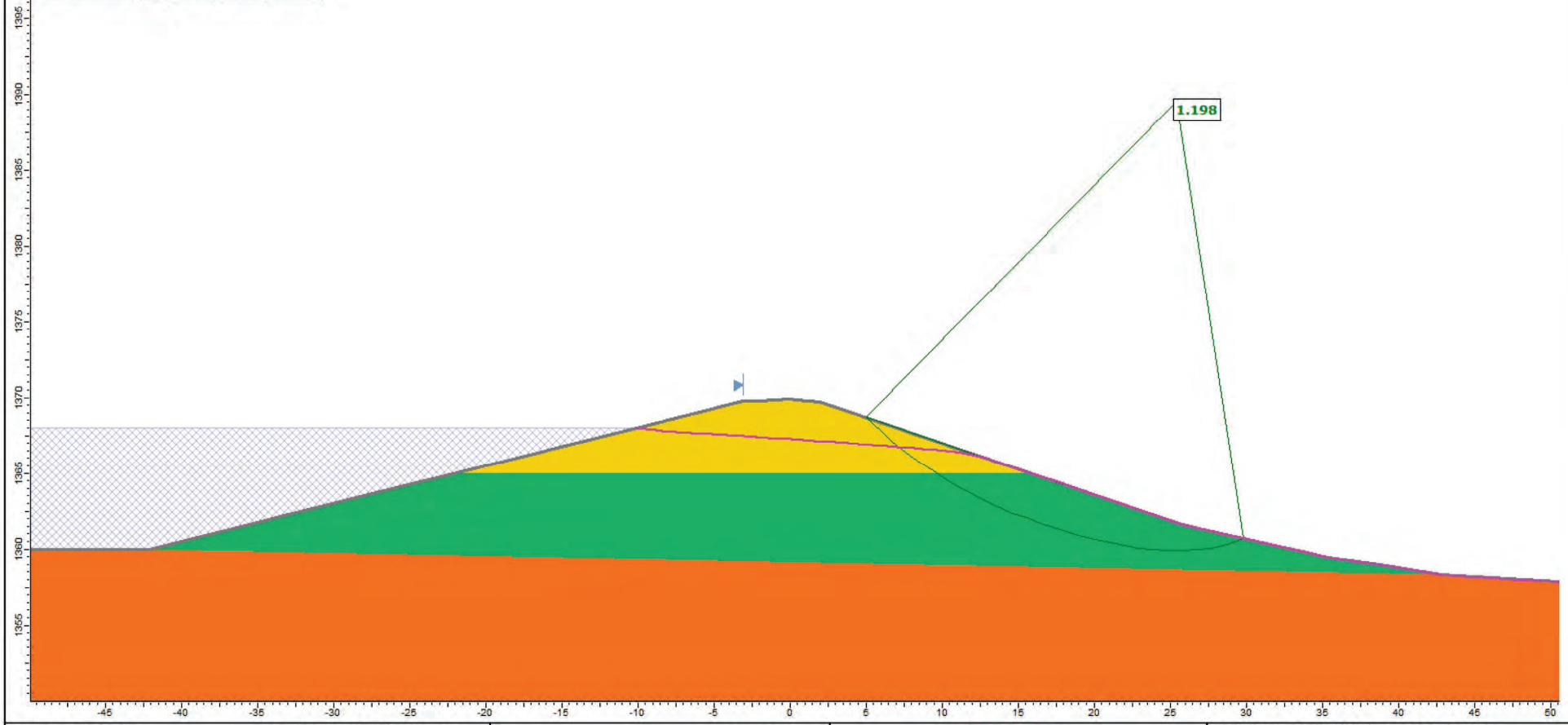
APPENDIX E:

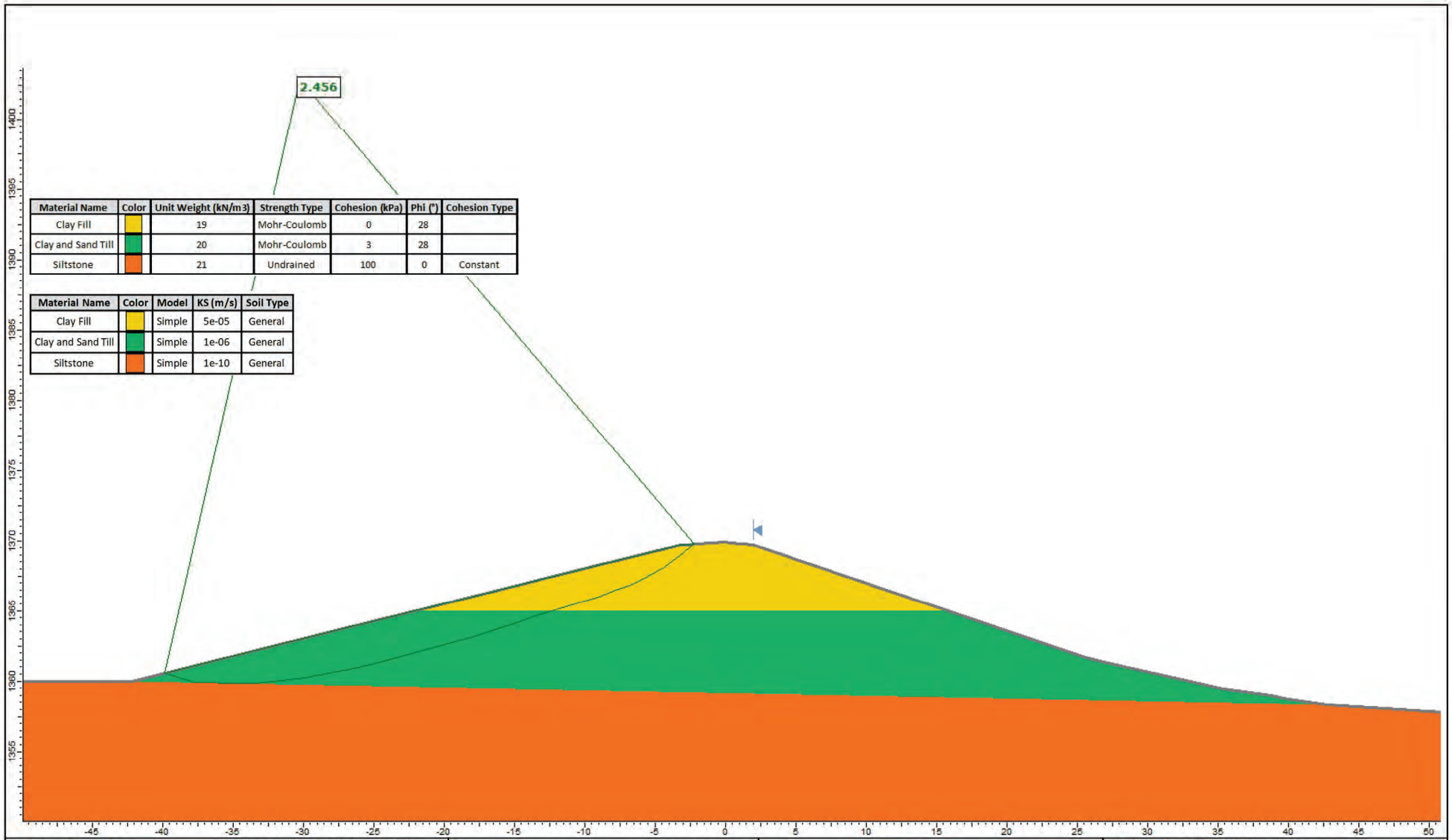
ANALYSIS FIGURES

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Cohesion Type
Clay Fill		19	Mohr-Coulomb	0	28	
Clay and Sand Till		20	Mohr-Coulomb	3	28	
Siltstone		21	Undrained	100	0	Constant

Material Name	Color	Model	KS (m/s)	Soil Type
Clay Fill		Simple	5e-05	General
Clay and Sand Till		Simple	1e-06	General
Siltstone		Simple	1e-10	General



ANALYSIS TYPE:	LONG TERM STEADY STATE	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION A-A	
UPSTREAM WATER LEVEL:	FSL (1368.0 m)						
ANALYSIS DIRECTION:	DOWNSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-1.1



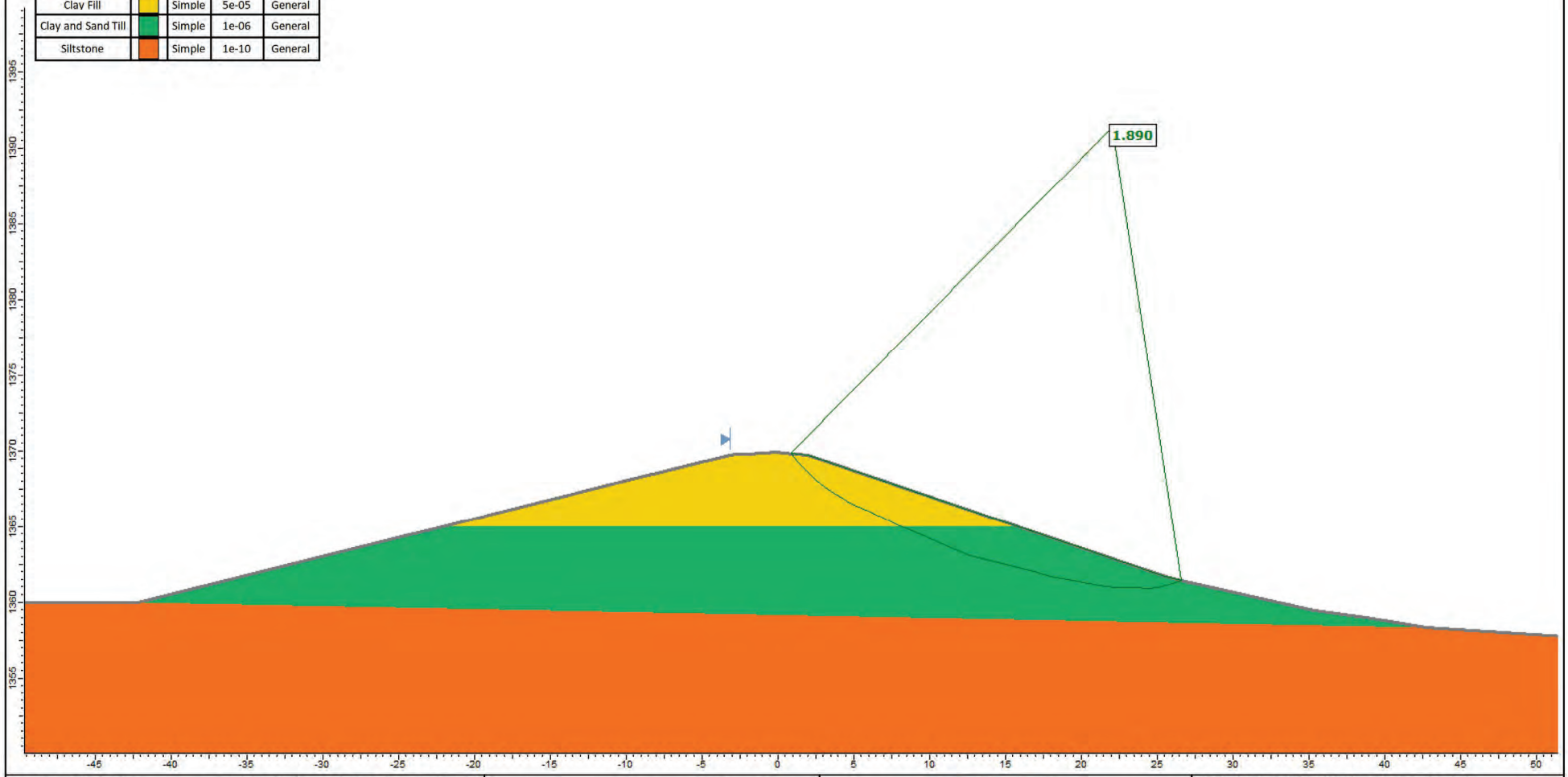
Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Cohesion Type
Clay Fill		19	Mohr-Coulomb	0	28	
Clay and Sand Till		20	Mohr-Coulomb	3	28	
Siltstone		21	Undrained	100	0	Constant

Material Name	Color	Model	KS (m/s)	Soil Type
Clay Fill		Simple	5e-05	General
Clay and Sand Till		Simple	1e-06	General
Siltstone		Simple	1e-10	General

ANALYSIS TYPE:	END OF CONSTRUCTION UPSTREAM	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION A-A	
UPSTREAM WATER LEVEL:	N/A						
ANALYSIS DIRECTION:	UPSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	BEFORE RESERVOIR FILLING	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-1.2

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Cohesion Type
Clay Fill		19	Mohr-Coulomb	0	28	
Clay and Sand Till		20	Mohr-Coulomb	3	28	
Siltstone		21	Undrained	100	0	Constant

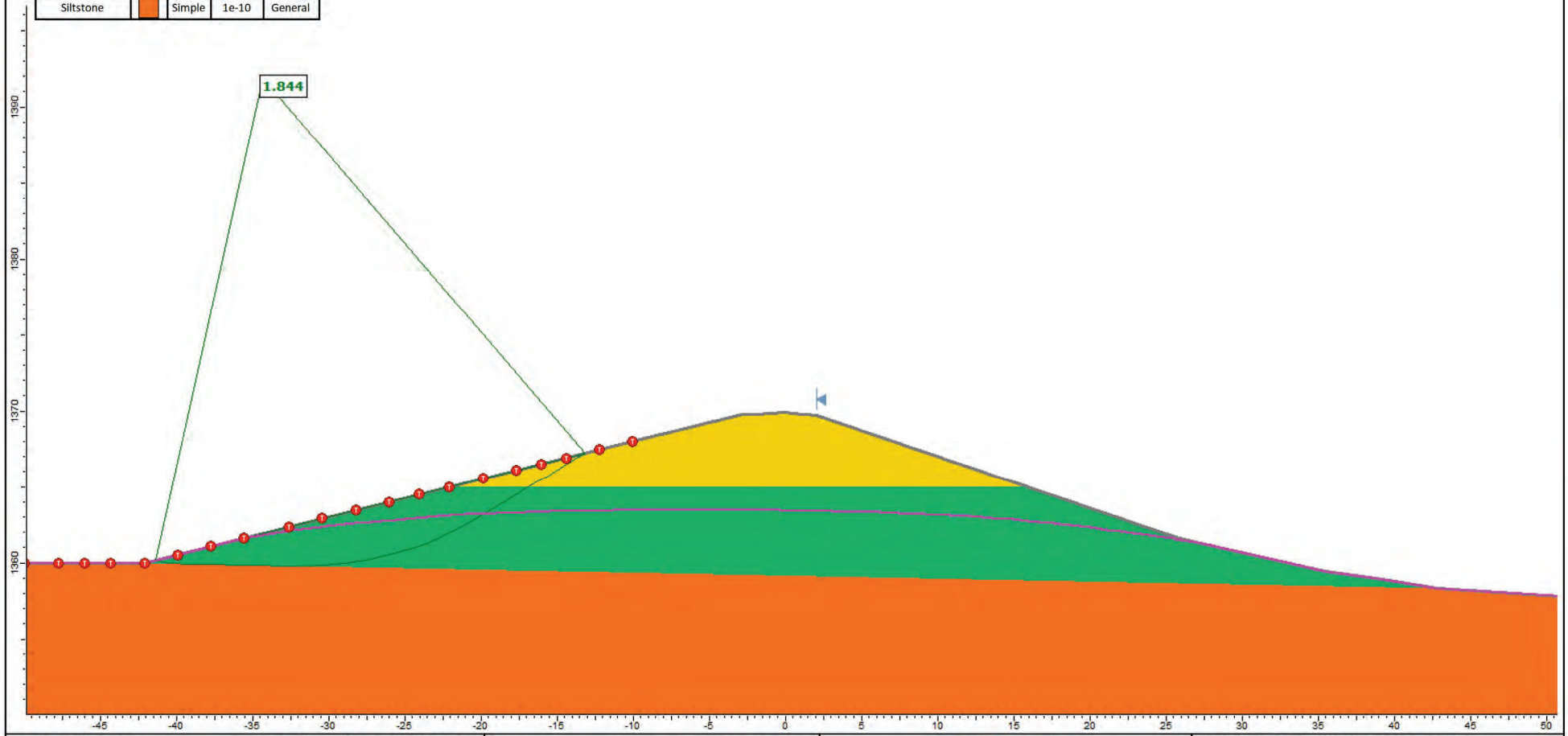
Material Name	Color	Model	KS (m/s)	Soil Type
Clay Fill		Simple	5e-05	General
Clay and Sand Till		Simple	1e-06	General
Siltstone		Simple	1e-10	General



ANALYSIS TYPE:	END OF CONSTRUCTION DOWNSTREAM	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION A-A	
UPSTREAM WATER LEVEL:	N/A						
ANALYSIS DIRECTION:	DOWNSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	BEFORE RESERVOIR FILLING	VERSION:	SLIDEINTERPRITE 9.037	SCALE:	NTS	DATE: JULY 2025	JOB: 1770-037 FIGURE: E-1.3

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Cohesion Type
Clay Fill		19	Mohr-Coulomb	0	28	
Clay and Sand Till		20	Mohr-Coulomb	3	28	
Siltstone		21	Undrained	100	0	Constant

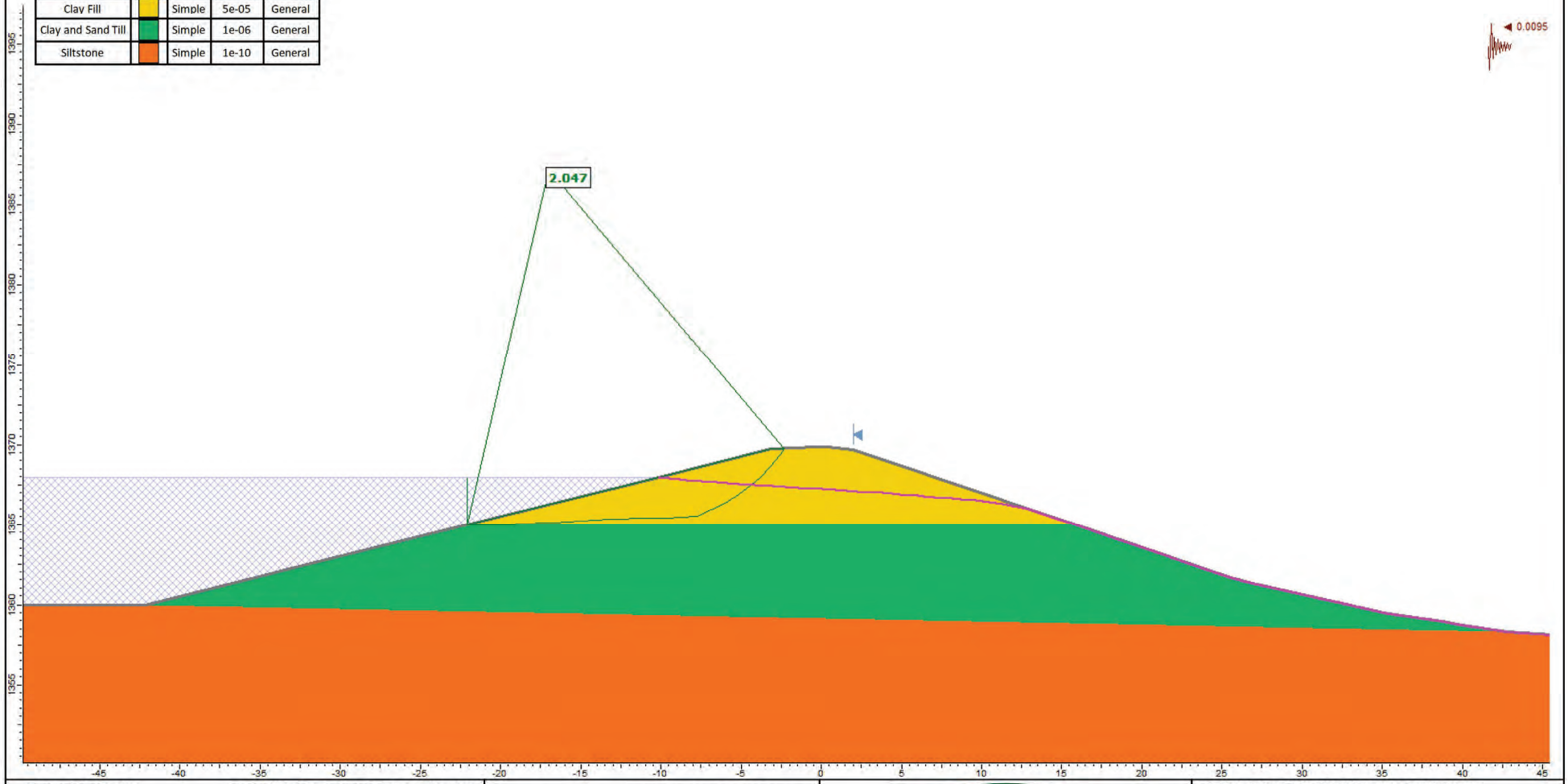
Material Name	Color	Model	KS (m/s)	Soil Type
Clay Fill		Simple	5e-05	General
Clay and Sand Till		Simple	1e-06	General
Siltstone		Simple	1e-10	General



ANALYSIS TYPE:	RAPID DRAWDOWN UPSTREAM	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION A-A	
UPSTREAM WATER LEVEL:	FSL (1368.0 m) TO EMPTY						
ANALYSIS DIRECTION:	UPSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-1.4

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Cohesion Type
Clay Fill		19	Mohr-Coulomb	0	28	
Clay and Sand Till		20	Mohr-Coulomb	3	28	
Siltstone		21	Undrained	100	0	Constant

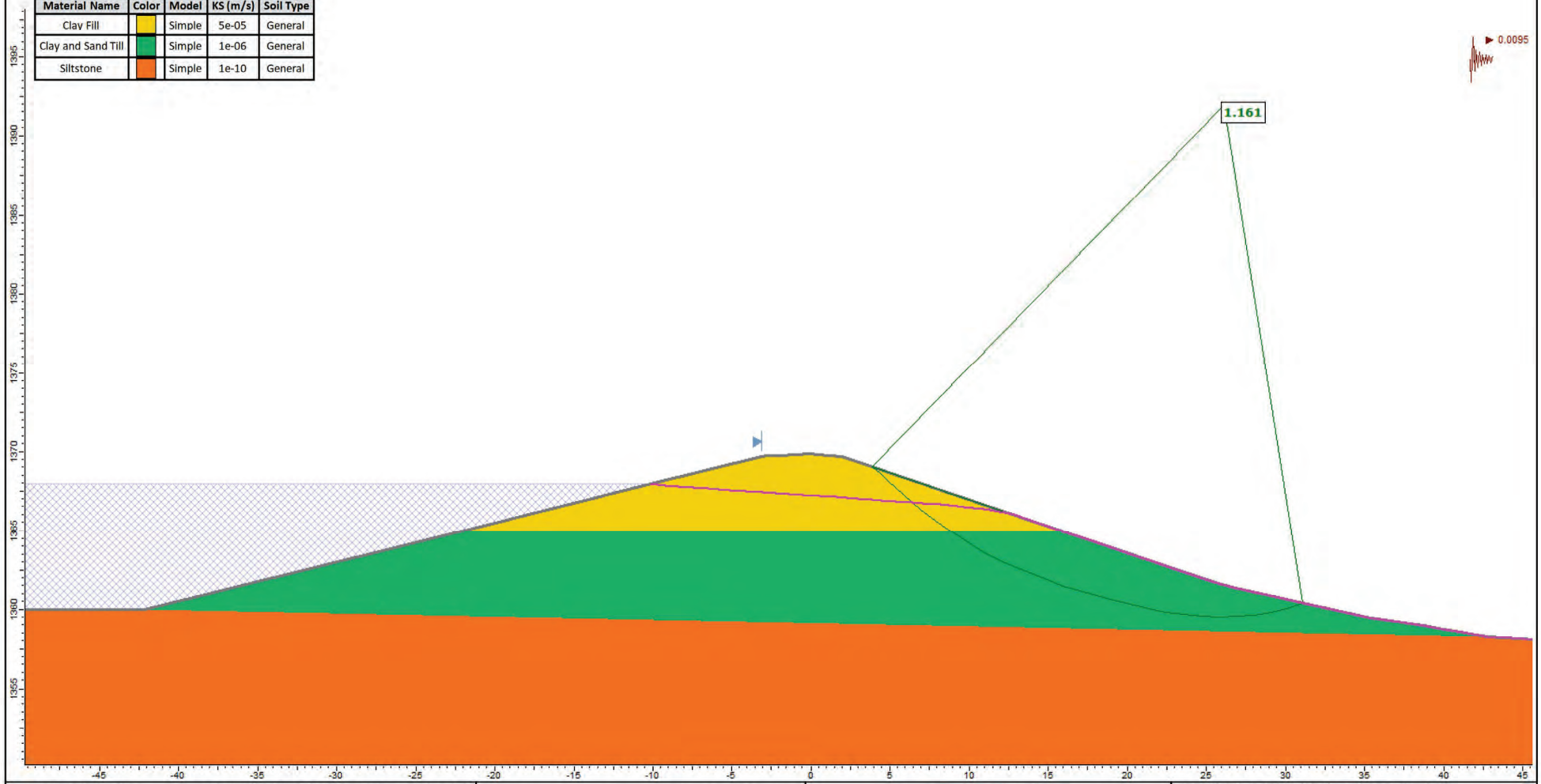
Material Name	Color	Model	KS (m/s)	Soil Type
Clay Fill		Simple	5e-05	General
Clay and Sand Till		Simple	1e-06	General
Siltstone		Simple	1e-10	General



ANALYSIS TYPE:	PSEUDO-STATIC UPSTREAM (1:100)	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe			CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION A-A
UPSTREAM WATER LEVEL:	FSL (1368.0 m)						
ANALYSIS DIRECTION:	UPSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0.0095g	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-1.5

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	Cohesion Type
Clay Fill		19	Mohr-Coulomb	0	28	
Clay and Sand Till		20	Mohr-Coulomb	3	28	
Siltstone		21	Undrained	100	0	Constant

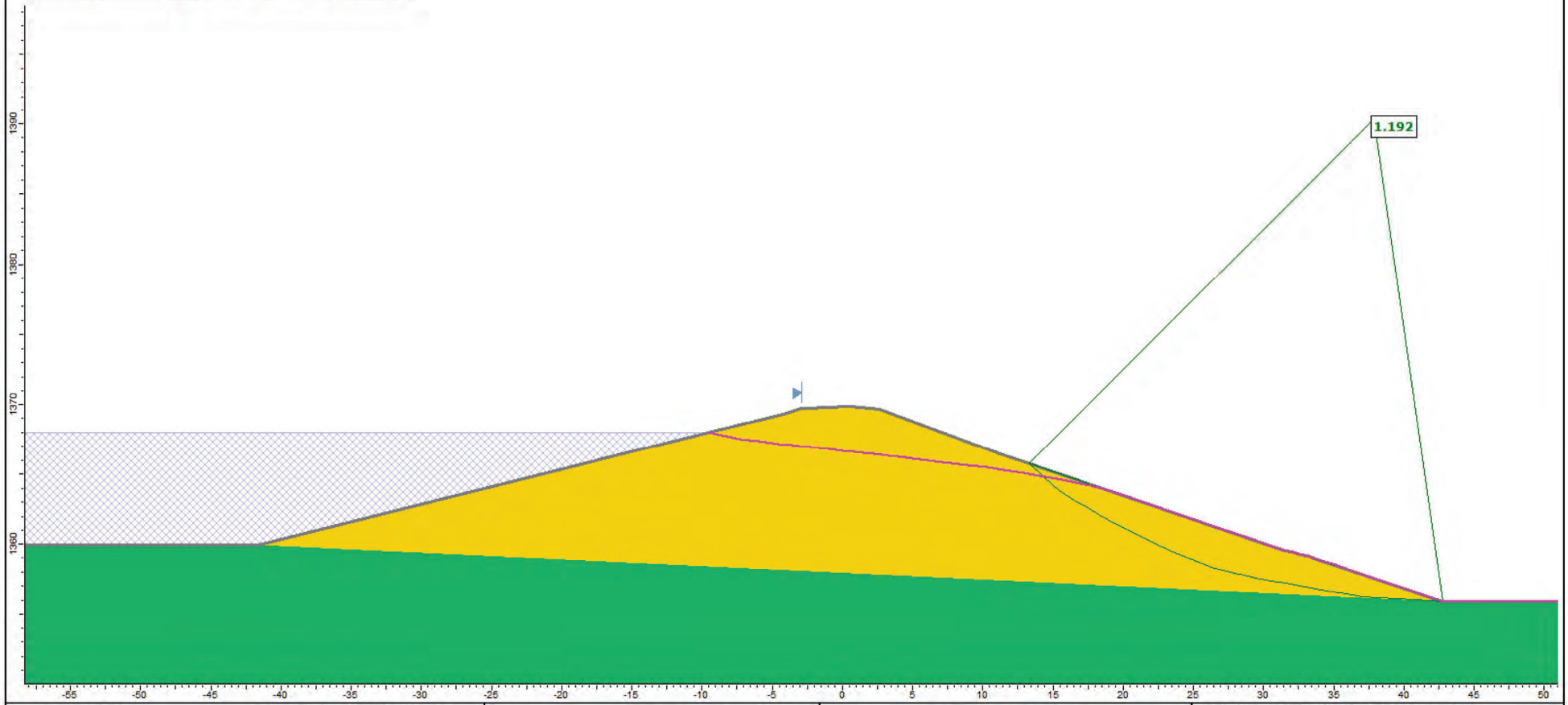
Material Name	Color	Model	KS (m/s)	Soil Type
Clay Fill		Simple	5e-05	General
Clay and Sand Till		Simple	1e-06	General
Siltstone		Simple	1e-10	General



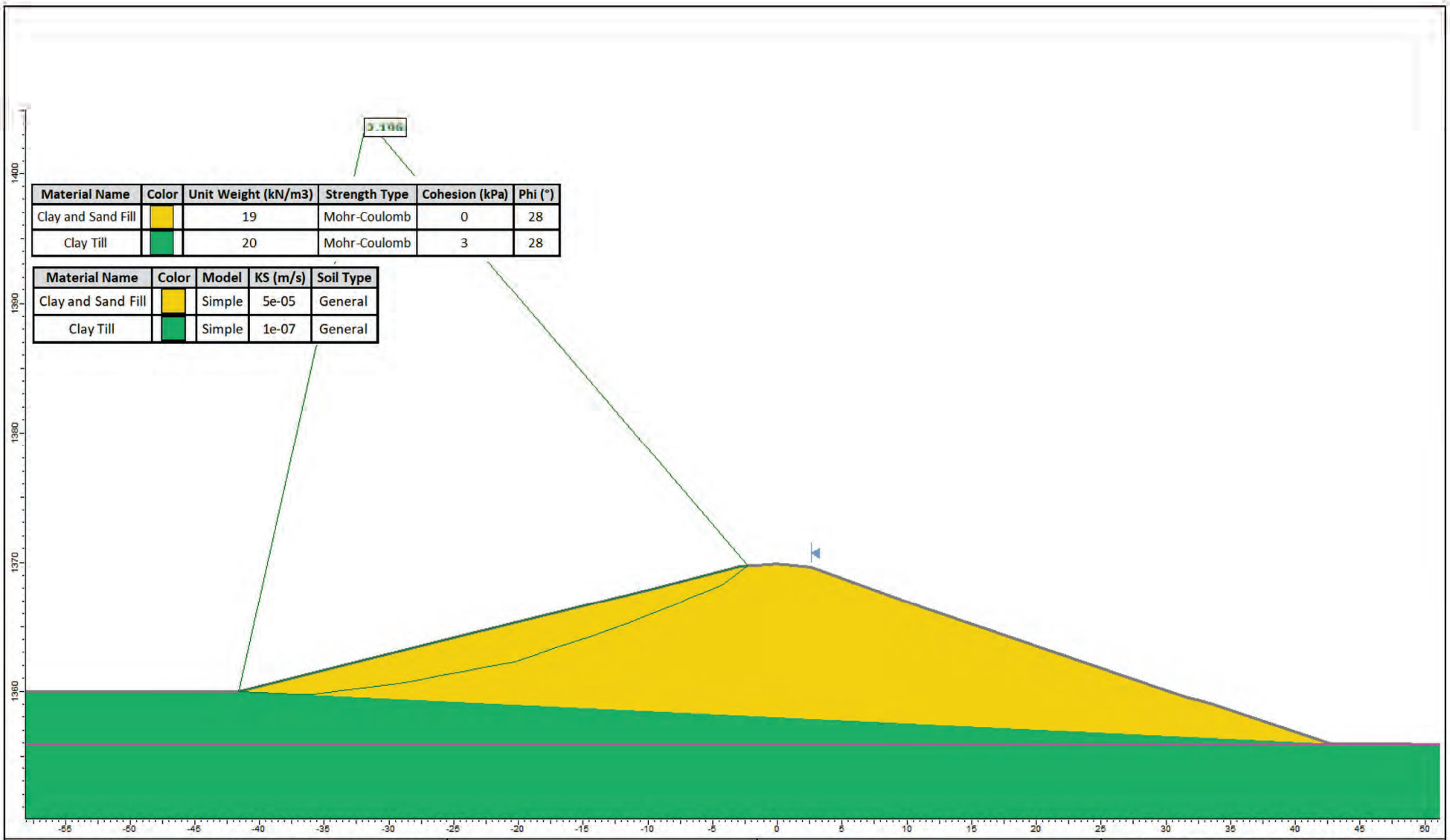
ANALYSIS TYPE:	PSEUDO-STATIC DOWNSTREAM (1:100)	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION A-A	
UPSTREAM WATER LEVEL:	FSL (1368.0 m)						
ANALYSIS DIRECTION:	DOWNSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0.0095g	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-1.6

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)
Clay and Sand Fill		19	Mohr-Coulomb	0	28
Clay Till		20	Mohr-Coulomb	3	28

Material Name	Color	Model	KS (m/s)	Soil Type
Clay and Sand Fill		Simple	5e-05	General
Clay Till		Simple	1e-07	General



ANALYSIS TYPE:	LONG TERM STEADY STATE	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION B-B	
UPSTREAM WATER LEVEL:	FSL (1368.0 m)						
ANALYSIS DIRECTION:	DOWNSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-2.1



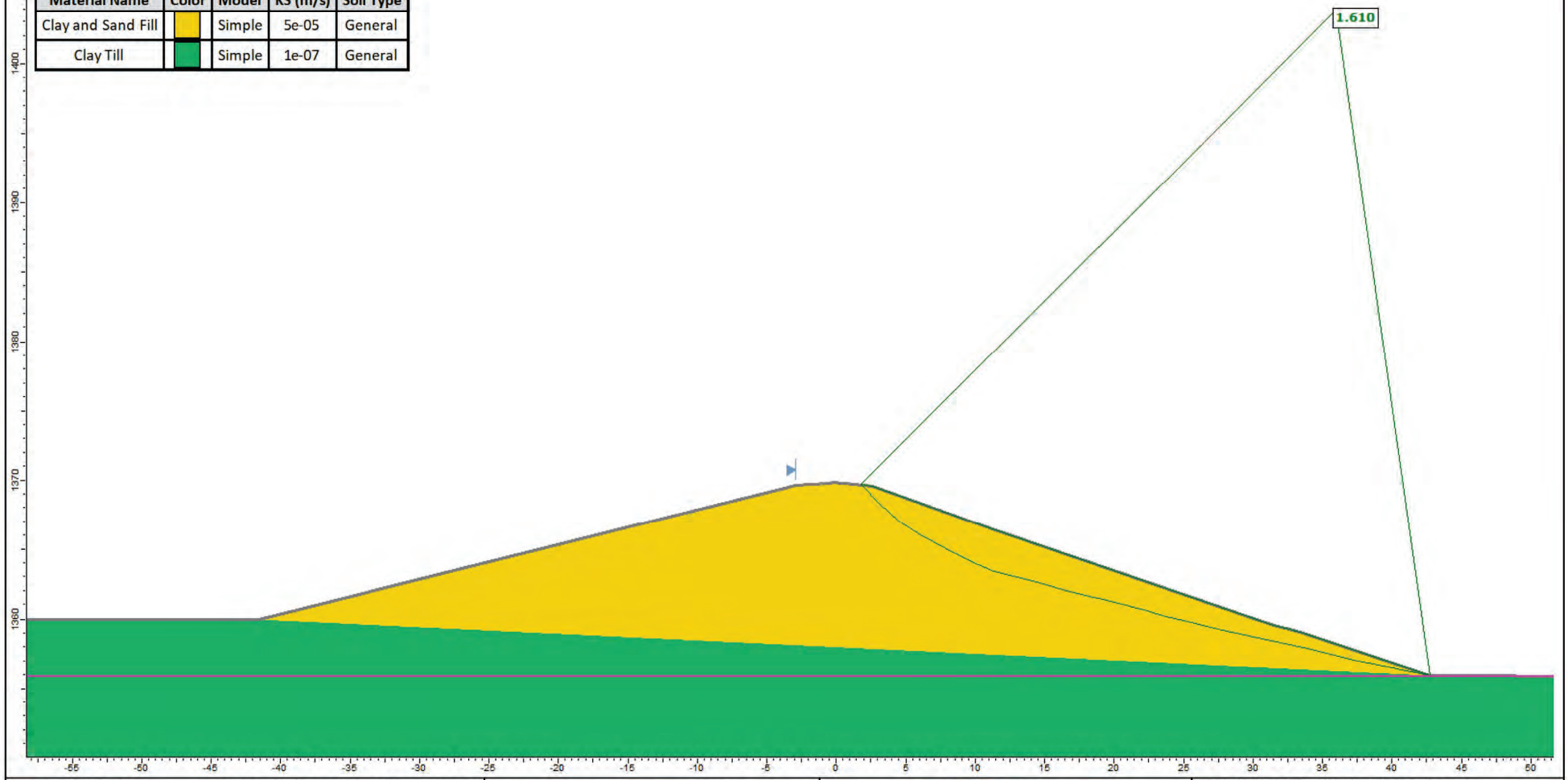
Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)
Clay and Sand Fill		19	Mohr-Coulomb	0	28
Clay Till		20	Mohr-Coulomb	3	28

Material Name	Color	Model	KS (m/s)	Soil Type
Clay and Sand Fill		Simple	5e-05	General
Clay Till		Simple	1e-07	General

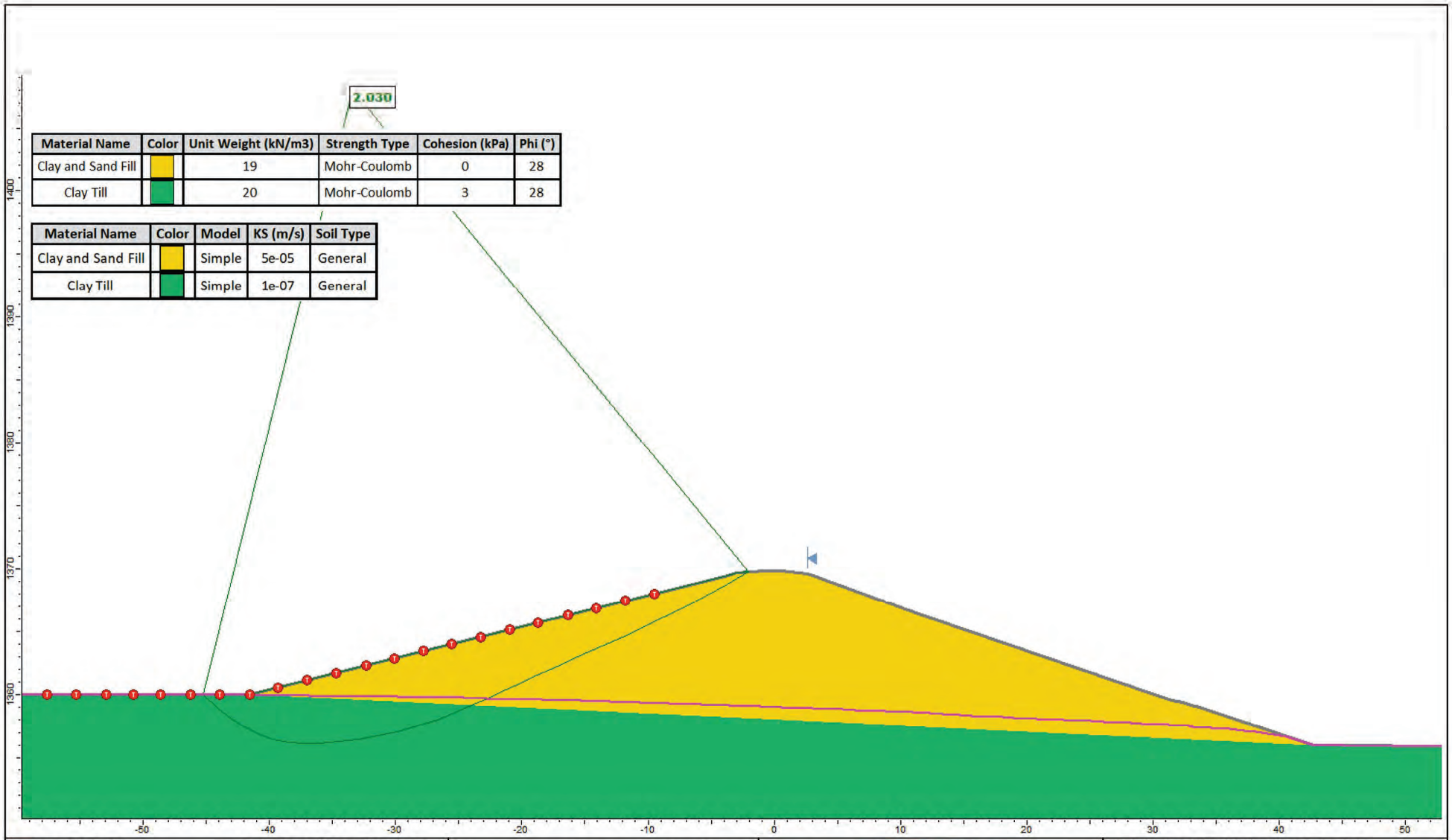
ANALYSIS TYPE:	END OF CONSTRUCTION UPSTREAM	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION B-B	
UPSTREAM WATER LEVEL:	N/A						
ANALYSIS DIRECTION:	UPSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	BEFORE RESERVOIR FILLING	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-2.2

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)
Clay and Sand Fill		19	Mohr-Coulomb	0	28
Clay Till		20	Mohr-Coulomb	3	28

Material Name	Color	Model	KS (m/s)	Soil Type
Clay and Sand Fill		Simple	5e-05	General
Clay Till		Simple	1e-07	General



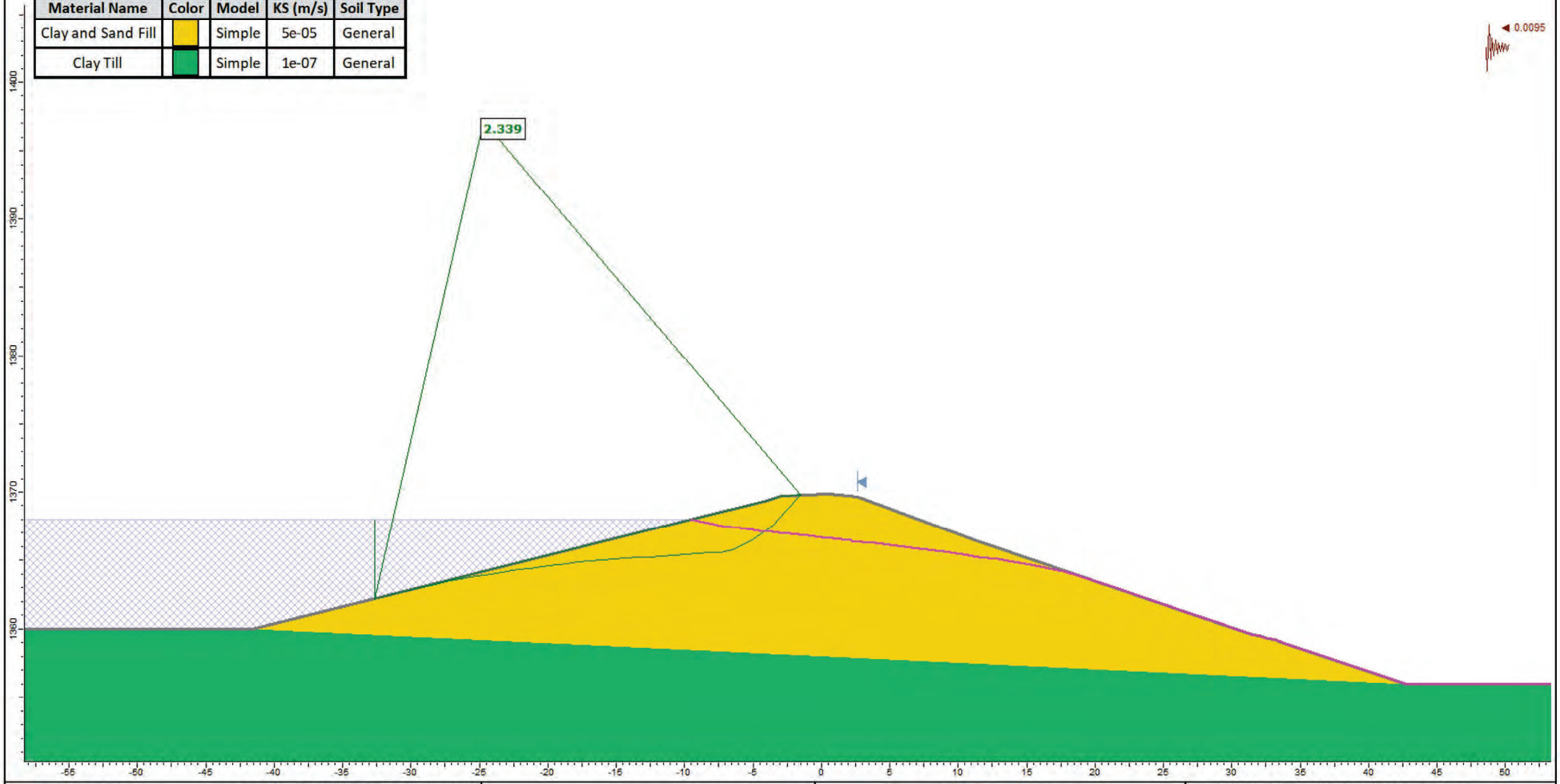
ANALYSIS TYPE:	END OF CONSTRUCTION DOWNSTREAM	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION B-B	
UPSTREAM WATER LEVEL:	N/A						
ANALYSIS DIRECTION:	DOWNSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	BEFORE RESERVOIR FILLING	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-2.3



ANALYSIS TYPE:	RAPID DRAWDOWN UPSTREAM	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION B-B	
UPSTREAM WATER LEVEL:	FSL (1368.0 m) TO EMPTY						
ANALYSIS DIRECTION:	UPSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-2.4

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)
Clay and Sand Fill		19	Mohr-Coulomb	0	28
Clay Till		20	Mohr-Coulomb	3	28

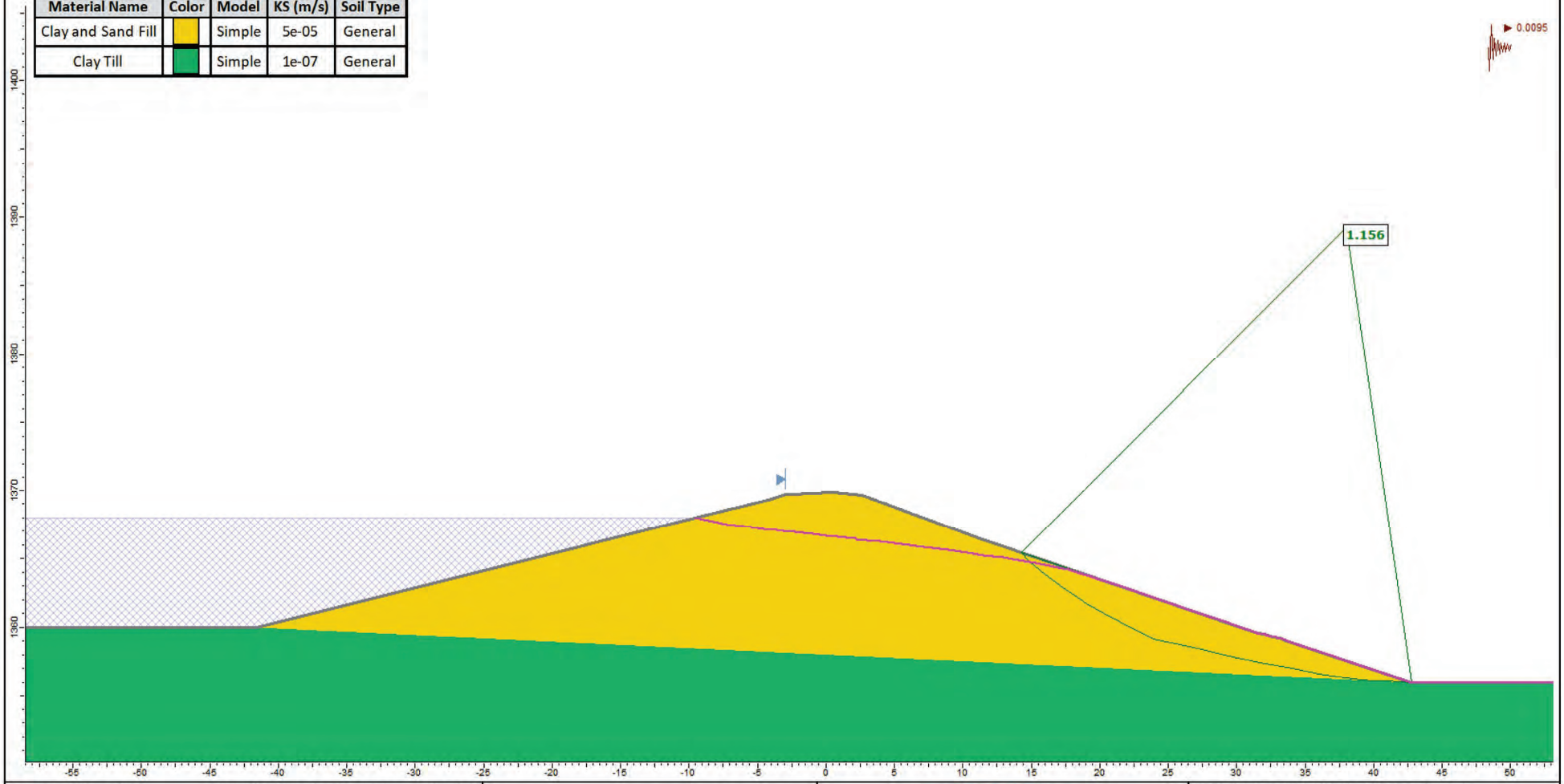
Material Name	Color	Model	KS (m/s)	Soil Type
Clay and Sand Fill		Simple	5e-05	General
Clay Till		Simple	1e-07	General



ANALYSIS TYPE:	PSEUDO-STATIC UPSTREAM (1:100)	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION B-B	
UPSTREAM WATER LEVEL:	FSL (1368.0 m)						
ANALYSIS DIRECTION:	UPSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0.0095g	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-2.5

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)
Clay and Sand Fill		19	Mohr-Coulomb	0	28
Clay Till		20	Mohr-Coulomb	3	28

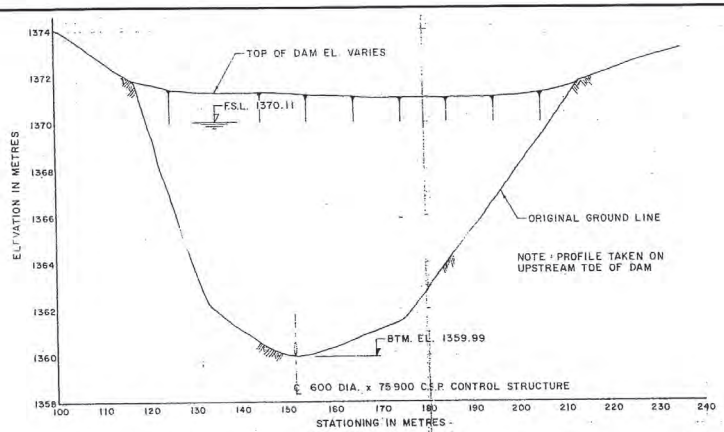
Material Name	Color	Model	KS (m/s)	Soil Type
Clay and Sand Fill		Simple	5e-05	General
Clay Till		Simple	1e-07	General



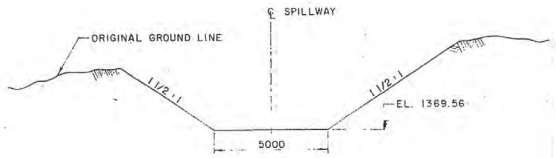
ANALYSIS TYPE:	PSEUDO-STATIC DOWNSTREAM (1:100)	CLIENT:	MUNICIPAL DISTRICT OF PINCHER CREEK NO.9	MPE a division of Englobe		CRIDLAND DAM STABILITY ASSESSMENT GEOTECHNICAL INVESTIGATION REPORT ANALYSIS FIGURES - SECTION B-B	
UPSTREAM WATER LEVEL:	FSL (1368.0 m)						
ANALYSIS DIRECTION:	DOWNSTREAM	ANALYSIS BY:	CHANG LIU				
SEISMIC LOAD:	0.0095g	REVIEWED BY:	TREVOR CURTIS				
CONSTRUCTION STAGE:	FSL CONDITION	VERSION:	SLIDEINTERPRITE 9.037	SCALE: NTS	DATE: JULY 2025	JOB: 1770-037	FIGURE: E-2.6

APPENDIX F:

REFERENCE HISTORICAL DOCUMENTS

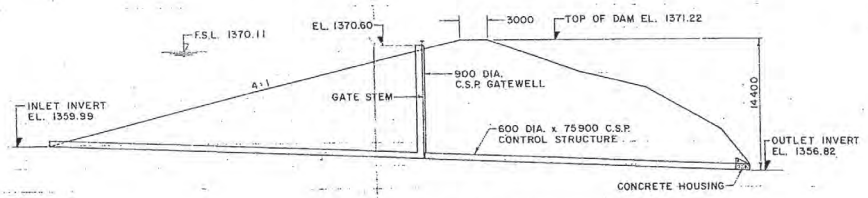


PROFILE OF DAM



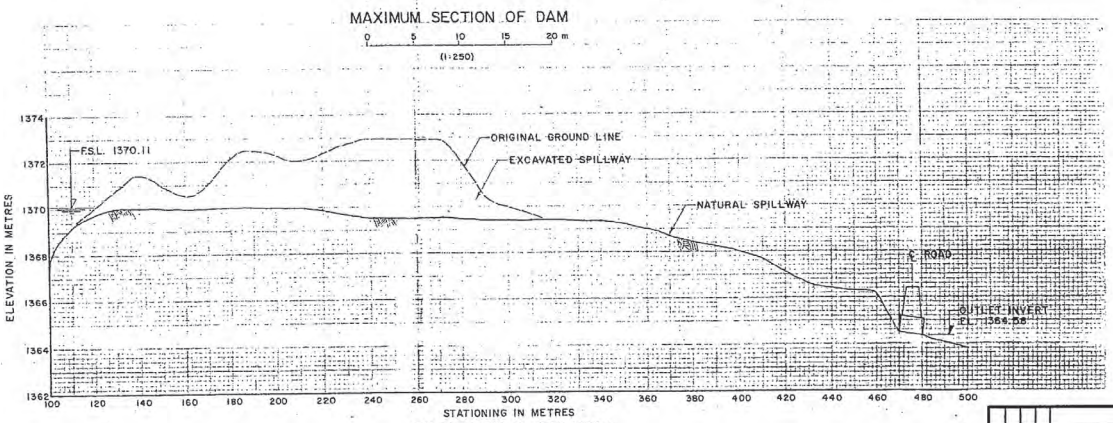
SECTION OF SPILLWAY STA. 237.50

0 1 2 3 4 5 6 7 8 m
(1:100)

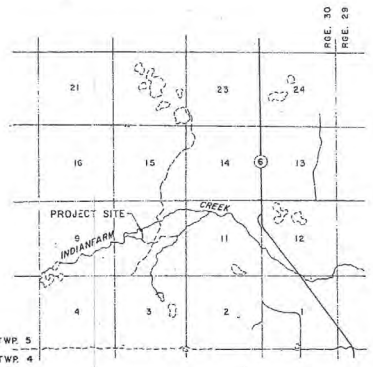


MAXIMUM SECTION OF DAM

0 5 10 15 20 m
(1:250)



PROFILE ON ℄ SPILLWAY



KEY PLAN

0 1000 2000 3000 4000 m
(1:50000)

NOTES:

1. THIS DRAWING HAS BEEN REDUCED TO FIT THE TITLE BLOCK AND IS NOT TO SCALE.
2. SOURCE: THE PRAIRIE FARM REHABILITATION ADMINISTRATION, 1958.

REV	Y	M	D	REVISION DESCRIPTION	DES	DRN	CHK
A	89	05	12	ISSUED FOR DAM SAFETY REVIEW	AKS	CO	HOW

PROJECT No. 0678-045-02 CALGARY, ALBERTA

File No. SW1483

uma

M.D. OF PINCHER CREEK

CRIDLAND DAM

SECTIONS AND PROFILES

Dwg. No. 004

A4 MODIFIED (11" x 17") 279mmx431mm

Government of Canada / Gouvernement du Canada

MEMORANDUM / **NOTE DE SERVICE**

CC Nsm & Council / SB

TO / À: R. Powley, Design Engineer
PFRA Regional Operations Division
Calgary, Alberta

FROM / DE: Yiming Lu, Head
Geotechnical Eng. Section
Saskatoon, Sask.

SECURITY - CLASSIFICATION - DE SÉCURITÉ	
OUR FILE/NOTRE RÉFÉRENCE	4548:928-8C16
YOUR FILE/VOTRE RÉFÉRENCE	
DATE	Jan. 11, 1995

SUBJECT / OBJET: Cridland Dam - Geotechnical Investigation

As you proposed (memo to Uhrbach, Sept. 8, 1994), three additional holes (C2 to C4) were drilled and 4 piezometers were installed on the crest of Cridland Dam in mid-October, 1994. The purpose of the investigation was to obtain further soil information to support the planning and implementation of any renovation options.

The approximate locations of all drill holes including C1 are shown on Figure 1. Hole logs C1 to C4 are attached. Note that soil descriptions "Till(Cl)" previously shown in C1 have been revised to " GC, glacial", or "Cl, glacial" in accordance with Unified Soil Classification System. The new descriptions duly reflect the engineering properties and geological origin of the materials as placed in the fill. The following paragraphs summarize soil conditions and piezometric levels within the embankment.

Soil Conditions

As shown in the hole logs, the entire embankment fill consists mainly of compacted clayey gravel (GC) of glacial origin to depths of 6.5 to 7.5 m, and glacial clay (Cl) below. Till overlying shale and sandstone occurs in the foundation in the left/west abutment (see C2), while till exists in the foundation to unknown depth in the right/east abutment (see C4).

Attempts were made to take continuous undisturbed samples in the fill. Because of the abundance of large sizes of gravels and cobbles, however, not all attempts were successful. Based on samples obtained, soil densities in the fill look satisfactory. Seven grain size analyses were performed on the GC, and the results indicate a wide range of grain size gradation distributions. Excluding the cobbles, the GC contains 11 to 30 % of fine grained soils, 32 to 40 % of sands, and 30 to 51 % of gravels. If the spaces between the sand and gravel particles within the GC were fully occupied by the fines, the GC materials should be impervious. On the other hand, voids and open-work structures could form in the GC at locations where the fines contents are low. The active seepage through the embankment indicate the existence of voids and open-work structures in the fill.

Piezometric levels taken shortly after installation are shown on the hole logs. The water levels ranged from 3.2 to 4.5 m below the dam crest approximately. The reservoir was maintained at its usual level during drilling.

Discussion

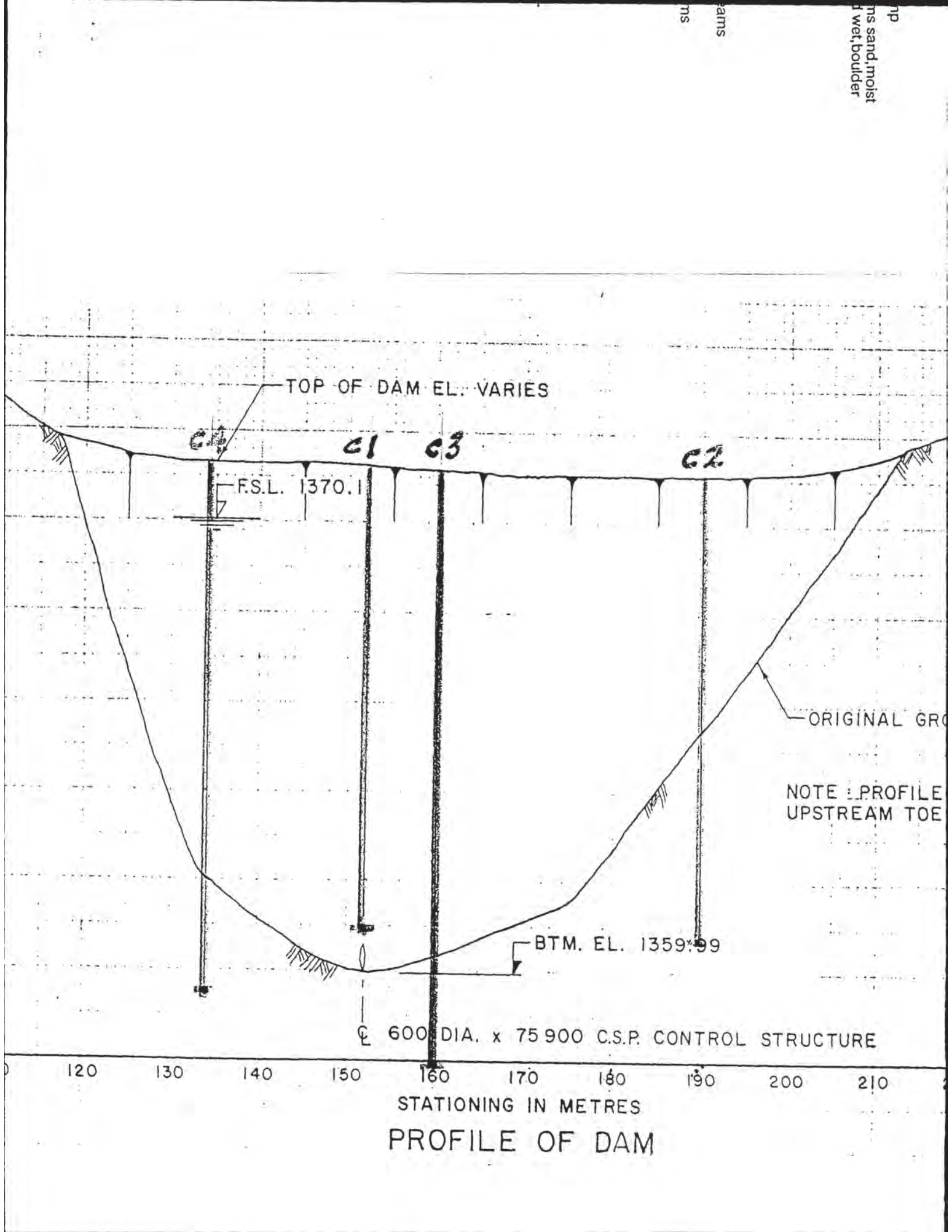
Obviously, the bulk of the embankment consists of compacted glacial materials with large proportions of sands, gravels and cobbles. In a normal construction practice without special precaution to prevent material segregation, voids and open-work structures would most likely have been incorporated in the fill. The current seepage conditions through the fill indicate that continuous flow paths have developed through these voids/structures over the years.

In connection with the Option 3 selected by the MD of Pincher Creek, the upstream portion of the GC materials in the embankment should be replaced with impervious fill to a depth of 7 to 8 m, at least locally. The final geometry of the impervious section will depend on availability of material, ease of construction, site layout, cost, ... etc. We will be willing to provide further details and assistance in geotechnical area to you in developing the construction plan.

The above is submitted for your information for now. Please call if you need further discussion.

Yiming Lu, Geotechnical Division

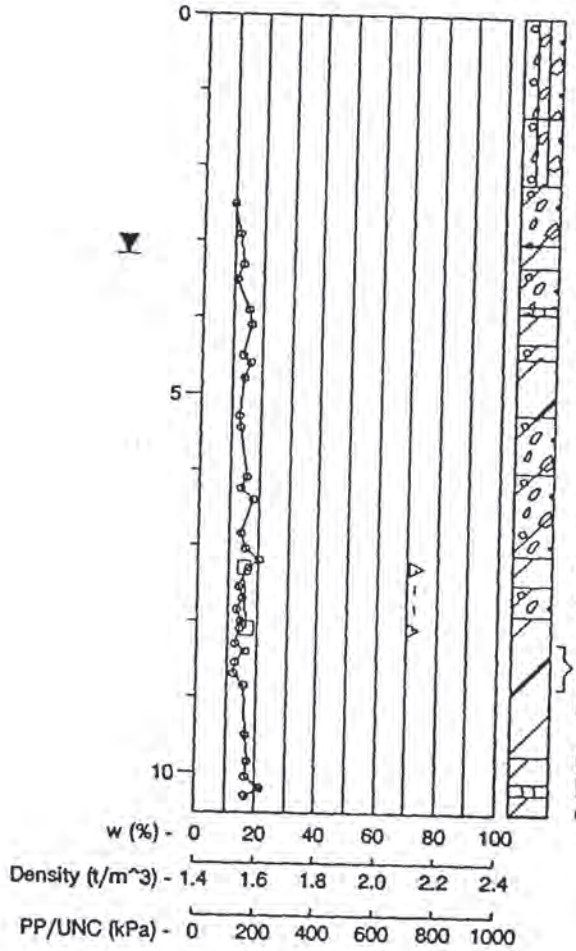
c.c. D. Uhrbach, M. D. of Pincher Creek
K. Stovra, PFRA Lethbridge



PROFILE OF DAM

C 1

EL. m



GPGM, fine, moist, very sandy, cobbles

(fn) GM, cobbles, dry

GC,glacial, very stiff, sandy,(fn) damp

CI,glacial,very stiff,gravelly,(fn) seams sand,moist
GC,glacial,very stiff,(fn) seams sand wet,boulder
GM, fine, wet, sandy
CI,glacial, very stiff, seams organic
GC,glacial
CI,glacial,stiff to very stiff,gravelly

GC,glacial, stiff, (fn) wet

GC,glacial,stiff,(fn) water bearing seams

CI,glacial,grey,gravelly,(fn) wet seams
GC,glacial, grey, (fn) wet seams

seepage

CI,glacial, stiff, gravelly

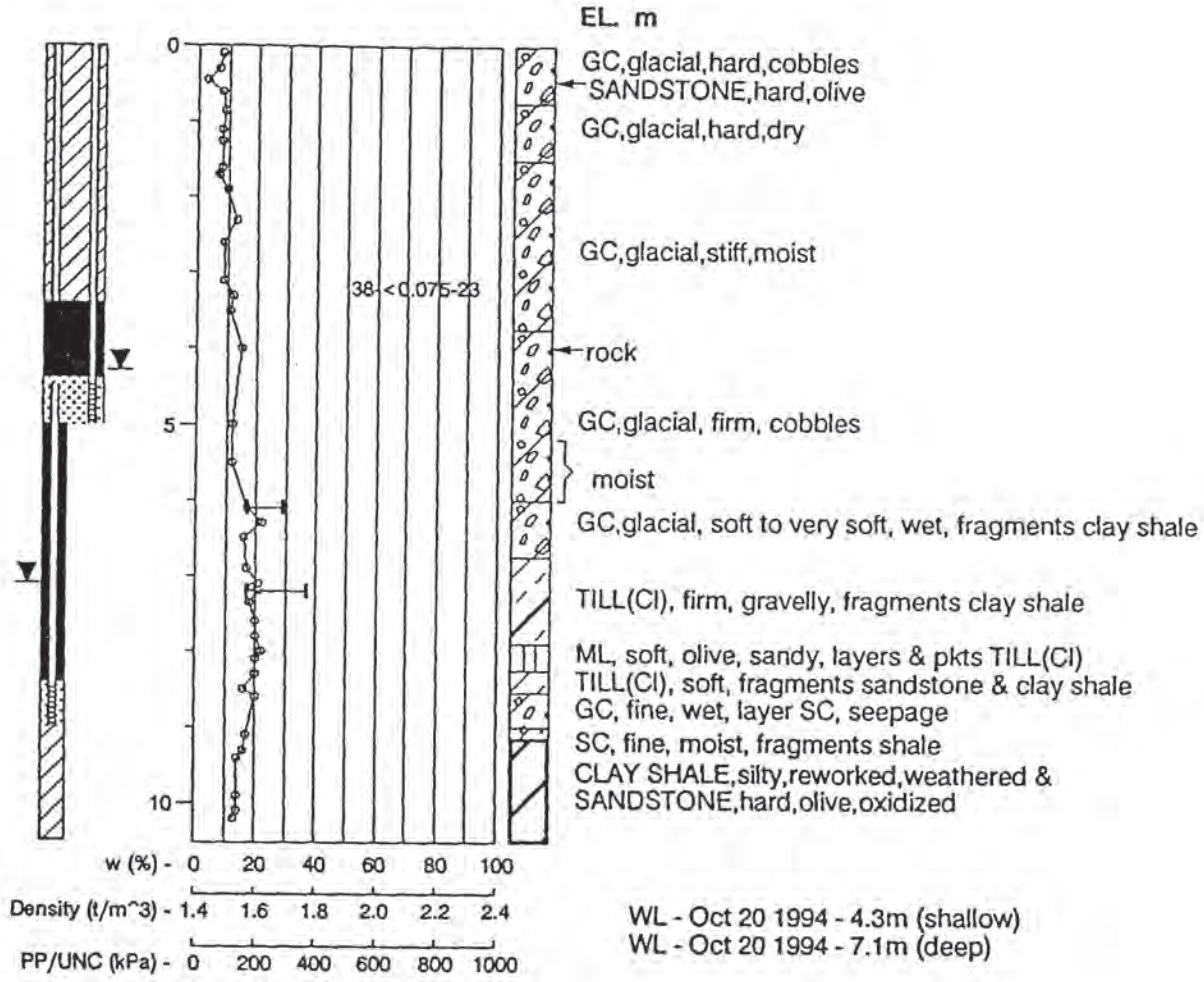
CI,glacial, stiff, grey, gravelly
ML, stiff, grey, gravelly
CI,glacial,stiff,grey,gravelly,layer ML

WL - May 31, 1994 - 3.2 m

Drilled - May 31, 1994 - 10.5 m

PFRA GEOTECHNICAL DIVISION	CRIDLAND DAM NW 10-5-30-W4		C 1
	Drawn/Checked: GF/SF/RG 01/03/95	4548:928-8C16	1 of 1

C 2



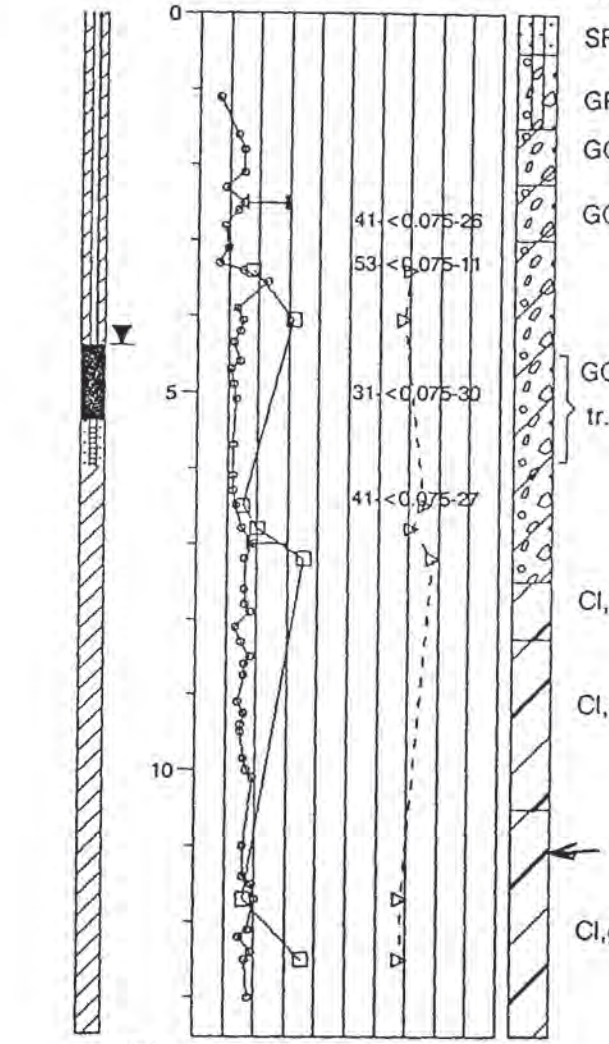
WL - Oct 20 1994 - 4.3m (shallow)
WL - Oct 20 1994 - 7.1m (deep)

Drilled - October 19, 1994 - 10.5 m

PFRA GEOTECHNICAL DIVISION	**CRIDLAND DAM** NW 10-5-30-W4	**C 2**
	Drawn/Checked: SF/SF/ML 01/03/95 | 4548:928-8C16	1 of 1

C 3

EL. m



SPSM,med.,moist,gravel,cobbles

GPGM,fine,moist,cobbles

GC,glacial,grey,cobbles

GC,glacial,fine,moist,cobbles

GC,glacial,very stiff,gravel,cobbles
tr. of seepage

Cl,glacial,soft to stiff,grey,wet

Cl,glacial,stiff,grey,cobbles,tr. seepage

Cl,glacial,very stiff to soft

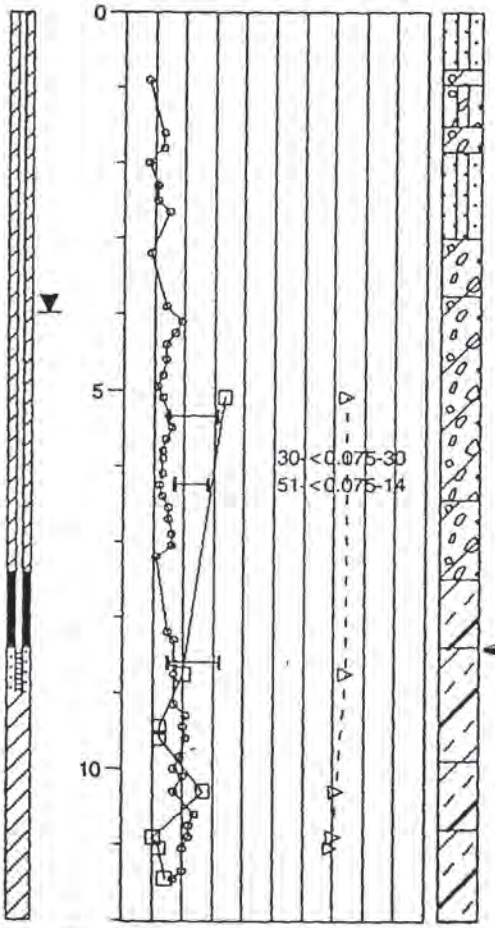
WL - Oct 19 1994 - 4.4m

Drilled - October 19, 1994 - 13.5 m

PFRA GEOTECHNICAL DIVISION	CRIDLAND DAM NW 10-5-30-W4		C 3
	Drawn/Checked: SF/SF/ML 01/03/95	4548:928-8C16	1 of 1

C 4

EL. m



SPSM, med.,moist,gravel

GC,fine,moist
GPGM,med.,moist
GC,glacial,stiff,cobbles
SM,fine,moist,gravel,cobbles

GC,glacial,fine,moist,cobbles

GC,glacial,stiff to very stiff,cobbles

GC,glacial,stiff,grey,cobbles

Cl,glacial,stiff,grey,moist,gravelly

TILL(Cl),very stiff,gravel

TILL(Cl),very stiff,grey,pkts organic

TILL(Cl),stiff,gravel

w (%) - 0 20 40 60 80 100

Density (t/m^3) - 1.4 1.6 1.8 2.0 2.2 2.4

PP/UNC (kPa) - 0 200 400 600 800 1000

WL - Oct 20 1994 - 4.0

Drilled - October 20, 1994 - 12.0 m

PFRA GEOTECHNICAL DIVISION	CRIDLAND DAM NW 10-5-30-W4		C 4
	Drawn/Checked: SF/SF/ML 01/03/95	4548:928-8C16	1 of 1

Recommendation to Council

TITLE: Grant In Place of Taxes (GIPOT) 2025 Write Off	
PREPARED BY: Meghan Dobie	DATE: February 5, 2026
DEPARTMENT: Finance	
Department Supervisor / Date	ATTACHMENTS: 1. N/A

APPROVALS:

Department Director	Date	CAO	Date
	Feb 5, 2026		2026/02/05

RECOMMENDATION:
That Council write off the uncollectible GIPOT in the 2025 fiscal year, up to a maximum of $5,315, with funds from the tax rate stabilization reserve.

BACKGROUND:
Properties belonging to the Government of Alberta are exempt from municipal taxation. Instead, municipalities are paid by a grant in place of taxes (GIPOT) on eligible properties. This is a discretionary grant program and not a tax payment. This program acknowledges that the province benefits from municipal services provided to these properties, such as roadwork, snow clearing, and emergency services.

In 2024, GIPOT applications were paid out at 50%; in 2025, at 75%; and in 2026, the program is expected to be restored.

In 2024/25 tax rolls 5153.000 to 5153.008 were being reclassed between GIPOT and Non-Residential, with a final settlement as GIPOT. This has resulted in a write-off equal to approximately $1,900.

There are still 3 GIPOT 2025 applications under review that have not yet been paid; we expect an update no later than March 31, 2026. However, their write-off portion remains unknown and is not included here. The remainder of the 2025 applications have been processed, resulting in a write-off equal to approximately $3,415.

FINANCIAL IMPLICATIONS:
$5,315 from the tax rate stabilization reserve

Royal Canadian Mounted Police

Commanding Officer
Alberta

Gendarmerie royale du Canada

Commandant
de l'Alberta

February 4, 2026

Good day,

As we begin a new year, I would like to take the opportunity to share an update on the work the Alberta RCMP is doing to support safe, resilient communities across the province.

Like you, and the communities you serve, crime remains a primary concern for the Alberta RCMP. We recognize the significant impacts crime has on residents, businesses, and overall community well-being. Policing in Alberta presents unique and real challenges, including vast geographic areas, long response distances, and a relatively small number of repeat offenders who cause a disproportionate amount of harm. Addressing these challenges requires responses that are intelligence-led, fiscally responsible, and built on strong partnerships.

We remain focused on addressing crime-through continual reassessment of operational approaches, responsible deployment of resources, and close collaboration with municipal and community partners. We also recognize the significant cost of policing for communities and remain committed to ensuring available resources are deployed strategically and efficiently to deliver effective policing services to Albertans.

As part of this commitment, we are investing in modernization initiatives, including the development of the Real-Time Operations Centre, the expansion of the Emergency Response Team, increased investigative capacity and resources focused on working in partnership with communities and government on prevention initiatives and address the root causes of crime.

I want to highlight for you some of the initiatives we have underway, some of the results we've realized and some of the opportunities we remain focused on.

Despite fiscal pressures, we continue to focus resources where they will have the greatest impact. One of our key strategies is concentrating on the relatively small number of offenders responsible for the greatest harm across the province through tracking and prioritizing the Top 100 offenders. Using data compiled from RCMP and municipal police services across Alberta our Strategic Research and Analysis Unit, has assessed nearly 100,000 unique offenders and ranked them to identify those causing the most significant harm. This intelligence directly informs the work of Crime Reduction Units located across the province that can be deployed where and when emerging crime trends demand to target those offenders causing the most harm. These units work in close coordination with local detachments and partner agencies, including municipal police services and Alberta Sheriffs.

We have countless examples of successful operations targeting property crime offenders across Alberta where significant seizures of stolen property including vehicles, ATV's heavy construction equipment, and copper wire, have been recovered and offenders have been arrested to face prosecution. This includes well coordinated investigations involving teams of investigators located strategically throughout the four districts working in concert and utilizing sophisticated investigative techniques and tools including the leveraging of cutting-edge surveillance assets from our federal RCMP partners.

We know that addiction to illicit drugs is a huge driver of the types of crime that victimize-Albertans. To that end, we have also utilized enhanced investigative resources to compliment local detachments in combatting the drug trade in communities across the province. We have made significant seizures of fentanyl, methamphetamines, cocaine and illegal firearms in numerous investigations across the province. These successes impact the availability of these harmful drugs through disruption of supply and act as a deterrent by holding accountable those who are profiting from the distribution of substances that deprive Albertans of their safety and security.

We are embracing technology to make policing more effective, efficient, and safer for both the public and police. The policing landscape is changing; yesterday's solutions won't solve today's challenges. As such, modern policing requires that frontline officers be supported by layers of expertise, coordination, and technology. The Real-Time Operations Centre does exactly that and is a critical component of police modernization. Operating twenty-four hours a day, seven days a week, the Real-Time Operations Centre provides operational support to every Alberta RCMP officer in the province. It enhances officer and public safety, coordinates specialized resources, and ensures informed decision-making during complex and evolving incidents. For our officers, the Real-Time Operations Centre ensures they are never working alone, regardless of location. For Alberta communities, this means every officer on their street is supported by a robust network of specialized units ready to respond at any moment. Ratepayers aren't funding just one uniformed member, but a comprehensive system of expertise and technology working behind that officer to keep their community safe.

Advanced investigative resources and practices represent another essential component of modernized policing as do resources such as the Emergency Response Teams. Emergency Response Teams are teams of highly skilled and trained individuals, bringing together experienced members, specialized tactics, advanced technology, and trained negotiators as a complete operational package, essentially bringing the right resource to the most volatile and dangerous calls. Their role is to safely resolve high-risk incidents involving armed or barricaded individuals, hostage situations and high-risk arrests. By deploying the appropriate expertise, equipment, and techniques, Emergency Response Teams have consistently led to safer outcomes for community members, suspects, and police officers. Demand for these specialized responses has increased significantly, with a sixty-one per cent increase in calls requiring Emergency Response Team involvement over the past four years. In response we have increased our capacity in this area enhancing overall public safety throughout the province. These specialized units place the Alberta RCMP on the leading edge of modern policing in Canada and directly support community safety. Combined with the dedication of our employees and the partnership of the communities we serve, these efforts have helped reduce crime rates in Alberta to the lowest in five years.

We recognize that police visibility and staffing levels remain key concerns for our clients and stakeholders. We continue to focus on recruiting Albertans to serve Albertans, strengthening experienced police officer recruitment. Since April 1, 2024, we have seen 5,450 applications in Alberta and 22 Experienced Police Officers have joined the Alberta RCMP since April 1, 2025. While these recruiting numbers are encouraging, we recognize the ongoing urgency to fill vacancies which is why we continually look inward at our hiring processes to remove barriers, find efficiencies and ensure the most qualified applicants are finding their way to service in communities across Alberta as quickly as possible.

Like all police services, we experience short-term human resource pressures at frontline detachments and have developed several strategies that enable a flexible response to these pressures. We have established a Relief Team based out of Leduc and Cochrane that is comprised of 30 members who

support detachments throughout the province. Since the start of 2026, the Relief Team has deployed 34 times to various detachments in the province. In addition, we currently have 33 Reservists who are retired police officers available as and when required to deploy where the greatest needs are. This provides another option of flexible deployment of highly experienced resources.

We are continually assessing our service delivery models to ensure our resources are deployed in the most effective and efficient way. This includes assessing resource levels at detachments, monitoring our response times, reviewing and adapting our policies and piloting initiatives to improve member visibility in communities. Just recently, we approved a pilot project that leverages technology to reduce the administrative burden placed on our front-line members, so that they can spend more time engaged in proactive patrolling and community engagement.

We continually engage in consultation with our community partners and stakeholders to identify whether changes to service delivery are needed. We assess and discuss impacts with our stakeholders and prioritize flexibility to ensure we are responsive to community priorities and needs.

Municipal leadership plays a critical role in advocating for safer communities. Your collective voice—grounded in firsthand knowledge of how crime affects residents, businesses, and community well-being—is essential in advancing meaningful change related to bail practices and court capacity.

I would like to highlight some of the broader challenges we encounter in this space.

First, let me share an example of a single prolific offender whose repeated releases resulted in significant harm across multiple communities:

- In February 2025, he committed a firearm-related robbery and stole a vehicle containing a one-year-old child, receiving a 90-day sentence.
- In June 2025, he was sentenced to 21 days time served after being located in a stolen vehicle.
- In July 2025, he was arrested again in a stolen vehicle, charged with 11 offences, and released on bail with conditions.
- In September 2025, he pled guilty to theft under $5,000 and served 30 days.
- In November 2025, he rammed an unmarked police vehicle with a stolen vehicle and was taken into custody.
- He now faces 11 charges, including failure to comply and assaulting a police officer with a weapon, and remains in custody.

This individual committed offences across Stony Plain, Spruce Grove, Parkland County, Lac Ste. Anne County, and Sturgeon County. His apprehension was the result of coordinated efforts between the Central Alberta District Crime Reduction Unit, a Community Response Team, and Parkland Detachment resources.

Examples such as this are not isolated. They demonstrate how a single prolific offender, repeatedly released back into the community, can cause significant harm to multiple municipalities in a short period of time. These cases underscore rural Albertans' concerns around repeat offending, bail, and court capacity.

We work closely with Crown Prosecutors to address repeat offending by ensuring priority offenders are supported by comprehensive bail packages that clearly outline criminal history, risk to public safety, and the broader community impacts of continued release. We also actively support the use of Community

Impact Statements, which allow communities and municipal leaders to articulate the cumulative harm crime causes beyond individual victims.

We remain compassionate toward individuals experiencing mental health challenges, addictions, and social vulnerability, and we continue to support partnerships that improve access to treatment and recovery services. This requires that adequate treatment be available and accessible. At the same time, there *are* individuals whose repeated, violent, or high-risk behaviour necessitates incarceration. Some people simply need to go to jail in order to protect the public and prevent further victimization.

Court capacity remains a significant challenge across the province, especially in rural Alberta. Limited court time, shortages of judges and clerks, and resulting delays undermine the effectiveness of the justice system. We will continue to advocate for improvements through multiple forums, consistently raising the impacts these pressures have on victims, communities, and frontline policing.

When policing data, operational experience, and municipal advocacy align, they provide a powerful foundation for justice system reform. Effective crime reduction cannot be achieved by policing alone. Long-term success depends on strong partnerships with municipalities, community organizations, government, and social service providers. We value our relationship with you and those you represent and recognize the essential role you play in shaping community safety priorities.

Modernization, fiscal responsibility, and collaboration will continue to guide our efforts. We are committed to leveraging technology, applying best practices, and deploying the right resources in the right places to support shared public safety goals.

Effective policing depends on strong partnerships, and I want to assure you that we remain committed to working closely with elected officials, municipal administrators, and community leaders to ensure policing services align with local priorities and needs. That is why I encourage you to reach out to your local Detachment Commander to discuss your policing services and explore opportunities to strengthen collaboration in support of your community priorities.

Sincerely,

Trevor Daroux
Deputy Commissioner
Commanding Officer Alberta RCMP

111140 - 109 Street
Edmonton, AB T5G 2T4

Telephone: 780-412-5444
Fax: 780-412-5445

February 5, 2026

Roland Milligan
CAO
Municipal District of Pincher Creek No. 9, AB

Dear CAO Milligan,

Please find attached the quarterly Community Policing Report covering the period from October 1st through December 31, 2025. It outlines staffing, financial information, and crime trends for the Crowsnest Pass Detachment, and supports our commitment to transparency and ongoing collaboration with our community partners.

Through both provincial and municipal policing contracts, the RCMP serves roughly 40% of Albertans across 95% of the province, including your community. That is why it is so important that our work is centered on people — the frontline members serving your community, the support teams behind the scenes, and the Albertans who rely on us every day.

The Government of Alberta's Police Funding Model (PFM) has strengthened our ability to meet those needs. With your contributions, we have added 279 police officers, 136 directly to detachments, along with 242 civilian staff, including 77 supporting detachment operations. These investments have also enabled the development of a Real-Time Operations Centre to support frontline officers, the expansion of our drone program, enhanced investigative capacity, and the addition of a third specialized Emergency Response Team.

These resources, along with the dedication of our employees and the support of your community, have helped bring Alberta's crime rates to their lowest point in five years — and we are committed to building on this progress together.

I welcome continued conversations about your community's policing priorities and any ideas that can help us strengthen our service. Working collaboratively is essential to maintaining this forward progress, and I encourage you to reach out at any time with questions, concerns, or suggestions.

Sincerely,

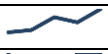
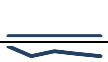
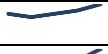
Sergeant Mark Amatto
Detachment Commander
Crowsnest Pass Detachment

RCMP
ROYAL CANADIAN MOUNTED POLICE

Crowsnest Pass Provincial Detachment
Crime Statistics (Actual)
October - December: 2021 - 2025

All categories contain "Attempted" and/or "Completed"

January 13, 2026

CATEGORY	Trend	2021	2022	2023	2024	2025	% Change 2021 - 2025	% Change 2024 - 2025	Avg File +/- per Year
Offences Related to Death		0	1	0	0	0	N/A	N/A	-0.1
Robbery		0	0	0	0	1	N/A	N/A	0.2
Sexual Assaults		2	3	2	2	1	-50%	-50%	-0.3
Other Sexual Offences		0	1	0	2	0	N/A	-100%	0.1
Assault		11	13	26	21	34	209%	62%	5.4
Kidnapping/Hostage/Abduction		1	0	0	1	1	0%	0%	0.1
Extortion		0	1	0	0	2	N/A	N/A	0.3
Criminal Harassment		12	9	4	10	9	-25%	-10%	-0.5
Uttering Threats		9	12	6	6	18	100%	200%	1.2
TOTAL PERSONS		**35**	**40**	**38**	**42**	**66**	**89%**	**57%**	**6.4**
Break & Enter		4	3	10	7	4	0%	-43%	0.4
Theft of Motor Vehicle		7	4	4	4	4	-43%	0%	-0.6
Theft Over $5,000		0	0	4	5	2	N/A	-60%	0.9
Theft Under $5,000		18	15	14	11	8	-56%	-27%	-2.4
Possn Stn Goods		3	3	3	2	4	33%	100%	0.1
Fraud		6	5	12	5	5	-17%	0%	-0.2
Arson		0	0	0	0	0	N/A	N/A	0.0
Mischief - Damage To Property		14	10	12	11	10	-29%	-9%	-0.7
Mischief - Other		5	9	11	19	18	260%	-5%	3.6
TOTAL PROPERTY		**57**	**49**	**70**	**64**	**55**	**-4%**	**-14%**	**1.1**
Offensive Weapons		3	2	2	4	5	67%	25%	0.6
Disturbing the peace		8	7	8	9	11	38%	22%	0.8
Fail to Comply & Breaches		6	8	3	8	12	100%	50%	1.2
OTHER CRIMINAL CODE		7	3	9	12	7	0%	-42%	0.9
TOTAL OTHER CRIMINAL CODE		**24**	**20**	**22**	**33**	**35**	**46%**	**6%**	**3.5**
TOTAL CRIMINAL CODE		116	109	130	139	156	34%	12%	11.0

RCMP
ROYAL CANADIAN MOUNTED POLICE

Crowsnest Pass Provincial Detachment
Crime Statistics (Actual)
October - December: 2021 - 2025

All categories contain "Attempted" and/or "Completed"

January 13, 2026

CATEGORY	Trend	2021	2022	2023	2024	2025	% Change 2021 - 2025	% Change 2024 - 2025	Avg File +/- per Year
Drug Enforcement - Production		0	0	0	0	0	N/A	N/A	0.0
Drug Enforcement - Possession		0	1	2	1	0	N/A	-100%	0.0
Drug Enforcement - Trafficking		0	0	4	2	1	N/A	-50%	0.4
Drug Enforcement - Other		0	0	0	0	0	N/A	N/A	0.0
Total Drugs		**0**	**1**	**6**	**3**	**1**	**N/A**	**-67%**	**0.4**
Cannabis Enforcement		0	0	1	0	0	N/A	N/A	0.0
Federal - General		4	4	4	0	0	-100%	N/A	-1.2
TOTAL FEDERAL		**4**	**5**	**11**	**3**	**1**	**-75%**	**-67%**	**-0.8**
Liquor Act		12	0	2	5	0	-100%	-100%	-1.9
Cannabis Act		3	1	4	0	0	-100%	N/A	-0.7
Mental Health Act		10	33	16	25	19	90%	-24%	1.0
Other Provincial Stats		20	18	16	16	16	-20%	0%	-1.0
Total Provincial Stats		**45**	**52**	**38**	**46**	**35**	**-22%**	**-24%**	**-2.6**
Municipal By-laws Traffic		1	0	0	0	0	-100%	N/A	-0.2
Municipal By-laws		6	3	2	8	4	-33%	-50%	0.1
Total Municipal		**7**	**3**	**2**	**8**	**4**	**-43%**	**-50%**	**-0.1**
Fatals		1	0	1	0	0	-100%	N/A	-0.2
Injury MVC		12	5	10	4	6	-50%	50%	-1.3
Property Damage MVC (Reportable)		62	76	65	38	63	2%	66%	-3.6
Property Damage MVC (Non Reportable)		15	12	9	11	16	7%	45%	0.1
TOTAL MVC		**90**	**93**	**85**	**53**	**85**	**-6%**	**60%**	**-5.0**
Roadside Suspension - Alcohol (Prov)		4	5	4	0	1	-75%	N/A	-1.1
Roadside Suspension - Drugs (Prov)		0	0	0	0	0	N/A	N/A	0.0
Total Provincial Traffic		**451**	**103**	**234**	**186**	**166**	**-63%**	**-11%**	**-48.7**
Other Traffic		**1**	**0**	**2**	**0**	**1**	**0%**	**N/A**	**0.0**
Criminal Code Traffic		**9**	**12**	**8**	**6**	**6**	**-33%**	**0%**	**-1.2**
Common Police Activities									
False Alarms		**9**	**6**	**16**	**10**	**13**	**44%**	**30%**	**1.2**
False/Abandoned 911 Call and 911 Act		**14**	**6**	**5**	**10**	**14**	**0%**	**40%**	**0.4**
Suspicious Person/Vehicle/Property		**20**	**19**	**24**	**9**	**17**	**-15%**	**89%**	**-1.6**
Persons Reported Missing		**6**	**4**	**4**	**6**	**4**	**-33%**	**-33%**	**-0.2**
Search Warrants		**0**	**0**	**0**	**0**	**0**	**N/A**	**N/A**	**0.0**
Spousal Abuse - Survey Code (Reported)		**11**	**26**	**28**	**27**	**21**	**91%**	**-22%**	**2.1**
Form 10 (MHA) (Reported)		**0**	**0**	**0**	**2**	**1**	**N/A**	**-50%**	**0.4**

Alberta RCMP – Provincial Policing Report

Detachment Information

Detachment Name
Crowsnest Pass Detachment

Detachment Commander
Sergeant Mark Amatto

Report Date	Fiscal Year	Quarter
February 5, 2026	2025-26	Q3 (October - December)

Community Priorities

Priority #1: Enhance Road Safety: Traffic Safety – Aggressive Driving

Updates and Comments:
The Crowsnest Pass Detachment fielded 82 motor vehicle collisions in this Quarter, 7 occurrences were Non-Fatal Injury collisions and 1 Fatal occurrence that had taken place on Highway 3 in Piikani wherein the deceased was from the Crowsnest Pass area. 55 Tickets and 41 Warnings were issued to drivers and/or registered owners; 1 ticket had been issued for failing to stop for a school bus with flashing red lights. Two presentations were completed at the Crowsnest Pass High School on the topics of Impaired Driving offences, as well as winter driving and intersection safety. Presentations at Livingstone School are forecast for the following Quarter.

Priority #2: Crime Reduction: Property Theft

Updates and Comments:
As Property Crime in the Crowsnest Pass is heavily influenced by either crimes of opportunity, travelling criminals, or both; Members at the Crowsnest Pass Detachment ensure that regular patrols are part of an established routine while they are on duty. The Lock It Or Lose It program conducted patrols in West Coleman and Lundbreck, of the 18 vehicles that were checked, all were found to be secured with nothing of overt value in plain sight. Property theft is an aspect of crime that can be difficult to predict, however by maintaining appropriate vigilance, properly securing assets and reporting suspicious persons/vehicles, residents are better able to reduce potential opportunities for those criminals that are searching for easy targets.

Priority #3: Change Culture and Transform: Violence In Relationships

Updates and Comments:
This category is part of a 2 year project to encourage Victims of Domestic Violence to report abuse or criminal activity. This is a rare example of where police want to see an increase in reported crimes as it allows for more assistance to be rendered and the opportunity to break the cycle of family violence by means of both enforcement and offering support to those in need. Domestic Violence occurrences are one of the most dangerous calls for police to respond to, given the propensity for elevated emotions, acts of physical violence, the presence of weapons and Victims refusing help.

During this reporting period, Crowsnest Pass Detachment Members responded to 42 Domestic Violence-related calls for service ranging in severity from property crime, complex fraud investigations, inclusive of Criminal Harassment, Assaults with a Weapon, Uttering Threats and Sexual Assaults. Victim Services is always offered to the Victims of crime in order to ensure appropriate referrals and after-care.

Priority #4: Enhance OHV / ATV / Snowmobile Compliance and Safety

Updates and Comments:
Members of the Crowsnest Pass Detachment conducted backcountry patrols at the Sartoris, McGillivray, York Creek and Atlas Staging Areas. Compliance checks were completed and Members found high rates of compliance in regard to insurance and registration, as well as appropriate equipment for rider safety. There were no reports of any off-road vehicle collisions in this reporting period.

Priority #5: Crime Reduction: Police / Community Relations – Visibility of Police

Updates and Comments:
Scaled-down foot patrols took place in and through the Crowsnest Pass and Lundbreck. Rural patrols were focused in and around the Hamlet of Lundbreck. Patrols were conducted on Highway 3, Highway 22 and Highway 40, when resources permitted.

Priority #6: Detachment Commander Comments

Updates and Comments:
Near the end of Quarter 2, on September 21, 2025, Crowsnest Pass Members were actively coordinating, and participating in, the search for a missing 6yr old boy near Tent Mountain; due to the extensive search effort and sensitive nature of a missing child, there was significant carry-over that went into the Quarter 3 reporting period. Detachment Members remained effective in delivering policing services to the residents of the Crowsnest Pass, MD of Ranchland No.66 and Pincher Creek MD No.9.

Within the Quarter 3 reporting period, the Crowsnest Pass Detachment fielded 590 files, provided presentations at the local schools, and ensured follow up and attention was given to any enhanced assignments that were given. Currently, staffing levels are low, however Member's are engaged and morale remains high.

Community Consultations

Consultation #1

Date	Meeting Type
November 20, 2026	Community Connection
Topics Discussed	
Horace Allen Lock Down Drill	
Notes/Comments:	
Member attended Horace Allen School, observed a Lock Down Drill and offered proactive suggestions to further enhance student and staff safety.	

Consultation #2

Date	Meeting Type
December 16, 2026	Meeting with Elected Officials
Topics Discussed	
Quarter 2 Reporting	
Notes/Comments:	
APP for Quarter 2 was presented to the Municipality of the Crowsnest Pass Council. Any questions or discussion points were addressed.	

Provincial Service Composition

Staffing Category	Established Positions	Working	Soft Vacancies	Hard Vacancies
Regular Members	9	6	2	1
Detachment Support	3	2	0	1

Notes:

1. Data extracted on December 31, 2025 and is subject to change.
2. Soft Vacancies are positions that are filled but vacant due to maternity/paternity leave, medical leave, etc. and are still included in the overall FTE count.
3. Hard Vacancies reflect positions that do not have an employee attached and need to be filled.

Comments:
Police Officers: Of the 9 established positions, 6 officers are working and 2 are on special leave (Parental leave). There is 1 hard vacancy at this time.

Detachment Support: Of the three established positions, two resources are currently working. None of the resources are on special leave. There is 1 hard vacancy at this time.

Recommendation to Council

TITLE: BYLAW No. 1370-26 (Land Use Bylaw Amendment – Hann Rezoning)	
PREPARED BY: Laura McKinnon	**DATE:** February 5, 2026
DEPARTMENT: Planning and Development	
Department Supervisor	2026/02/05 Date

ATTACHMENTS:
1. Rezoning Application
2. Rural Business Land Use Designation
3. Bylaw No. 1370-26

APPROVALS:

Department Director	Date	CAO	Date
			2026/02/05

RECOMMENDATION:

That Council give first reading to Bylaw No. 1370-26, being the Land Use Bylaw Amendment (Hann Rezoning), and set a date for the required Public Hearing on March 10, 2026 directly following Public Hearing for Bylaw No. 1368-26.

BACKGROUND:

Theresa and Stuwart Hann have made application for an amendment to Land Use Bylaw 1349-23. The proposed amendment is to redesignate Block 4, Plan 7910279 from Grouped Country Residential (GCR) to Rural Business (RB) and portion of SW 34-7-2 W5 from Agriculture (A) to Rural Business (RB) ***(Attachment No. 1)***

The applicants state the purpose of the redesignation is to ensure compliance for a historically operating rural business (mechanics shop) and satisfy the requirements for a future subdivision.

The current operation of mechanics shop, is located within a building that exceeds the threshold of 5490 ft^2 building, requiring the Specialty Manufacturing/Cottage Industry, major use. Definition from Land Use Bylaw 1349-23 below:

> *Development used for larger-scale, on-site production of goods in a building exceeding a gross floor area of 510 m2 (5,490 ft2), including areas devoted to retail sales, display and storage. This use includes but is not limited to bakeries and specialty food production facilities, welding and fabrication and sculpture studios, greenhouses and specialty furniture and cabinet makers.*

Recommendation to Council

The Specialty Manufacturing/Cottage Industry, major use, requires the Rural Business land use designation ***(Attachment No. 2)***

An amending bylaw, Bylaw No. 1370-26 has been prepared for Council's consideration ***(Attachment No. 3)***.

FINANCIAL IMPLICATIONS:

None.

MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9

APPLICATION FOR AMENDMENT TO THE LAND USE BYLAW

APPLICATION FEE $1000 **RECEIPT NO.** 70417

I/We hereby make application to amend the Land Use Bylaw.

Applicant: Theresa Hann and Stuwart Hann

Address: [redacted] Telephone: [redacted]

Owner of Land (if different from above): same as above

Address: _____ Telephone: _____

Lot _____ Block 4 Registered Plan 7910279

or Certificate of Title 181 145 211 / 181 145 188

Quarter SW 34 Township 7 Range 2 Meridian W5

AMENDMENT PROPOSED:

From: AG portion of above sw34-7-2-W5

To: Rural Business (the 8.45 ac + 7.576 ac of proposed subdivision)

REASONS IN SUPPORT OF APPLICATION FOR AMENDMENT:

To facilitate subdivide partial to agger subdivision requested, for Reference's from ORRSC

*See attached notice of "Incomplete Subdivision Application" + mapping from Shawn Okamura

I/We enclose $ 1000 being the application fee.

DATE: Jan 29/26

Applicant

Registered Owner

Information on this application form will become part of a file which will be considered at a public meeting.

IMPORTANT NOTES:

1. Every application for an amendment to the Land Use Bylaw shall be completed in every part and signed.

2. If the amendment involves a change of land use district, the applicant shall also supply:

   (a) a site plan at a scale to the satisfaction of the Development Officer showing the size and shape of the lands affected, the location and extent of existing developments, waterbodies and treed areas and the location and form of any new development intended, fully dimensioned and explicit to the satisfaction of the Development Officer;

   (b) at the discretion of the Development Officer, a Real Property Report as proof of location of existing development; and

   (c) a Certificate of Title indicating ownership and encumbrances.

3. An application fee shall be required.

4. If the amendment involves a revision to the wording of the Land Use Bylaw, including the addition to or the deletion from the permitted or discretionary uses listed for a district, the desired change shall be explicit and reasons given.

5. Failure to complete the application form fully and supply the required information, plans, and fee may cause delays in processing the application.

6. The Development Officer may refuse to accept an application for amendment to the Land Use Bylaw where the information required has not been supplied or where the quality of such information is inadequate to properly evaluate the application.

7. Upon receipt of an application for amendment, the Development Officer shall determine when the application will be placed before the Council and shall issue not less than 10 days' notice to the applicant that he may appear and speak to the application.

8. A decision of the Council in regard to an application to amend the Land Use Bylaw is final but, if refused, the applicant may reapply at any time that the Council agrees to accept another application for the same or similar amendment.

MD of Pincher Creek No. 9
P.O Box 279
1037 Herron Avenue
Pincher Creek Alberta T0K 1W0
(403) 627-3130
Website: www.mdpinchercreek.ab.ca
Email: info@mdpinchercreek.ab.ca

Hann, Theresa and Stuwart
P.O. Box 219
Lundbreck, AB T0K 1H0
Canada

PAYMENT RECEIPT

Receipt Number:	70417
Date:	1/30/2026
Initials:	SLW
GST Registration #:	10747347RP

Receipt Type	Roll/Account	Description	QTY	Amount	Amount Owing
General	RENZ	Planning Rezoning Fees	N/A	$1,000.00	$0.00

Subtotal:	$1,000.00
Discount	$0.00
GST	$0.00
Total Receipt:	$1,000.00
Cheque:	$1,000.00
Total Amount Received:	$1,000.00

RURAL BUSINESS – RB

1. INTENT

The intent of the Rural Business - RB district is to provide for isolated commercial uses on farm yard locations where commercial uses may be accommodated in the rural areas.

2. USES

2.1 Permitted Uses

Accessory building (see Section 36)
Animal care service, major and minor
Extensive agriculture (see Section 15.1(b))
Farm buildings and structures (see Section 15.1(a))
Home occupation (see Section 47)
Manufactured home, singlewide and doublewide (see Section 54)
Modular home
Personal service
Solar energy system, household wall or roof mounted (see Section 15.1(r))
Single-detached residence
Specialty Manufacturing / Cottage Industry, minor
Wind Energy Conversion System – Category 1 (See Section 57)

2.2 Discretionary Uses

Abattoir
Accessory structure (see Section 37 and Section 15.1(l))
Accessory use
Animal care service, major and minor
Auto body or paint shop
Construction supply and contractors
Dwelling unit as a secondary use to an approved use (see Section 50)
Farmer's market
Garden suite (see Section 49)
Intensive horticultural operation
Mini storage
Moved-in accessory building (see Section 54.6 - 54.9)
Moved-in dwelling (see Section 54.6-54.9)
Outdoor storage
Public utility
Restaurant
Retail store
Secondary suite (see Section 49)
Shipping container (see Section 58)
Sign (see Section 55)
Sleeping unit as an accessory use to an approved use (see Section 50)
Solar energy system, household – freestanding (see Section 59)
Specialty manufacturing / Cottage industry, major
Tourist home (see Section 47)

2.3 Prohibited Uses

All uses not deemed similar by the Development Authority to any permitted or discretionary use listed above.

2.4 USE REQUIREMENTS:

(a) Prior to the approval of any commercial or industrial use, a dwelling unit must be established on the parcel;

(b) Commercial and industrial uses shall be located to the rear of the dwelling unit;

(c) Commercial and industrial uses shall directly involve one or more residents of the parcel involved in the business or operation;

(d) Hours of operation of commercial and industrial uses occurring outside of an enclosed building shall be limited to between 8:00 a.m. and 7:00 p.m.;

(e) Any outdoor storage associated with a commercial or industrial use shall meet the building setback requirements for commercial and industrial buildings;

(f) A development application which proposes to locate an outdoor storage use within the boundary of the Burmis Lundbreck Corridor Area Structure Plan:

(i) at a location which, in the opinion of the MPC, is highly visible to the travelling public from Provincial Highways 3, 3A, 22 or 507; or

(ii) at a location which is highly visible to an adjoining or nearby residence, a public park or recreation use, a commercial / private recreation use or a public and institutional use;

shall not be approved.

3. MINIMUM LOT SIZE

All residences:	1.2 ha (3 acres) to a maximum of 4.05 ha (10.00 acres)
Other uses:	1.2 ha (3 acres)

4. MINIMUM SETBACK REQUIREMENTS

Setbacks from public roadways:	30 m (98.4 ft.)
All other property lines:	7.5 m (24.6 ft.)
Provincial highways:	Minimum distance as set by Alberta Transportation and may be increased by MPC where warranted
Railways	
(application: residence, dwelling	40 m (131 ft.) or less if mitigated by sound attenuation
or sleeping units):	and not considered an unsafe location

Note: Setbacks can be varied by the MPC if they meet the generally accepted rules of variances as outlined in Section 18.

See Section 57 for setbacks pertaining to WECS.

5. MAXIMUM BUILDING HEIGHT

Principal buildings:	10.7 m (35.1 ft.)
Accessory buildings:	10.7 m (35.1 ft.)
Fences, privacy walls and gates:	1 m (3.3 ft.) in all front yards
	2 m (6.6 ft.) in all side and rear yards

6. ENVIRONMENTAL SETBACKS AND SEPARATION DISTANCES

See Sections 35, 44 and 45.

7. LANDSCAPING, SCREENING AND LOCATION OF STORAGE

The outdoor display of goods, materials or equipment solely for advertisement purposes may be allowed by the MPC, but unless otherwise required by the MPC, foods, material and equipment:

(a) shall not be stored in a front yard; and

(b) shall be screened from public view, to the satisfaction of the MPC.

8. REFUSE SCREENING AND STORAGE

Unless otherwise required by the MPC or the Development Officer:

(a) refuse or garbage shall be kept in a suitably-sized container or enclosure;

(a) refuse and refuse containers shall be effectively screened; and

(b) refuse and refuse containers shall be located in a rear yard.

9. OFF-STREET PARKING AND LOADING REQUIREMENTS

See Section 56.

MUNICIPAL DISTRICT OF PINCHER CREEK NO. 9
BYLAW NO. 1370-26

Being a bylaw of the Municipal District of Pincher Creek No. 9 in the Province of Alberta, to amend Bylaw No. 1349-23, being the Land Use Bylaw.

WHEREAS Section 639 of the Municipal Government Act, Revised Statutes of Alberta 2000, Chapter M-26, as amended, provides that a municipality must pass a Land Use Bylaw;

WHEREAS The Municipal District of Pincher Creek No. 9 is in receipt of a request to change the land use designations of lands legally described as:

Block 4, Plan 7910279, as shown on Schedule 'A' attached hereto, from "Grouped Country Residential - GRC" to "Rural Business – RB"; and
The portion of SW 34-7-2 W5M as shown on Schedule 'A' attached hereto, from "Agricultural - A" to "Rural Business – RB"; and

WHEREAS The purpose of the proposed amendment is to allow for rural business subdivision and development;

NOW THEREFORE, under the authority and subject to the provisions of the *Municipal Government Act*, Revised Statutes of Alberta 2000, Chapter M-26, as amended, the Council of the Municipal District of Pincher Creek No. 9, in the Province of Alberta, duly assembled does hereby enact the following:

1. This bylaw shall be cited as "Land Use Bylaw Amendment No. 1370-26".

2. Amendments to Land Use Bylaw No. 1349-23 as per "Schedule A" attached.

3. This bylaw shall come into force and effect upon third and final passing thereof.

READ a first time this ____ day of _____, 2026.

A PUBLIC HEARING was held this ____ day of _____, 2026.

READ a second time this ____ day of _____, 2026.

READ a third time and finally PASSED this ____ day of _____, 2026.

_____	_____
Reeve	***Chief Administrative Officer***
Rick Lemire	*Roland Milligan*

LAND USE DISTRICT REDESIGNATION
SCHEDULE 'A'

Aerial Photo Date: 2024

FROM: AGRICULTURE – A
TO: RURAL BUSINESS - RB

FROM: GROUPED COUNTRY RESIDENTIAL – GCR
TO: RURAL BUSINESS - RB

PORTION OF SW 1/4 SEC 34, TWP 7, RGE 2, W 5 M
MUNICIPALITY: MD OF PINCHER CREEK
DATE: FEBRUARY 2, 2026

Bylaw #: 1370-26
Date: _____

OLDMAN RIVER REGIONAL SERVICES COMMISSION

0 Metres 100 200 300 400

N

MAP PREPARED BY:
OLDMAN RIVER REGIONAL SERVICES COMMISSION
3105 16th AVENUE NORTH, LETHBRIDGE, ALBERTA T1H 5E8
TEL. 403-329-1344

"NOT RESPONSIBLE FOR ERRORS OR OMISSIONS"

February 02, 2026 N:\Pincher-Creek-MD\Pincher-Creek-MD LUD & Land Use Redesignations\MD of Pincher Creek - Bylaw No. 1370-26 Ptn SW 34-7-2-5.dwg

LAND USE DISTRICT REDESIGNATION
SCHEDULE 'A'

FROM: AGRICULTURE – A
TO: RURAL BUSINESS - RB

FROM: GROUPED COUNTRY RESIDENTIAL – GCR
TO: RURAL BUSINESS - RB

PORTION OF SW 1/4 SEC 34, TWP 7, RGE 2, W 5 M
MUNICIPALITY: MD OF PINCHER CREEK
DATE: FEBRUARY 2, 2026

Bylaw #: 1370-26
Date: _____

OLDMAN RIVER REGIONAL SERVICES COMMISSION

MAP PREPARED BY:
OLDMAN RIVER REGIONAL SERVICES COMMISSION
3105 16th AVENUE NORTH, LETHBRIDGE, ALBERTA T1H 5E8
TEL. 403-329-1344
"NOT RESPONSIBLE FOR ERRORS OR OMISSIONS"

Recommendation to Council

TITLE: Request for Development Agreement – Irrigation Line in Road ROW			
PREPARED BY: Laura McKinnon		**DATE: 05/02/2026**	
DEPARTMENT: Planning and Development			
Department Supervisor	2026/02/05 **Date**	**ATTACHMENTS:** 1. **Request from Landowner & Aerial** 2. **Policy 408 – Utility Lines in Road Plan Right-Of-Ways** 3. **GIS Aerial**	
APPROVALS:			
		Roland Milligan	
Prepared by	**Date**	**CAO**	**Date** 2026/02/05

RECOMMENDATION:

That Council give consideration for an irrigation line to be placed within MD Road ROW, adjacent to SW 32-7-1 W5

BACKGROUND:

Landowner, Norm Cervo, has requested consent to place an irrigation line in the westerly ditch of the road ROW, adjacent to SW 32-7-1 W5, in order to reach his parcel proposed for irrigation (NW 32-7-1 W5) ***(Attachment No. 1).***

A Development Agreement can be placed on the title of the parcel to ensure compliance and location, which satisfies the requirements of MD Policy 408 – Utility Lines in Road Plan Right-Of-Ways ***(Attachment No. 2)***

In 2004, Council approved a request from Livingstone Colony to run an irrigation line in the east side of the ditch to reach the irrigated parcels (S ½ 5-8-1 W5). It was discussed with Mr. Cervo's consultant, the feasibility of tapping into the current irrigation line that runs within the MD ROW, and it was determined that the waterline would not have enough capacity to carry for the additional pivot.

Additionally, MD Administration reached out to Public Lands regarding the requirements and possibility of Mr. Cervo's irrigation line running through the "Park Land". Public Lands was unable to give absolute approval, and did suggest there is no guarantee and the cost of the application and process would be ~$30,000 (including application fee, environmental study, survey, construction deposit, reclamation deposit, annual rental & other associated fees).

Recommendation to Council

This road accesses the Oldman River Reservoir area, and is likely to never be developed. It is considered an Unimproved Road, within the MD's road inventory ***(Attachment No. 3***

FINANCIAL IMPLICATIONS:

N/A
Landowner would be responsible for all construction costs, and maintenance.

Outlook

RE: Norman Cervo - Potential water pipeline placement in road allowance (500-2793)

From Corey Shilliday [redacted]>
Date Tue 2025-12-02 3:09 PM
To Laura McKinnon <AdminDevOfr@mdpinchercreek.ab.ca>
Cc Roland Milligan <AdminCAO@mdpinchercreek.ab.ca>; Loreilee Cervo <lcervo66@gmail.com>

Hello Laura,

Thank you for the email response and question.

Yes, the other waterline has been discussed. The other waterline would not have enough capacity to carry water for the additional pivot. This would have been a great option to branch of the existing line, but volume/capacity would not meet all user needs.

Norman did mention that this would need to go to Council for review, so he is aware of that.

I have included Norman's sister in this email so she can pass along the communication and so that Norman is aware of the communication.

Thank you,

Corey

COREY SHILLIDAY, B.Sc, P.Ag.

Partner and Principal Scientist, Trace Associates Inc.
Trace 525, 525 WT Hill Boulevard South, Lethbridge, Alberta, T1J 1Y6
[redacted]
www.traceassociates.ca

From: Laura McKinnon <AdminDevOfr@mdpinchercreek.ab.ca>
Sent: December 1, 2025 8:19 PM
To: Corey Shilliday [redacted]
Cc: Roland Milligan <AdminCAO@mdpinchercreek.ab.ca>
Subject: Re: Norman Cervo - Potential water pipeline placement in road allowance (500-2793)

Hi Corey,

This is a request that will have to go forward to Council, as the waterline would run through the municipal road ROW.

There is another irrigation waterline that runs on that side of the road - has it been discussed as to whether the same line could be shared?

Kindly,

Laura McKinnon, CPT
Development Officer

MD Of Pincher Creek
1037 Herron Avenue
Box 279
Pincher Creek, AB
T0K1W0
Office: 403-627-3130
Email: AdminDevOfr@mdpinchercreek.ab.ca

From: Corey Shilliday [redacted]
Sent: December 1, 2025 9:18 AM
To: Laura McKinnon <AdminDevOfr@mdpinchercreek.ab.ca>
Subject: Norman Cervo - Potential water pipeline placement in road allowance (500-2793)

Hello Laura McKinnon,

Norman Cervo provided your contact information to me so I could provide the two attached air photographs on his behalf.

As part of AEP's water licence application process an Agricultural Feasibility report is required along with written landowner consent for any pipelines or pump site locations that are located on lands not slowly owned by the water licence applicant.

Therefore, the air photographs are being provided to help illustrate the general location of the proposed water pipeline to supply water to a proposed pivot that will be part of a water licence application.

The ask for consent would be to run the proposed water pipeline in the west ditch of the road allowance at Mr. Cervo's expense to a proposed pump site location immediately adjacent to an existing pup site. Power for the proposed pump would come from existing power line associated with the existing pump site.

If you have any questions or would like to discuss, please let me know and we can coordinate, or I will have Mr. Cervo follow up.

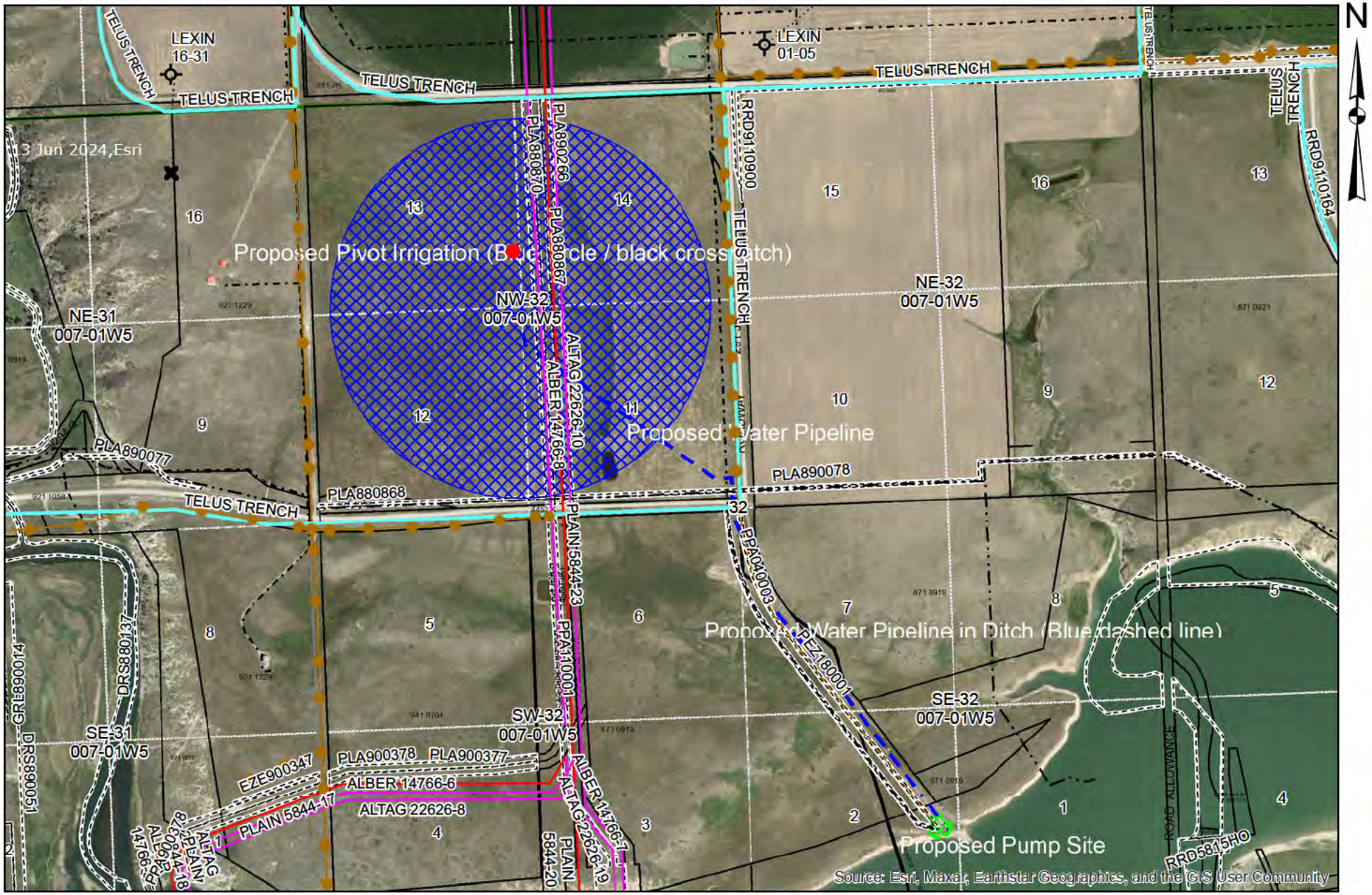
Thank you,

Corey

COREY SHILLIDAY, B.Sc, P.Ag.

Partner and Principal Scientist, Trace Associates Inc.
Trace 525, 525 WT Hill Boulevard South, Lethbridge, Alberta, T1J 1Y6
[redacted]
www.traceassociates.ca

NW 32-07-01 W5 Pivot (Proposed Pump Site SE 32)



Wells

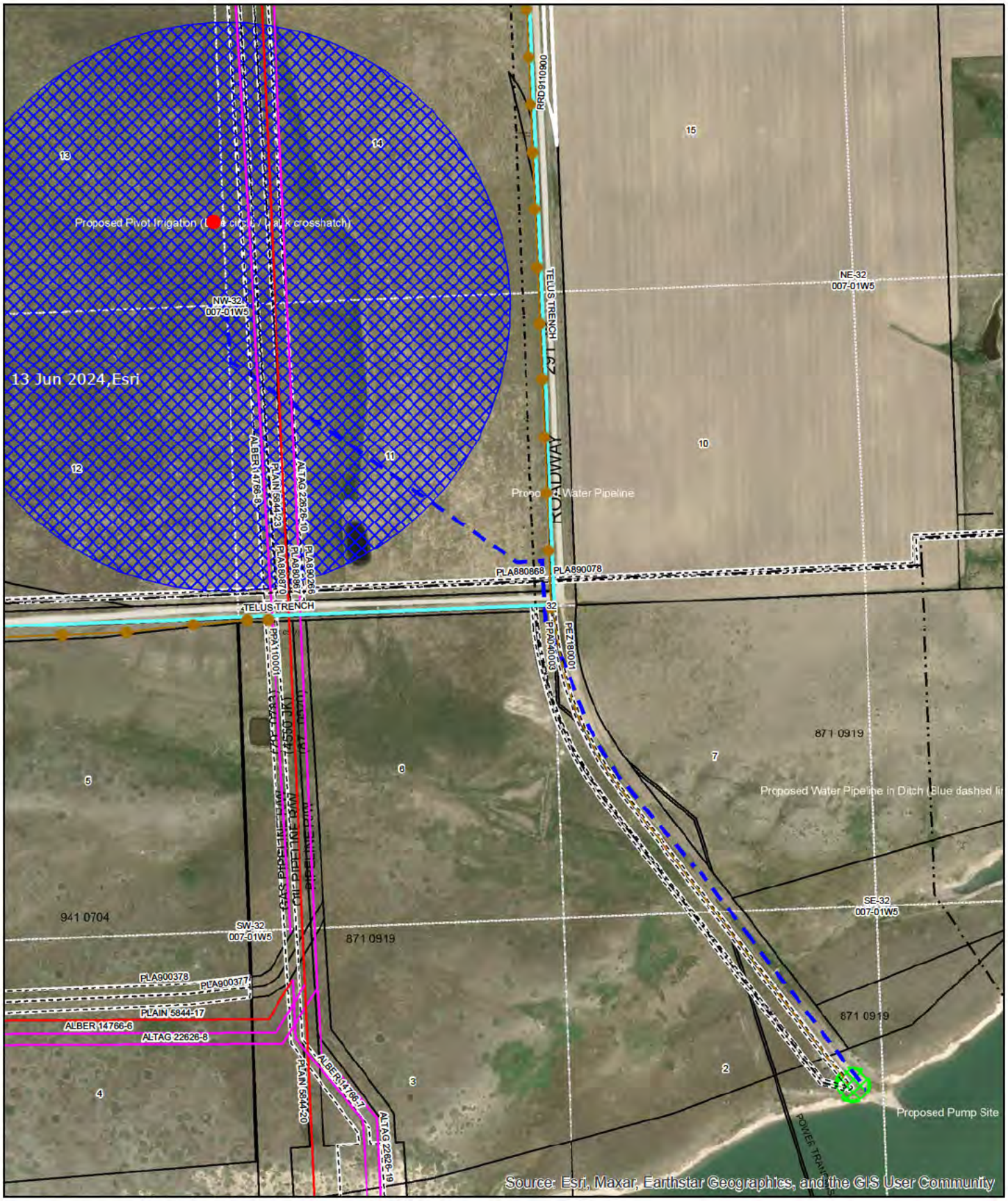
- Abandoned Wellhead
- Suspended Gas Wellhead
- Suspended Oil Wellhead
- Flowing Gas Wellhead
- Location Wellhead
- Flowing Oil Wellhead
- Miscellaneous Wellhead
- Water Wellhead
- Well Downhole Location
- Newly Licenced Well
- Newly Spudded Well
- AB Environment Water Well
- User Water Well
- Monitor Well

Pipelines

- Gas Pipeline
- Oil Pipeline
- Water Pipeline
- LVP/HVP Pipeline
- Foreign Pipeline (When Filtering by Company)
- Gas Co-op Pipeline (Low Pressure)

0 80 160 320 480 640 m

NW 32-007-01 W5M Pivot (Proposed Pump Site SE 32)



WELLS

- Abandoned Wellhead
- Suspended Gas Wellhead
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- Flowing Gas Wellhead
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- User Water Well
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- Gas Pipeline
- Oil Pipeline
- Water Pipeline
- LVP/HVP Pipeline
- Foreign Pipeline (When Filtering by Company)
- Gas Co-op Pipeline (Low Pressure)

0 55 110 220 330 440

m

408 UTILITY LINES IN ROAD PLAN RIGHT-OF-WAYS

These regulations shall govern standards and procedures used in integral parts thereof, or extensions thereto within the municipality. Provincial regulations must be followed at all times.

In these regulations:

1.0 Definitions:

1.1 Council means the Council of the Municipal District of Pincher Creek No.9

1.2 Road crossing means any utility line installed across a road.

1.3 Oiled or light surface roads means roads which have a light asphalt or oiled surface.

1.4 Local roads means all roads other than numbered roads and highways and light surfaced or oiled roads.

1.5 Unimproved road allowances means road allowances to which no improvements have been made in the way of road construction.

1.6 Punched/bored means a procedure used to establish passageway through a road by using either an auger or a pneumatic type of equipment, eliminating the necessity of open cut/trenching.

1.7 Open cut/trenching means open trenching a passageway through a road surface or other surface, and down to the required depth as opposed to punch/bored. Trench backfill must be compacted to 100% standard proctor.

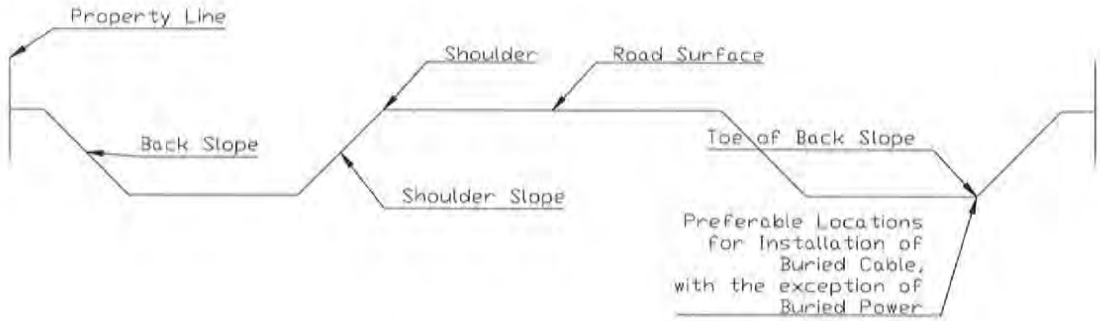
1.8 Plow means a pull type or self propelled machine which is used in the planting or burying of telephone line/cable in the ground in a continuous, one step operation, eliminating trenching and back-filling.

1.9 Approved means approval by the Development Officer and Public Works Superintendent of the Municipal District of Pincher Creek No. 9.

1.10 Owner means the owner and/or operator of a utility system or integral part thereof.

Utility Lines in Road Right-of-Ways cont'

1.11 Toe of the back slope means the point at which the slope starts upward to the property line from the ditch bottom as per following diagram.



2.0 Utility Lines

2.1 Utilities crossing Municipal District graveled roads may be installed by open cut subject to the approval of the Public Works Superintendent. Crossings over oiled or asphalt road shall be installed by boring.

2.2 Where physically possible, utilities shall be placed in the toe of the back slope unless otherwise approved. See paragraphs 1.09 and 1.11.

2.3 Utilities installed on municipal right-of-ways shall be buried a minimum depth of 1.2 meters below final grade, except for road crossings (see paragraphs 3.5 and 3.6), or unless otherwise approved (see paragraph 1.09).

2.4 The ditches of all Municipal District road allowances affected by these installations are to be restored to their original condition and seeded to grass to the satisfaction of the Municipal District (e.g. rock removal).

2.5 The Development Officer and Public Works Superintendent shall be supplied with a detailed map, plans and drawings for approval of all utilities and/or extensions or revisions thereto, 30 days prior to commencement of any construction. These drawings shall show location(s) of proposed road crossings.

2.6 In terms of overhead utility lines (hydro) the utility company shall ensure that the location of all new lines are physically marked so that an inspection can be carried out by an M.D. member, prior to the issuance of a utility permit.

2.7 The Municipal District or the Development Officer or the Public Works shall not be liable for any damage, injury or other costs or inconvenience arising from the construction, maintenance or operation of any telephone line or integral part thereof within the municipality.

Utility Lines in Road Right-of-Ways cont'

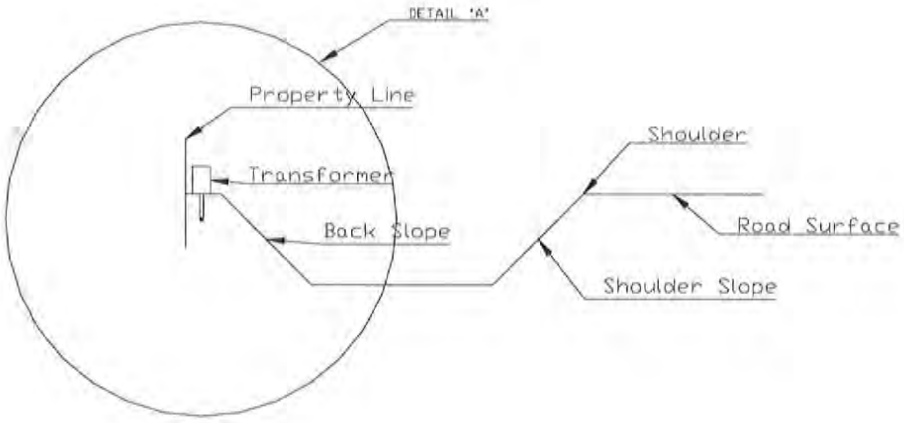
2.8 The installation of all underground utilities shall be in accordance with applicable federal or provincial legislation based on the finished or anticipated final grade.

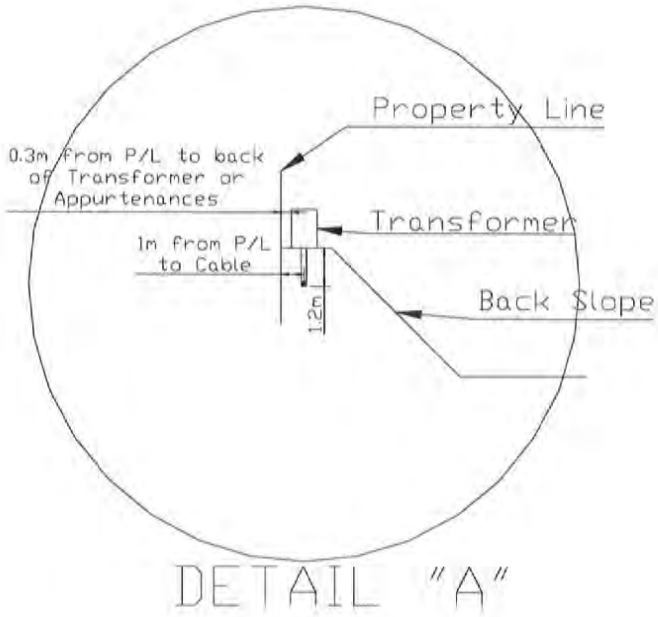
2.9 That prior to the installation of the line, the Public Works Superintendent be informed by the utility company of their intention to start the installation.

2.10 All underground utilities shall be adequately signed.

2.11 Those utility crossings under municipal roads be clearly marked.

UNDERGROUND POWER LINES





Utility Lines in Road Plan Right-of-Ways cont'

All conditions pertaining to utility lines, as noted above, apply in addition to the following which apply to underground power lines.

2.12 Installation of underground power lines shall be within one (1) meter of the Municipal District right-of-way property line, however, should circumstances prohibit the installation of lines within the one (1) meter corridor, the Development Officer, in consolation with the Public Works Superintendent, may vary this condition.

2.13 That transformers be set on private property, ***OR*** with prior approval, if in the M.D. right-of-way, they must be set back 0.3 meters from property line.

2.14 Underground power shall be buried a minimum of 1.2 meters below existing Ground level.

3.0 Road Crossings

3.1 The Public Works Superintendent shall be notified when construction of line is to commence to enable the Superintendent of Public Works to discuss installation with the contractor.

3.2 All road crossings shall be punched from shoulder to shoulder unless otherwise approved. See paragraph 1.9.

3.3 All road crossings approved for open cut/trenching shall be well tamped throughout the backfilling operation to 100% standard proctor and six (6) cubic yards of 3/4 inch crushed gravel be spread over the affected area.

3.4 Maintenance of all road crossings shall be at the expense and responsibility of the owner.

3.5 The depth of all road crossings shall be 1.2 meters below existing ditch bottom, unless road improvements are proposed. See paragraph 3.6 below. The depth of road crossings shall be maintained at the same elevation throughout the entire width of the road allowance or proposed road allowance.

3.6 Road crossings under roads which are to be improved, may be required to be installed deeper to prevent damage to the utility installation. The depth of these installations shall be determined individually and the expense of the deeper installation shall be borne by the owner.

3.7 All road crossings shall be as near 90 degrees to the road allowance as possible and properly marked by warning signs.

3.8 Road crossings shall be installed in a manner which will cause the least inconvenience to the traveling public.

3.9 Where traffic is to be detoured around any area, due to work being performed on a utility installation or integral part thereof, a detour shall be provided and adequately maintained, with ample signs, etc., being erected throughout. During the hours of darkness, all warning and detour signs, and excavations shall be illuminated by traffic control devices, at the expense of the utility company or his contractor. All signage and work shall conform to Occupational Health and Safety and Alberta Government Standards.

3.10 Open trenches that cross the traveled portion of a road shall not be left unattended unless a detour has been provided.

4.0 Additional Requirement for Fibre Optic Lines

4.1 The depth of all road crossings shall be 2.1 metres below existing ditch bottom and that the 2.1 metres depth shall be maintained for a distance of 38.1 metres from the centre line of the road each way when the road is a local road and a distance of 42.7 metres from the centre line of the road each way when the road is a provincial road.

5.0 Bridges

5.1 No open excavation shall be closer than 15.25 metres from a bridge pier or earth retaining structure.

5.2 The backfilling of all trenches in the highway right-of-way or within 15.25 metres of a bridge pier or earth retaining structure shall be undertaken immediately after the installation has been placed and passed any necessary inspection. Backfill material shall be thoroughly tamped and compacted in 15 cm layers with mechanical tampers to 100% standard proctor and the owner of the utility installation will be held responsible for any settling in backfill for a period of one year after the completion of the work.

6.0 Expiry of Approval

6.1 Approval of a utility installation expires one (1) year from the date on which the letter of approval is issued. However, the applicant may apply to the municipality for an extension of the term of the approval. After receiving an application for extension, the municipality may grant an extension of the term of the original approval for a period not exceeding one (1) year by notice in writing to the applicant.

7.0 Future Responsibilities

7.1 The owner of a utility system is responsible for the cost of any adjustments of the requested facilities when any future municipal improvements take place.

8.0 First Call Responsibility

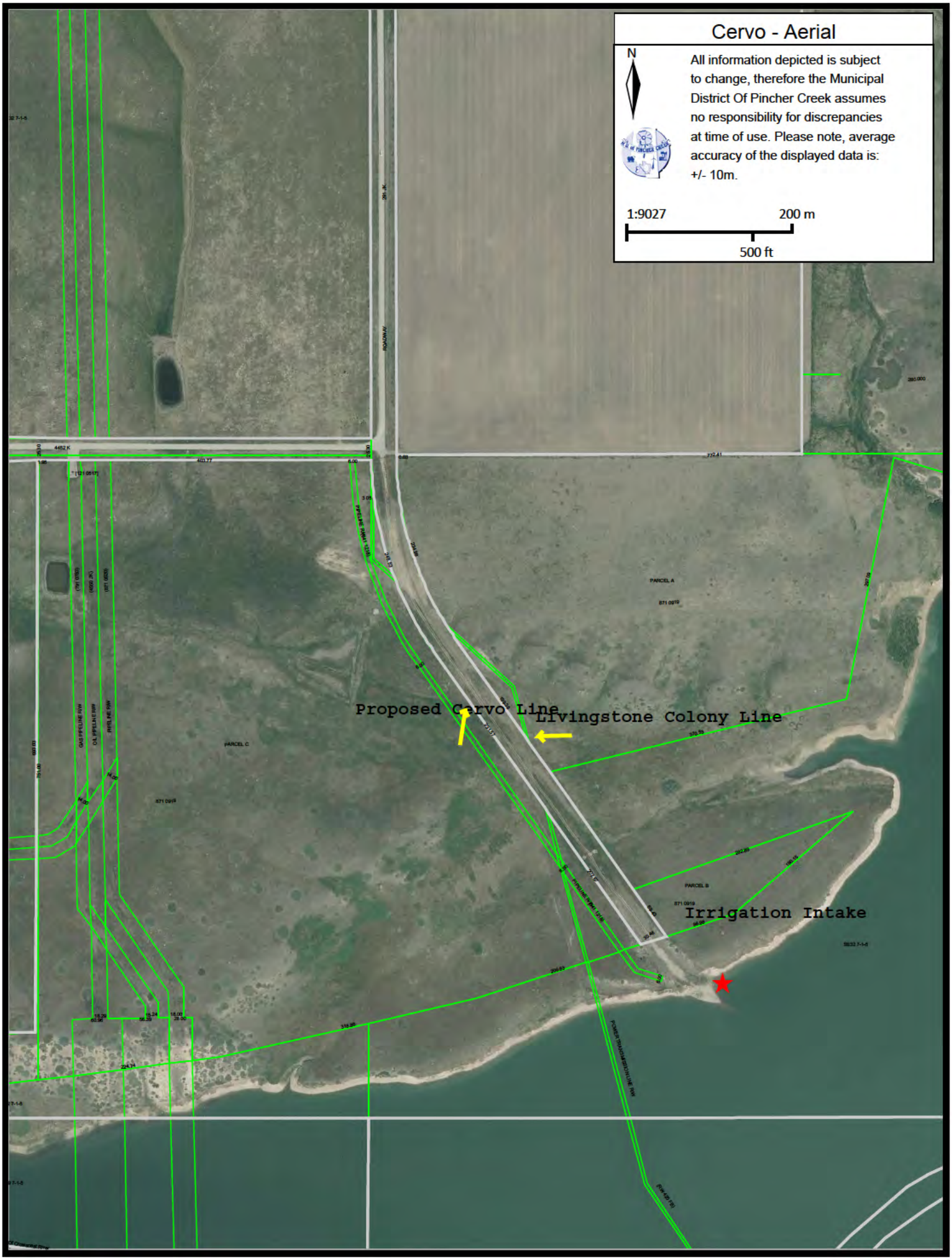
8.1 All companies installing utilities in the M.D. must be registered with Alberta One Call

Utility Lines in Road Plan Right-of-Ways cont'

8.1 It is the responsibility of the owner to contact Alberta One Call (1-800-242-3447) and have all underground utilities identified. The owner is responsible for all installation locating and procedures.

THESE ARE MUNICIPAL MINIMUM STANDARDS AND ANY PROVINCIAL AND FEDERAL REGULATIONS / STANDARDS, WHICH ARE GREATER, MUST BE ADHERED TO.


Cervo - Aerial
N
All information depicted is subject to change, therefore the Municipal District Of Pincher Creek assumes no responsibility for discrepancies at time of use. Please note, average accuracy of the displayed data is: +/- 10m.
1:4513
100 m
200 ft
871 0919
3.05
PIPELINE R/W(41 1218)
248.53
234.98
6.00
199.38
Proposed Cervo Line
231.57
Livingstone Colony Line
370.53
282.89
PARCEL B
871 0919
Irrigation Intake
86.98
69.43
30.48
202.67
6.00
PIPELINE R/W(41 1218)
209.63
6.00
318.86
POWER TRANSMISSION LINE


Cervo - Aerial
N
All information depicted is subject to change, therefore the Municipal District Of Pincher Creek assumes no responsibility for discrepancies at time of use. Please note, average accuracy of the displayed data is: +/- 10m.
1:9027
200 m
500 ft
Proposed Cervo Line
Livingstone Colony Line
Irrigation Intake

CHIEF ADMINISTRATIVE OFFICER'S REPORT

January 26, 2025, to February 6, 2026

Discussion:

Jan 27	Council Committee and Regular Council Meetings
Jan 29	Admin Staff and Safety Meeting
Jan 29	MD LED Sign Software Walk Through
Jan 29	Developer Meeting
Jan 30	Leadership Education Session on OHS Responsibilities
Feb 3	Consultant Meeting
Feb 3	Planning Session
Feb 3	Subdivision Authority and MPC Meeting
Feb 4	PW Safety Meeting
Feb 4	Automobile Taxable Benefit Meeting
Feb 5	JHSC Public Works Yard Inspection

Upcoming:

Feb 9	Senior Management Meeting
Feb 10	Council Committee and Regular Council Meetings
Feb 11	JHSC Meeting
Feb 12	Emerging Trends Webinar
Feb 13	MLA Visit

RECOMMENDATION:

That Council receives for information the Chief Administrative Officer's report for the period January 26, 2026, to February 6, 2026.

Prepared by: Roland Milligan, CAO Date: February 4, 2026

Respectfully presented to: Council Date: February 10, 2026

ADMINISTRATIVE SUPPORT ACTIVITY

January 22, 2026 to February 4, 2026

Correspondence from the Last Council:

- Enforcement Services Appeal Board - Welcome Members
- Agricultural Service Board – Welcome Member
- Request to Waive Tax Penalty

Advertising/Social:

- MD Seeking Bin Hosts
- PSA Road Closure Township Road 65
- Crowsnest Pincher Creek Landfill Closure – Hazardous Winds
- Employment Opportunity – Pesticide Applicator
- Coffee with Council Reminder
- Council/Committee Package

Other Activities:

- Regular Committee, Council
- Training with other staff for new digital sign

Invites to Council:

- Invitation to Waterton/ID #4 to Attend Council – still waiting for them to contact us to attend an MD Council meeting
- Bringing Hearts Home – attending March 10, 2026

Upcoming Dates of Importance:

- Regular Committee, Council – February 10, 2026
- 2026 Emerging Trends Virtual Session – February 12, 2026
- Visit with MLA – February 13, 2026
- Family Day Office Closure – February 16, 2026
- Coffee with Council – Division 1 – February 17, 2026
- Meeting with Cowley -February 19, 2026
- Regular Committee, Council – February 24, 2026

Outlook

MD of Pincher Creek No. 9 - Community Priorities Plan

From Amatto, Mark (RCMP/GRC) <mark.amatto@rcmp-grc.gc.ca>
Date Tue 2026-02-03 08:50
To Roland Milligan <AdminCAO@mdpinchercreek.ab.ca>
Cc Jessica McClelland <AdminExecAsst@mdpinchercreek.ab.ca>

1 attachment (419 KB)
MD of Pincher Creek No. 9 - CPP.pdf;

Good morning Roland,

Please see the attached invitation for yourself and Reeve Lemire. I would like to select a date this month to sit down with you both and discuss community concerns so they may be addressed by means of the Community Priorities Plan (similar to the APP).

Please let me know if you have any questions.

Thank you,

-Mark

Sgt. M. Amatto (NCO i/c)
Treaty 7 Territory
Crowsnest Pass Detachment
(p) 403 562 2867
(f) 403 562 7115

Community Priorities Plan Leadership Invitation Letter

February 3rd, 2026

Dear CAO Milligan,

As Alberta's provincial police service, the RCMP is continually working to modernize and strengthen the way we partner with communities to address local public safety needs. This letter is being shared to provide early awareness of an upcoming change to the community priority planning process and to support timely engagement with local leadership ahead of the next planning cycle.

Beginning in February 2026, Alberta RCMP detachments will be transitioning to a new Community Priorities Plan (CPP) for the 2026–2027 cycle. This updated approach replaces the previous Annual Performance Plan (APP) and is intended to serve as the primary framework for identifying and tracking policing priorities at the community level.

The CPP is intentionally community-led. It was developed to strengthen collaboration with municipal and Indigenous leadership and to ensure that the priorities of your police service are directly informed by the communities we serve. The CPP is designed to support meaningful dialogue, shared understanding, and clear, achievable priorities that reflect local realities.

This early communication is intended to allow community leaders sufficient time to begin considering local priorities and engaging with constituents before formal planning begins.

Community Priorities Plan Overview

Step One: Preparation and Consultation (February 2026)

Community leaders consult with their constituents in advance of meeting with the RCMP to gather ideas, concerns, and objectives related to community safety. This initial consultation is the first of two points of engagement and is an important step in ensuring that policing priorities are built with the community, not for the community.

Should community leaders wish to involve their Detachment Commander in these early community discussions, requests can be made directly to the detachment and support will be provided.

The purpose of this stage is to develop a clear understanding of community-specific concerns and objectives to inform upcoming discussions.

Step Two: Engagement Meeting (March 2026)

An engagement meeting is held between community representatives and the Detachment Commander. This meeting provides an opportunity for community representatives to share feedback gathered during consultations and to discuss community perspectives openly.

All relevant concerns, ideas, and objectives are welcome for discussion at this stage. These conversations help build a shared understanding between the community and the detachment and support alignment as priorities begin to take shape.

Following this initial engagement meeting, the Detachment Commander will take the identified community priorities and meet with their leadership team to develop an operational plan outlining how the RCMP will work to deliver on those priorities.

Step Three: Finalizing Priorities

A subsequent meeting will be held between community representatives and the Detachment Commander where possible, during which the proposed plan will be presented to the community for review. This meeting will provide an opportunity for community leaders to offer feedback, seek clarification, and confirm alignment before priorities are finalized.

Following engagement and discussion, the Community Priorities Plan is finalized. The goal of this stage is to confirm a consolidated list of up to three community policing priorities that accurately reflects and encompasses the concerns and objectives raised through earlier engagement.

Once confirmed, the plan is endorsed by the Detachment Commander and community leadership. Progress will be monitored through regular reporting, with adjustments made as required to ensure priorities remain responsive and aligned over time.

Detachments Serving Multiple Communities

For detachments that serve multiple municipalities, this CPP process will be conducted with each community group. Engagement, consultation, and feedback will be gathered independently to ensure each community's unique needs and perspectives are understood. Overall, detachment priorities will then be developed based on the totality of feedback received across all participating communities.

Next Steps - Community Consultation and Engagement

As part of the CPP process, community leaders are encouraged to begin consulting with their constituents to gather input on local safety concerns, emerging issues, and opportunities for collaboration. Community leaders may choose the consultation methods that best suit their communities, such as surveys, town halls, meetings, or other engagement activities. Detachment

Commanders may be invited to attend these conversations where appropriate, or consultations may be conducted independently, with feedback shared at a later stage.

This early engagement will help inform discussions with your Detachment Commander as CPP development progresses. Your partnership is essential to ensuring policing priorities reflect the unique needs of your community. Further information and guidance will be provided by your local detachment as the CPP process moves forward.

Thank you for your continued partnership and leadership in supporting community safety.

Sincerely,

Sgt. Mark Amatto
Detachment Commander
Crowsnest Pass RCMP

Outlook

2026 CMCA Golf Classic - Saturday June 22th

From David Clement <dclement876@gmail.com>
Date Thu 2026-01-22 20:42
To Jessica McClelland <AdminExecAsst@mdpinchercreek.ab.ca>

1 attachment (118 KB)
CMCA SponsorShip Package.pdf;

Hello Jessica, I wanted to thank you and everyone at the MD office again for your support of the 2025 Castle Mountain Community Association's fundraising Golf Tournament at Waterton Lakes. Thanks to sponsors such as yourself and the enthusiastic participants, we were able to raise $18,000. (See link to Video of the day below:)

https://drive.google.com/file/d/1yK5YXLIaa4jsfTaKUHicVnnkzFq2dk9w/view?usp=drive_web

Funds raised over the last two years have be utilized to complete significant fire smart work in and around the community as well as buy strategic fire fighting equipment. Our efforts over the last number of years have been Acknowledged by FireSmart Canada with the "FireSmart Neighbourhood Recognition Award".

Funds raised from the 2025 event have been earmarked for a key parcel of land adjacent to the community that will be professionally fire smarted in the summer of 2026.

In addition we made a $1500 donation to the local food banks in Pincher Creek and Crowsnest Pass.

As we begin the planning process for the 2026 event scheduled for Saturday June 20 2026 at Waterton I'm reaching out to you in the hope that you will support us again this year.

I have included the Sponsorship Package for the event. It is similar to last year with a few additions.

You can select and register for any of the options at cmcagolfclassic.com

If you have any questions I can be reached through my contact info below any time.

Thank you for considering sponsoring the 2026 event.

Dave Clement
CMCA Golf Committee
403 831 2037
dclement876@gmail.com

Castle Mountain Community Association Golf Classic

Partnership/Sponsorship Package

cmcagolfclassic.com

The Castle Mountain Community Association (CMCA) is a registered non-profit society comprised of members that are Castle Mountain Resort (CMR) residents, shareholders, active resort users and community supporters. CMCA and its roots have a long history in supporting the viability and long term sustainability of the resort and the surrounding areas. CMCA is committed to being a catalyst to engage the community through collaborative partnerships and volunteerism in plans, actions and activities that:

- Promote and support a family oriented safe and sustainable community experience.
- Provide advocacy as needed to ensure the collective voice of the community is heard on matters that enhance community well-being, advance common interests and support the viability and long-term sustainability of the resort and surrounding area
- Collaborate with developers to ensure a vibrant community that aligns with the mission and values of the CMCA.
- Promote an inclusive, family oriented community for members and visitors to enjoy while recreating, living or visiting our mountain community.

Castle Mountain Resort Community continues to be at extreme wildfire risk due to dry forest fuel in close proximity. The Community is currently engaged in FireSmart Best Practice and Action to be more defensible in the event of Wildfire. A quotation from Dave Cox, former Fire Chief of Pincher Creek: “It is not a matter of IF the Castle valley will burn, but rather WHEN it will burn” While we have made significant improvements over the last number of years there is still more to be done.

The Goal of the 2026 Golf Tournament is to continue raising funds for the Fire Smarting initiatives around the Castle Mountain Resort Community protecting the community from future Wildfire danger. As well, in the spirit of greater community responsibility CMCA will be donating a percentage of funds raised to the Pincher Creek Food Center and the Crowsnest Pass Food Bank.

Partnership Opportunities:

Gold Sponsorship - $2500

Includes:

1. **4 Complimentary Registrations for the Event**
2. **Company Signage on all Golf Carts**
3. **Premium Signage Around Golf Course,CMCA Lift Line Newsletter & Event Website**
4. **Acknowledgement in Local Paper**
5. **Acknowledgement at Dinner and Awards Banquet**

Golf Ball Sponsor - $1500

Your sponsorship will provide 1 sleeve of quality Golf Balls to each participant with your logo on them.

Includes:

1. **2 Complimentary Registrations for the Event**
2. **Your Logo on Golf Balls for all attendees.**
3. **Premium Signage around the Club House.**
4. **Acknowledgment in the Local Paper & CMCA Life Line Newsletter & Event Website**
5. **Acknowledgement at the Dinner and Awards Banquet**

Hole in One Sponsor - $1500

If a hole in one is made on the designated hole the winner will receive $10,000

Includes:

1. **2 Complimentary Registrations for the Event**
2. **Premium Signage around the Club House**
3. **Signage on Designated Hole.**
4. **Acknowledgement in the Local Paper & CMCA Lift LIne and Event Web site.**
5. **Acknowledgement at the Dinner and Awards Banquet.**

Silver Sponsorship - $1000

Includes:

1. **2 Complimentary Registrations for the Event**
2. **Premium Signage around the Golf Course,CMCA Life Line Newsletter & Event Website**
3. **Acknowledgement in Local Paper**
4. **Acknowledgement at Dinner and Awards Banquet**

Putting Contest- $500

All players will have opportunity to participate throughout day, the winner receiving a prize. Prize will be drawn from those players who qualify by sinking the qualifying putt.

Includes:

1. 1 Complimentary Registration for the Event
2. Signage around Putting Green
3. Acknowledgement at Dinner and Awards Banquet

Golf Cart Sponsor - $500

Have you Company Logo / Family Name on every Golf Cart

Includes:

1. 1 Complimentary Registration for the Event
2. Your logo/family name on each cart
2. Acknowledgement at Dinner and Awards Banquet

Hole Sponsorship - $250

Includes:

1. Signage on Your designated hole.
2. Acknowledgement at the Dinner and Awards Banquet

Prize Donor: - $100

In lieu of Cash a prize donation of equal value for the event would be greatly welcome!

Includes:

1. Recognition at the Dinner and Awards Banquet.

For more Information, Donor Sign up, go to : cmcagolfclassic.com

or Contact Dave Clement - dclement876@gmail.com - 403 831 2037

Outlook

Ethical Conflict and Support for MD Stewardship (#2840)

From Dave Bairnes <dbairnes@gmail.com>
Date Tue 2026-02-03 15:45
To Rick Lemire <CouncilDiv2@mdpinchercreek.ab.ca>; MDInfo <MDInfo@mdpinchercreek.ab.ca>

1 attachment (111 KB)
Gmail - FORMAL CHALLENGE_ Regulatory Failure at Grassy Mountain – Dave Bairnes, Land Agent #2840 (Retired).pdf;

Dear Reeve Lemire and Council,

As a former Land Agent who entered the profession in 1980, I formally support the MD's stance of "Unyielding Stewardship". My professional history is defined by walking away from my license because I refused to facilitate development that compromised our natural resources under the regulatory constraints of the time. It also reflects a history of advocacy for the rights of the Land, the interests of it's private Landowners, and the true owners of this province's resources, the Alberta Public.

The 1976 Coal Policy was designed to prevent exactly what we are now inviting: the poisoning of the Oldman and the entire South Saskatchewan River system. The decision to grant NorthBack "Advanced Project" status for a project rejected in 2021 is a masterclass in incompetence.

I applaud the MD for stating that any risk to our water is unacceptable. Please continue to challenge this loophole that threatens water security from The Pass to Taber and beyond. Our agricultural and ranching legacy is far more valuable than a short-term coal mine founded on unproven selenium technology.

Attached here is the related email I sent to the Premier and others, today.

Sincerely,

Dave Bairnes, #2840 (Retired)

Gmail Dave Bairnes <dbairnes@gmail.com>

FORMAL CHALLENGE: Regulatory Failure at Grassy Mountain – Dave Bairnes, Land Agent #2840 (Retired)

Dave Bairnes < Tue, Feb 3, 2026 at 3:20 PM
To: premier@gov.ab.ca, info@albertandp.ca, livingstone.macleod@assembly.ab.ca, Nagwan.AlGuneid@assembly.ab.ca, banff.kananaskis@assembly.ab.ca, epa.minister@gov.ab.ca, minister.energy@gov.ab.ca

Premier Smith and Minister Jean,

I am Dave Bairnes. I was born in Calgary, in 1955, lived there until 1990 and now live in Pincher Creek. The Eastern Slopes have been my backyard my entire life.

I was certified as an Alberta Land Agent in October 1980 (Cert #2840). I am writing to you today as a professional who walked away from that career because I could not reconcile my duty to the Land with the constraints of a licensing system that served as a mere conveyor belt for industry.

A Professional Rejection of the System: I surrendered my license because I found it impossible to responsibly represent Alberta's natural resources under the limitations required of me. Even in the 1980's, I saw the 1976 Coal Policy being treated as a hurdle rather than the permanent protection Peter Lougheed intended. Today, that same "regulatory stupidity" has resurfaced as an "Advanced Project" loophole for NorthBack Resources.

The Threat Beyond Pincher Creek**:** Granting this exception to a project rejected in 2021 is an act of complicity that ignores 50 years of land management history. To allow NorthBack to proceed is to knowingly permit the poisoning of the Oldman River system. This is a direct threat to the water security of every municipality from Pincher Creek to Taber and beyond**.**

The Selenium and Water Reality**:** Using a $15 billion "lawsuit threat" to justify new exploration is a failure of leadership—as a Land Agent, I know a "bad permit" is a liability, not a settlement. Furthermore, the unproven selenium technology being touted ignores decades of empirical data showing that even reclaimed mines leak toxins for generations.

I am asking the government to reinstate the 1976 protections in full and stop this "fire sale" of our water. I am asking the Official Opposition to hold this administration to the standard of stewardship I once swore to uphold.

Sincerely,

Dave Bairnes, #2840 (Retired)

Box 2771 Pincher Creek, T0K1W0

Outlook

Release of the new Plan for Parks

From Robin Schmidt <robin.schmidt@gov.ab.ca>
Date Wed 2026-01-28 16:00

Hello,

Alberta Forestry and Parks is pleased to share the new Plan for Parks, Alberta's strategic direction to guide management of the provincial parks system. This includes sites designated under the *Provincial Parks Act*: provincial parks, provincial recreation areas, and wildland provincial parks.

The new Plan for Parks provides a renewed vision for the future, enduring goals, and outcomes that describe the core purpose of parks. It provides strategic supporting actions that guide how to achieve these goals while responding to emerging pressures and embracing new opportunities.

The Plan was informed by multiple perspectives provided to government during two phases of public, Indigenous, and stakeholder engagement that took place in 2024 and 2025.

The first phase of engagement (June 19 – August 18, 2024) collected feedback on perspectives, priorities, and needs to inform the creation of the new draft Plan for Parks. The second phase of engagement (May 27 – July 26, 2025) sought input on a draft plan.

In addition to the more than 200 contact emails and phone discussions, we heard from twenty-two stakeholder organizations in the second phase, and five stakeholder organizations during the first phase, and appreciate the feedback provided during both phases of engagement.

Thank you for your interest in Alberta's provincial parks system, and your support as we work collaboratively to implement the new Plan for Parks.

Sincerely,

Robin Schmidt
Director, Policy & Planning
Parks Division | Forestry and Parks
Government of Alberta
C: 587-986-8215 | E: *robin.schmidt@gov.ab.ca*

Classification: Protected A

Outlook

FW: Accepting Watershed Legacy Program applications for 2026

From Tony Bruder <CouncilDiv1@mdpinchercreek.ab.ca>
Date Fri 2026-01-23 14:58
To Jessica McClelland <AdminExecAsst@mdpinchercreek.ab.ca>

1 attachment (237 KB)
WLP Application Form 2026 - Fillable V2.pdf;

Hi Jessica,

Can you please add this to the next meeting for information.

Tony

From: Debra Still <debra@oldmanwatershed.ca>
Sent: January 23, 2026 2:34 PM
Cc: Sofie Forsstrom <sofie@oldmanwatershed.ca>; Shannon Frank <shannon@oldmanwatershed.ca>
Subject: Accepting Watershed Legacy Program applications for 2026

Oki, hello Friends of the Oldman Watershed,

The Oldman Watershed Council (OWC) is pleased to announce that we are accepting applications for funding through our Watershed Legacy Program (WLP) for on-the-ground stewardship projects in the Oldman watershed.

The deadline to apply is **March 1st, 2026**. The application form is attached and available on our website. OWC is also accepting oral applications through a video or meeting. Reply to this email to book a meeting with me.

We are looking for projects in these categories:

- ☐ Water development (troughs, springs, wells, etc.)
- ☐ Wildlife-friendly fencing (virtual, electric, wire)
- ☐ Riparian enhancements (plantings, bioengineering, erosion control, etc.)
- ☐

Beaver coexistence (fencing trees, pond levellers, etc.) and beaver dam analogues

- ☐

  Cultural and prescribed burns

- ☐

  Pollinator habitat (gardens in public spaces, plantings, etc.)

Applications are being accepted from land managers, farmers, ranchers, municipalities, and nonprofit organizations. Land could be First Nations, public, or private. We are moving to a once-per-year funding window each February, so now is your chance to secure funds. The next opportunity won't be for another year.

There is no dollar limit but only 50% of the project costs will be paid in cash. Matching funding from other funders can be coordinated with OWC to make sure grant requirements from other funders are met.

Funding will be awarded on approximately March 31st, 2026. Applicants must allow OWC to showcase the project through our communications channels and events, and allow range, riparian, and/or aquatic health assessments to be completed (at OWC's cost).

Debra Still

Restoration Manager

Oldman Watershed Council

1 (403) 330-1346 ext. 7

debra@oldmanwatershed.ca

www.oldmanwatershed.ca

PO Box 1892, Lethbridge AB T1J 4K5

Become a Member

Grant Application

Visit our website for more information.

Oral applications are accepted through a video or meeting. Please contact Debra Still, Restoration Manager, at debra@oldmanwatershed.ca if you would like to set up a meeting.

Contact Information ***(PLEASE TYPE or PRINT CLEARLY—unreadable applications will be returned)***	
Date:	**Name:**
Phone:	**Cell:**
Mailing Address:	
Town:	**Postal Code:**
Email:	
Watershed Stewardship Group, Farm, or Ranch Name:	
Have you received funding from the Oldman Watershed Council in the past? If so, for what and when?	
If this project does receive funding who should the cheque be made out to? Where should the cheque be sent? ***(if same as above, please indicate)***	
Is there a technical specialist supporting this project? (optional, please mention if your local ag fieldman, or another group is supporting you)	

Project Information (1)

Project Title:

Project Location: **County or Municipal District or First Nation:**

Legal Land Description:

GPS coordinates of project implementation site (decimal degrees)**:** (Projects must be in the Oldman watershed, see map)

Watershed: (nearest river/creek/waterbody):

Project Description:

Provide as much detail here as possible—tell us why your project is important and how it will make a difference. Include details such as: the relationship to the sub-basin or local community, area, number of animals affected, planned grazing management strategies, number of anticipated participants, etc.

Project Information (2)

Project Results:
What are the results you are hoping to achieve with this project?
What will the environmental benefit be?
How do you plan to achieve these results?
Why should your project be funded?

Project Details (2)

Project Category: ***(Select one or more of the following categories. At least one must apply.)***

- ☐ Water development (troughs, springs, wells, etc.)
- ☐ Wildlife friendly fencing (virtual, electric, wire)
- ☐ Riparian enhancements (plantings, bioengineering, erosion control, etc.)
- ☐ Beaver coexistence (fencing trees, pond levellers, etc.) and beaver dam analogues
- ☐ Cultural and prescribed burns
- ☐ Restoring pollinator habitat (gardens in public spaces, plantings, etc.)

Project Impact
What impact will your project have? We use this information to communicate the successes of these projects to the public and our partners. Fill in as applicable.

How many animals kept out of water?
How many kilometres of fenceline?
How many kilometres of streambank improved?
How many plants installed?
How many hectares positively affected?
Other:
Other:
Have you had an aquatic (CABIN), range or riparian health assessment near the site? If so, when? (OWC reserves the right to have assessments completed, at our cost)

Project Timeline: ***(Estimated length of project)***

- ☐ **Less than 6 months**
- ☐ **6 months**
- ☐ **1 year**
- ☐ **18 months**

Expected Start Date:	**Expected End Date:**

Project Costs		
Item	Estimated cost covered by the Watershed Legacy Program (approximately 50%)	Estimated cost covered by other sources, including in-kind (~50%) *include name of other funding source*
Materials		
Equipment/Hours		
Labour Hours		
Other (explain)		
Total Costs	***(A)***	***(B)***
Grand Total ***(A+B)***		

Please budget in-kind labour contributions at $85 per hour.

***If in-kind contributions are greater than 50% of the project, OWC will not pay the amount above the 50% in cash.**

Attachments Checklist

Be sure to include with your application form the following documents.

☐ Aerial or satellite imagery of project site (if available).

☐ A sketch-plan of the site showing existing built and natural features, location of the work site, and a north arrow.

☐ Photos of project site (select specific photo points around project site—these will be used for monitoring purposes).

Photo points MUST be clearly marked with metal stakes/rebar so as to be able to relocate in following years. If able, mark the photo points using a GPS and provide GPS coordinates with application.

☐ Letters of approval (or support in principle, specifying outstanding requirements to obtain full approval) from regulatory agencies. (if applicable) *See Appendix A for spring developments.*

☐ Written quotes from suppliers (eg. UFA) for materials and/or quotes from contractors for machinery, etc. (if applicable).

☐ Any longer term plans for the project (eg. future years of monitoring, future project phases), if available.

☐ Any other documents you feel may enhance your application.

The Memorandum of Understanding (MoU) requires you to allow us access to your project site for field days, tours, monitoring, health assessments, etc. for up to 5 years after project completion. We also require you to allow the OWC to profile your project through OWC's communications channels.

You must agree to these terms to receive funding.

☐ **Agree**

Are you able to receive funding by Interac eTransfer? ☐ **Yes** ☐ **No**

If yes, please provide email or phone number for Interac eTransfer: _____

Submit Completed Application Form to the Oldman Watershed Council:

Preferably by email in PDF format to debra@oldmanwatershed.ca .

OWC Contact Information:

Feel free to contact us at any point if you have questions or concerns with the application process.

Debra Still, OWC Restoration Manager
Phone: 403-330-1346 extension 7
Email: debra@oldmanwatershed.ca

Appendix A: General Spring Development Criteria

Licence requirements:

So long as a spring is developed in a manner that does not increase the flow of water a Licence would not be required as per Schedule 3 of the *Water (Ministerial) Regulation 1(d)*, "… the diversion of surface water (i.e. spring) for the purpose of operating an alternative watering system for livestock that are generally grazed." This type of diversion of water is exempt from the requirement of a licence. Whereas an "alternative watering system" is defined under the Water (Ministerial) Regulation as " a method of supplying water to grazing livestock that has been developed to replace the watering of grazing livestock directly in a natural water body". If the flow from a spring is increased a licence would be required. However, approval may still be required (see below).

Approval requirements:

An Approval under the Water Act is required prior to commencing any construction or disturbance within a natural water body, e.g. spring. Note that the spring needs to be developed in a manner that does not increase the flow of water. If the flow of water is increased a licence under the Water Act is required. The Bow, Oldman, and South Saskatchewan River Basins and their tributaries however, are closed to new water allocations under a licence. Please confirm whether or not the rate of flow from the spring will be increased as a result of the proposed development.

For your application to be considered complete you need to submit the following information, which will have to be done for each spring to be developed:

☐ **complete Water Act Application—at the top of the form check off 'Approval for Constructing Works' under the Water Act for a spring development.**

☐ **annual water consumption—Livestock Water Requirement Worksheet**

☐ **Application Plan within the quarter section(s)**

Location of springs need to be labelled on the Plan. If you choose to use the aerial photo or Google Map submitted previously you will need to:

- ***Label springs***
- ***Put a North arrow***
- ***Label quarter sections***
- ***Show any piping and where it leads to eg. Waterers, troughs etc.***
- ***Sign and date the Plan***

☐ **detailed plan(s) of the proposed spring development (see Agri-Facts sheets on spring developments) and any water distribution system (troughs, pipelines and overflow return to the natural channel)**

Note you are not restricted to these forms for illustrating the proposed works, so long as the plan is clearly defined. Please note that the piping of the spring water from the culvert can ONLY be used on the quarter section where the spring source is located, it CANNOT be piped off quarter.

Effective April 4, 2022, Water Act applications for temporary diversion licences (TDL) and amendments must be submitted through the Digital Regulatory Assurance System (DRAS). For more information, visit https://www.alberta.ca/water-act-forms.aspx

Upon receipt and review of the complete application by this office, a notice of application will be sent to you requiring a 7 day period for public notice. The 7 day period for public notice allows any directly affected party to submit a statement of concern. Once the public notice period is complete and the statements of concern are addressed, an approval may be issued for the proposed project.

In regards to any licence requirements for the diversion of water from the spring, so long as the flow of water is NOT increased from the spring, then as per Schedule 3 of the *Water (Ministerial) Regulation 1(d)*, " the diversion of surface water (i.e. spring) for the purpose of operating an alternative watering system for livestock that are generally grazed", this diversion of water is exempt from the requirement of a licence. Whereas an "alternative watering system" is defined under the Water (Ministerial) Regulation as " a method of supplying water to grazing livestock that has been developed to replace the watering of grazing livestock directly in a natural water body".

Once the spring development is complete, the spring should be fenced off to prevent the cattle continued access to the spring source. All water that overflows the spring development (e.g. culvert) MUST be allowed to flow back into its original channel.

Please note: This information was provided by Alberta Environment and Parks and is reported here for informational purposes only. WLP applicants are responsible for following up with the Regulatory Approval Centre to determine how licensing or approval may apply to their specific project. Oldman Watershed Council is not responsible for determining whether licensing or approval is required.

February 3, 2026

The Honourable Danielle Smith, M.L.A.
Premier of Alberta
Office of the Premier
307 Legislature Building
10800 – 97 Avenue
Edmonton, Alberta T5K 2B6

Open Letter to the Premier of Alberta and All Albertans

Dear Premier Smith,

I am writing to you, and to all Albertans who care about those who currently rely on the Assured Income for the Severely Handicapped (AISH) program.

I know you are receiving hundreds of calls and letters urging you to halt the transition from AISH to the Alberta Disability Assistance Program (ADAP) under Bill 12. This is one more of those letters, and perhaps it too will fall on deaf ears. However, I would be remiss in my duty as a mother and as an informed voter if I did not add my voice and advocate for what is just and right for Albertans with disabilities — including my son.

Before I speak personally, some necessary background for those unfamiliar with AISH and ADAP:

- AISH stands for Assured Income for the Severely Handicapped.
- AISH currently provides a maximum benefit of $1,940 per month.
- Applicants generally apply approximately six months before their 18th birthday.
- AISH requires a physician's report, for which a fee may be charged.
- Applicants must have a medical condition likely to be permanent.
- The medical condition must be the primary factor limiting their ability to earn a living — not education level or lack of training.
- AISH considers available treatment, therapy, rehabilitation, and training that may improve earning capacity.
- Applicants are encouraged to work to the extent they are able:
    - Up to $1,072 per month is exempt from benefit reduction.
    - Income between $1,072 and $2,009 is 50% exempt.
    - Income over $2,009 is clawed back dollar-for-dollar.
- AISH provides limited health benefit coverage.

- ADAP stands for Alberta Disability Assistance Program.
    - It is built on the premise of segmenting people with disabilities based on their perceived ability to work.
- All current AISH recipients will be automatically transferred to ADAP.
    - Recipients may apply to return to AISH, which requires a new medical assessment.
- ADAP provides a benefit of $1,740 per month — $200 less than AISH.
- There is no guarantee of continued health benefits under ADAP.
- There is no guarantee that individuals transitioned from AISH will meet ADAP eligibility criteria.
- There is no right of appeal under ADAP.
- ADAP removes cost-of-living adjustment reviews.

- CDB refers to the Canada Disability Benefit:
    - A federal program designed to supplement provincial supports and bring recipients closer to the poverty line.
    - Recipients receive $200 per month.
    - Alberta chose to claw this benefit back by reducing AISH payments by the same amount, effectively neutralizing its impact.

Now that the technicalities are out of the way, I want to speak about what this means in real life.

I do not expect pity. Some readers may even be angry that these benefits exist at all. To them I would simply say: I am thankful your life has not been touched by disability, and I am sorry that empathy is so difficult.

We brought our beautiful son home from the hospital on the second day of his life. He appeared healthy in every way. By three months of age, his adoption was finalized and our family was complete. By age three, however, we noticed developmental delays and difficulty engaging with other children. We sought help.

Over the next two years, we learned from his birth mother that she drank heavily during pregnancy and smoked. Drug use was never confirmed, but remains a possibility. Our son was formally diagnosed with Fetal Alcohol Spectrum Disorder, Oppositional Defiant Disorder, Attention Deficit Hyperactivity Disorder, and a mood disorder. He is now twenty-two years old.

When he was eight years old, he was admitted to the mental health unit at the Children's Hospital for one month — beginning the day after Christmas. While other families were enjoying the holidays, we were entering a nightmare we did not understand.

We hoped a full team of professionals — physicians, psychiatrists, counsellors, pharmacists — could create a treatment plan that would stabilize him. We visited every

day. I still remember the elevator ride down to the unit, the recorded voice announcing "going down." In my head I thought: yes, we are going down — into something I do not yet have words for.

The day he was discharged, I posted on Facebook that sometimes I felt like I was living in a nightmare, and other times I thought this must be what hell feels like. I had no idea then that it could get worse.

Over the years, our son was moved between schools. We advocated. He punched holes in walls; we learned to spackle. He threatened suicide; we called 911.

Three things never changed:
We never regretted adopting him.
We loved him with every fibre of our beings.
We never considered walking away.

We have watched our son beat himself in the face until he bled, asking why God made him this way. He wants to know what he did wrong to deserve this life. We cannot answer him. It breaks us — every single time.

We have held him while he sobbed and asked why nobody wants him.

If you met our son briefly, you would likely describe him as a wonderful young man — and he is. You might not even notice his disability, depending on the topic of conversation. But spend enough time with him and it becomes unmistakably clear.

My point is this: disability cannot be meaningfully assessed through a short application or a brief phone interview.

Our son has tried to work. He has tried work training programs. For people like him, success can take multiple attempts. Unfortunately, once he leaves a program, it can be nearly impossible to re-enter.

Over five years, he has been hired three times. Those three jobs total approximately seven days of work. Fear and anxiety take over — and they are very real.

Last week, he was hired for a part-time job he was excited about. He bought the right clothing. He called his support workers. He prepared. Then he received his schedule: 38 hours per week.

When he asked whether there had been a mistake, he was told anything under 38 hours is considered part-time. He was also told no job sharing was possible due to other staff's work visas. He was asked to submit a letter of resignation.

Now we are again helping him work through feelings of worthlessness and fear. He knows how hard it is to get hired. He knows how much harder it is for him to stay employed.

Alberta is experiencing a labour shortage — for workers without barriers. I question how you believe people like my son will suddenly be able to secure and sustain employment.

Where will the job coaches come from?
Who will pay for the support workers?
How will employers be trained to accommodate neurological disabilities?
How will he maintain the PDD supports that help him develop basic life skills?

These are not abstract questions. They are daily realities.

We will always support our son. But $1,940 per month is not enough for independent living. After rent with a supportive roommate, food, utilities, phone, transit, activity fees, and basic participation in community life, he is already in deficit. We subsidize him — because we can.

Many others cannot.

Our son has been on the Calgary Housing list since age 18. As a single adult male, he will likely never receive housing through that system.

My husband and I are both accountants. We understand budgets and constraints. We also understand language.

“Assured Income” and “Assistance Program” are not neutral terms. They signal fundamentally different philosophies. One implies stability. The other implies conditional worth.

My professional instinct tells me to follow the money. My maternal instinct tells me to raise the alarm.

You can put lipstick on a pig — but it is still a pig.

In this case, ADAP under Bill 12 is the pig.

Sincerely,
Wendi Campbell
wendilorene@hotmail.com
587-777-9630