

# Dominion Diamond Corporation

Developer's Assessment  
Report – Community  
Hearing Presentation,  
September 2015



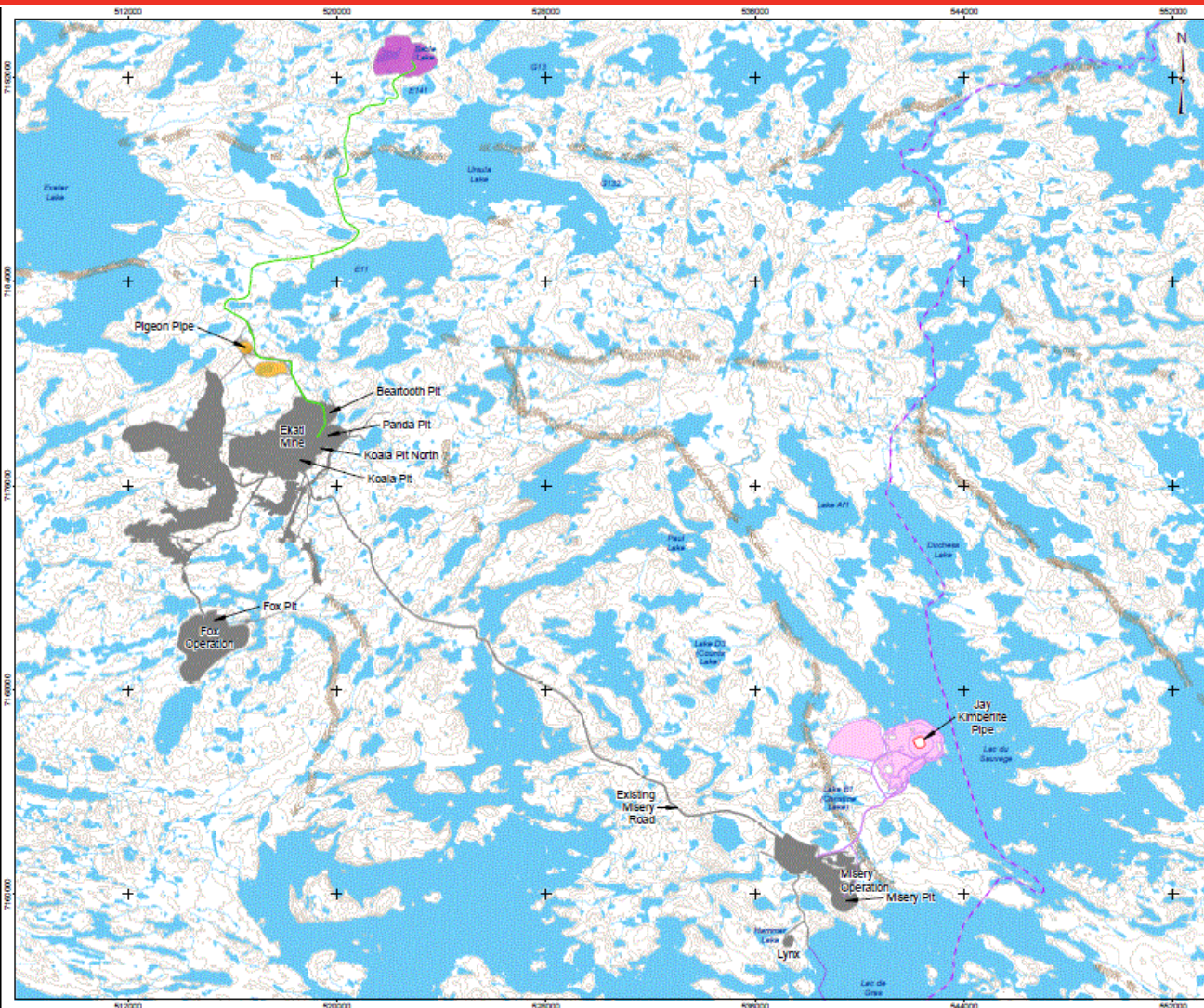


# Overview

- Welcome and Introduction
- Overview of the Project
- What did we assess, what did we hear, and how will we mitigate and monitor?
  - Socio-economic
  - Air Quality
  - Caribou and other Wildlife
  - Water and Fish
- Summary



# Jay Project – Overview



Jay Project is located:

- 25 km from the main Ekati mine facilities along the Misery Road
- 7 km northeast of Misery Pit operations

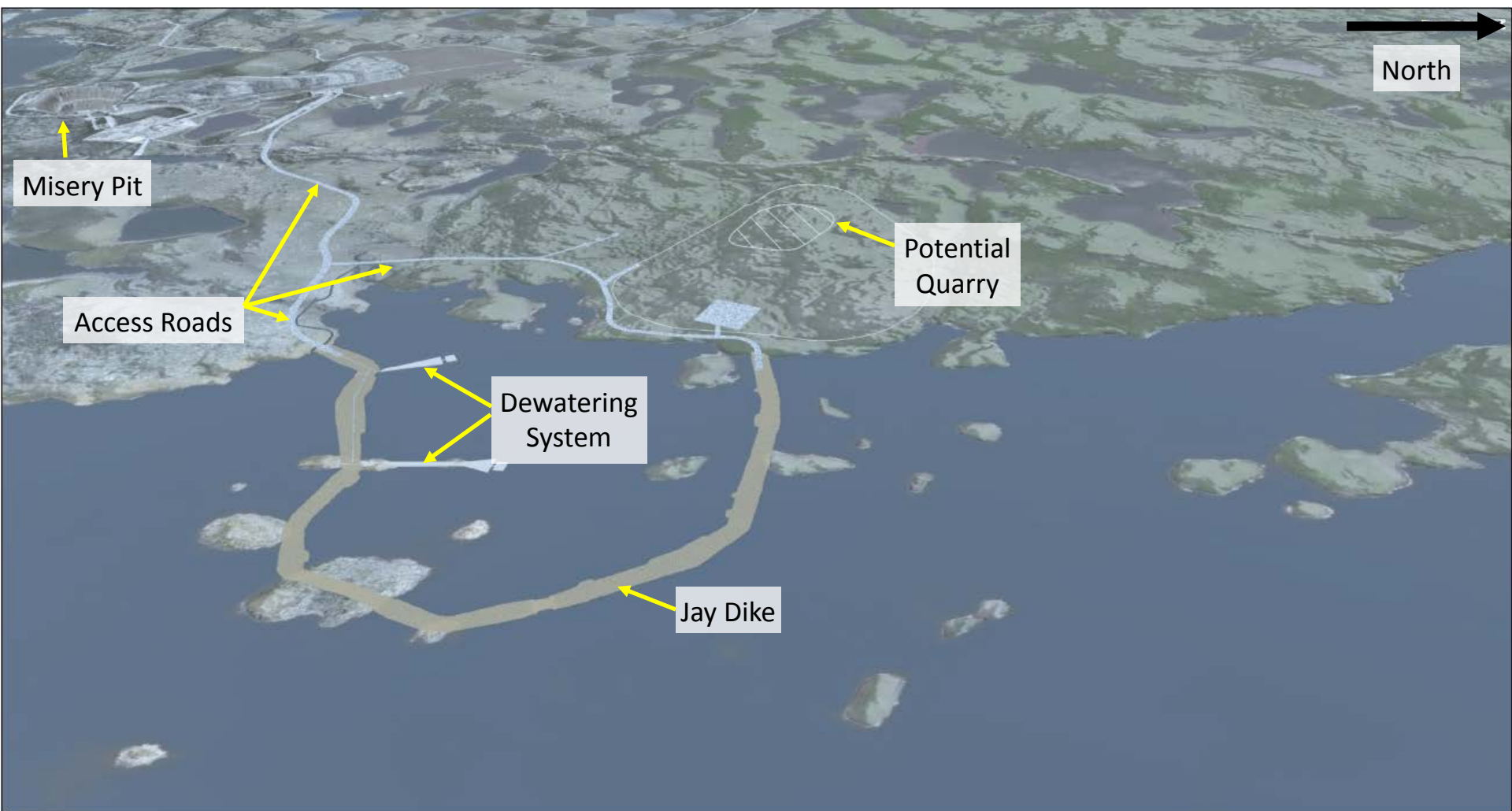


# Jay Project Design - Pre-Construction





# Jay Project Design - Construction



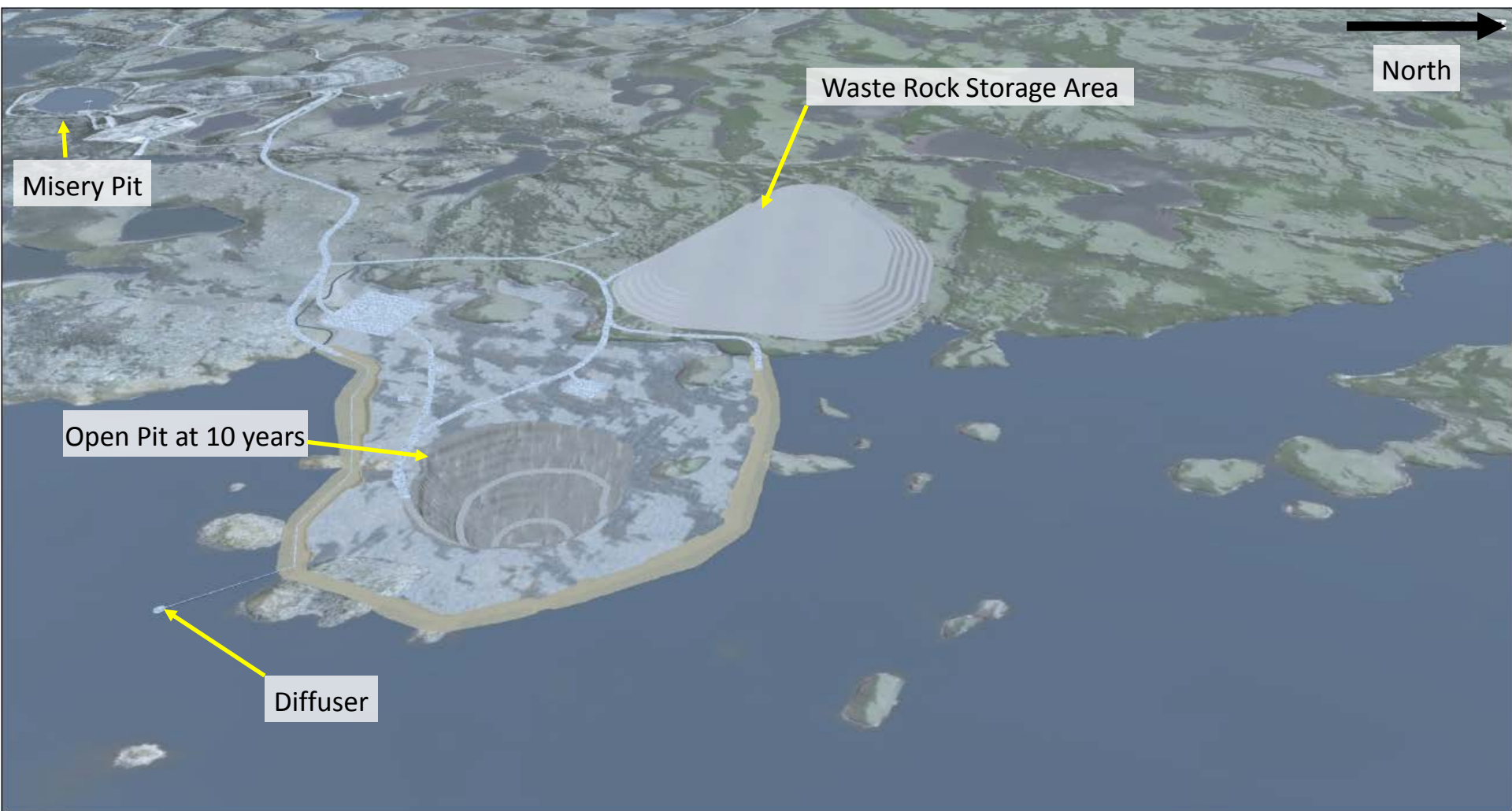


# Jay Project Design - Operations 1<sup>st</sup> Year



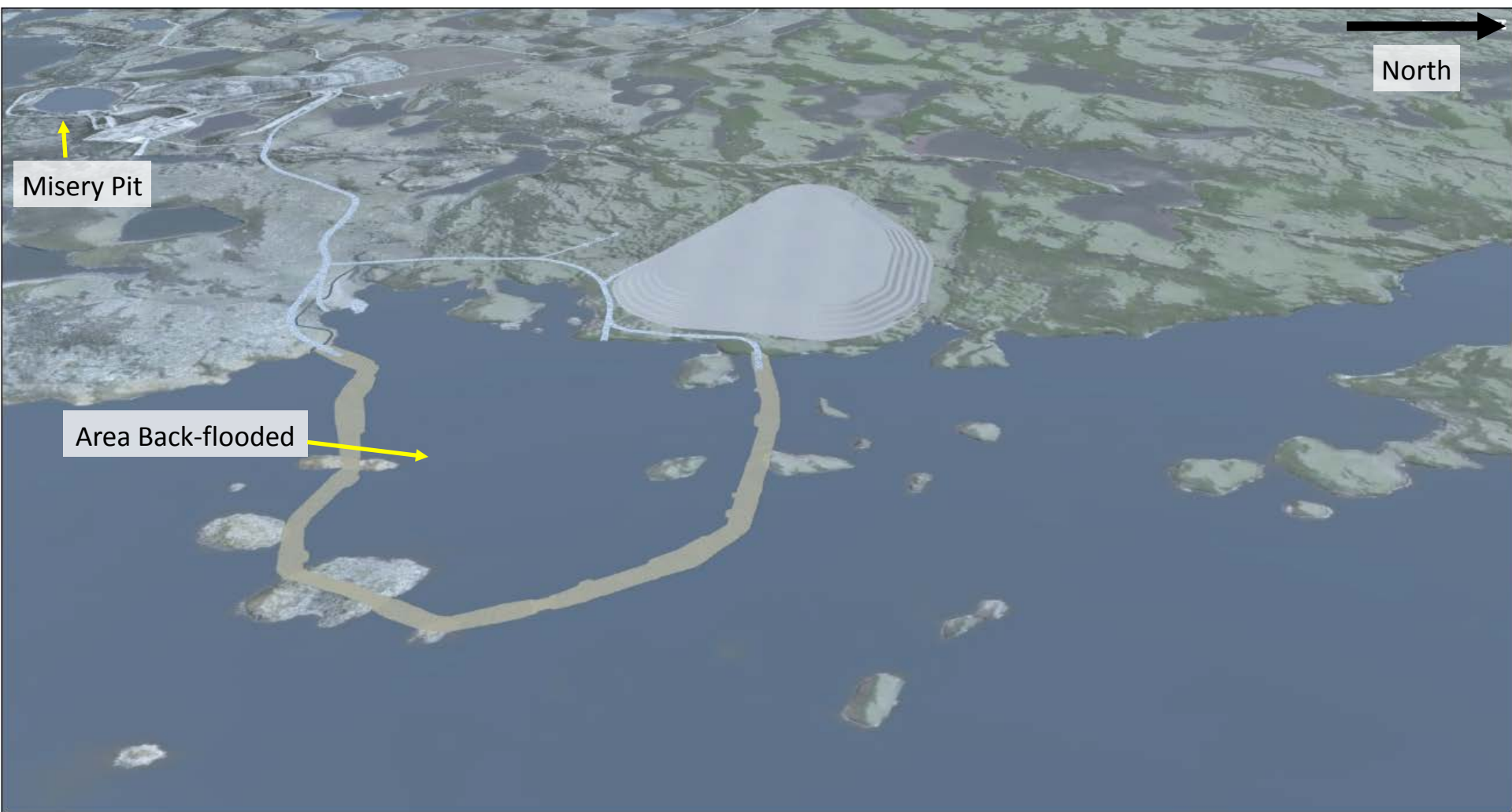


# Jay Project Design - Operations 10<sup>th</sup> Year



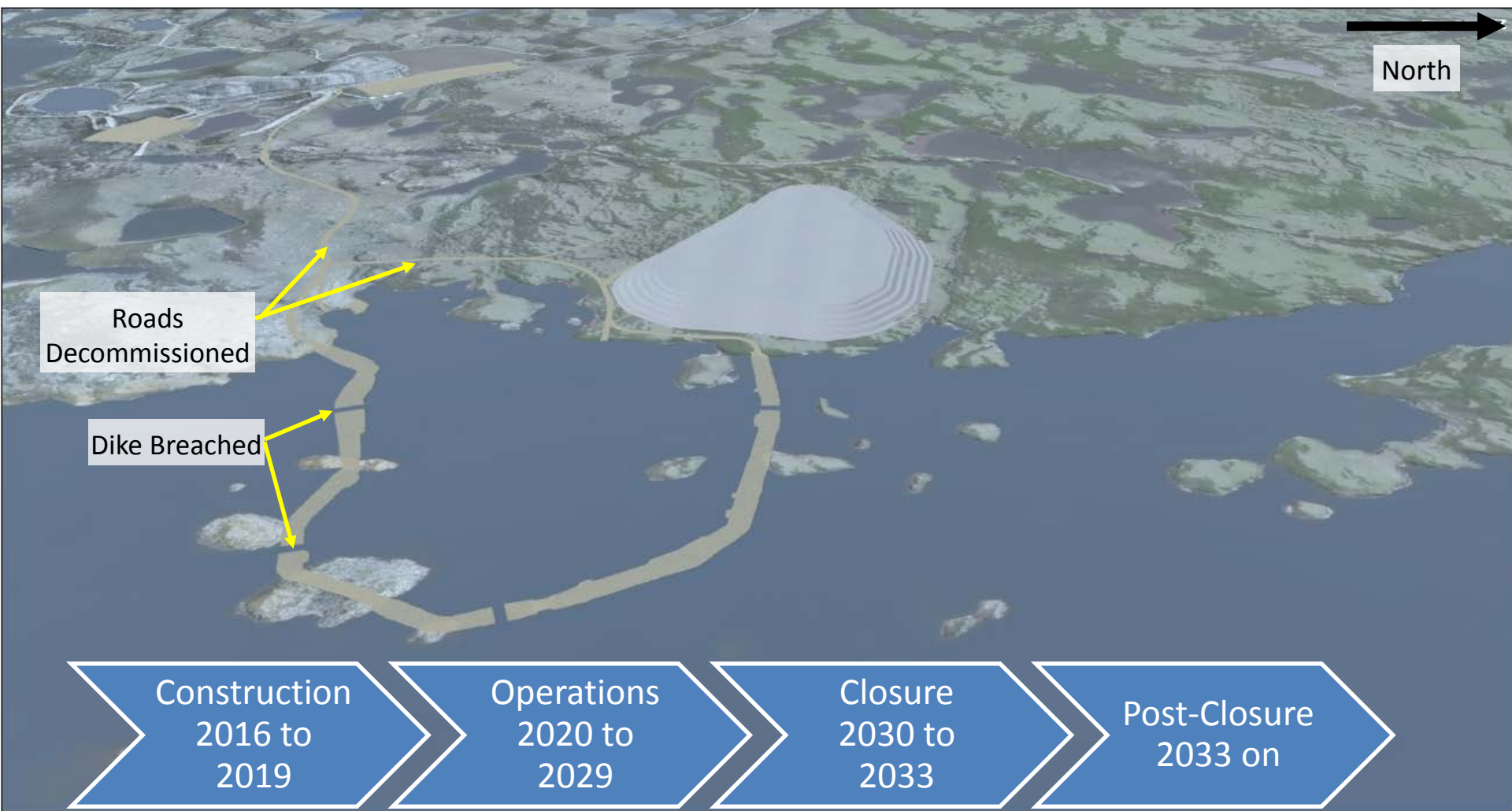


# Jay Project Design - Closure



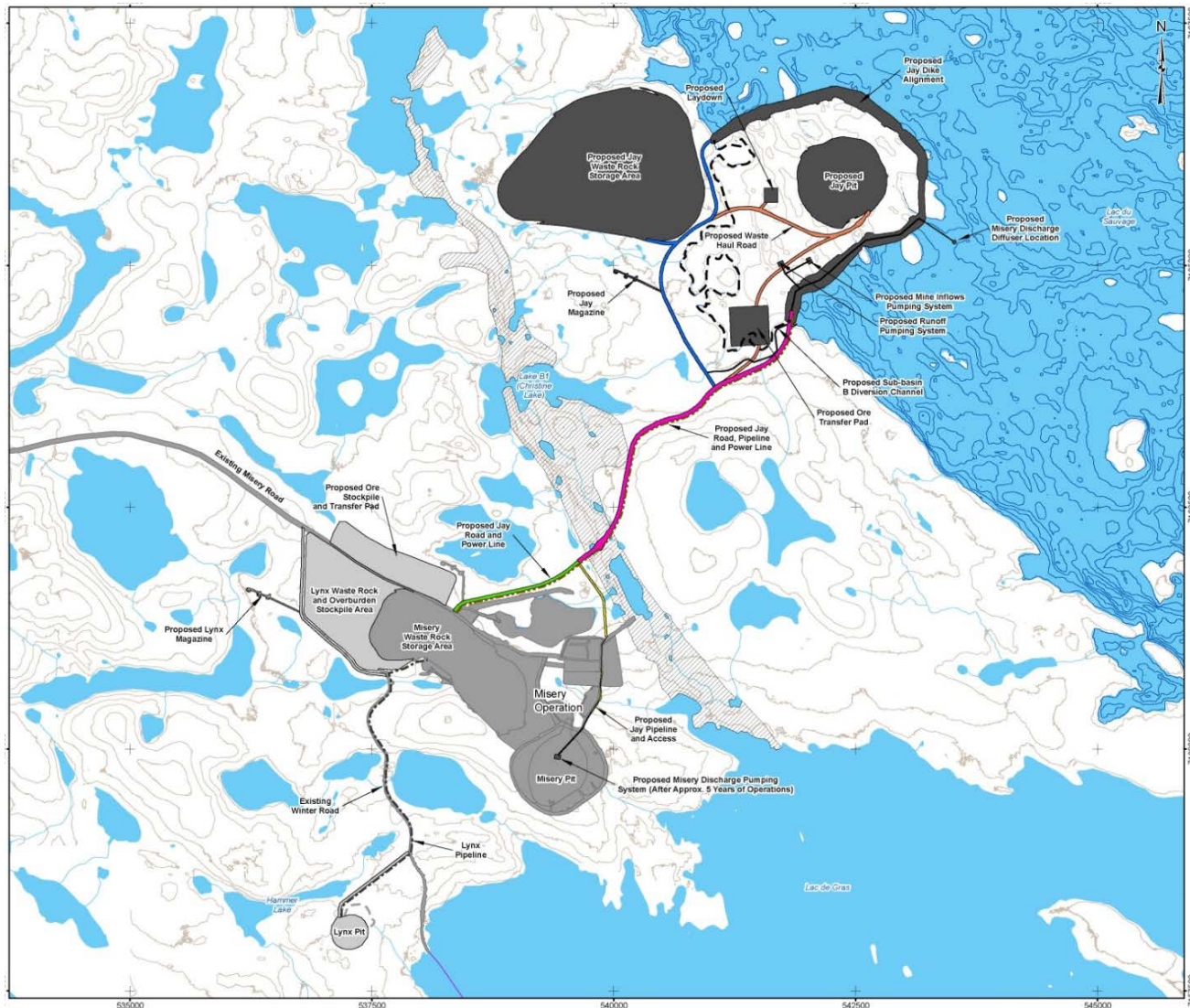


# Jay Project Design - Post-Closure





# Jay Project - Footprint (Operations)





## Jay Project – Extension of Current Mine



Extending the existing mine,  
using existing infrastructure

The current camp, airstrip,  
processing plant, Misery  
Road and other  
infrastructure will be used  
for the Jay Project

Other Ekati Mine areas will  
be reclaimed during mining  
of the Jay Pipe



# Jay Project – Closure and Reclamation

- Processed kimberlite will go in open pits where mining is complete
- Reclamation of Long Lake Containment Facility can begin



New growth  
at Long Lake  
Containment  
Facility Cell B



# Dominion Diamond – Socio-economic Benefits



**We are the Largest NWT Mining Company.  
Canadian-Owned - Northern-Based.**

Dominion is the NWT's Largest  
owns:

Own 89% of the  
Ekati Diamond  
Mine

40% of the  
Diavik Diamond  
Mine

Dominion employs more Northern  
Aboriginal resident than any other  
mining company in the NWT.



# Jay Project – Socio-economic Benefits

As an extension of the existing Ekati Mine, the Jay Project represents the continuation of employment, economic inputs, and community development

## EMPLOYMENT

- Jay Project extends existing employment opportunities at the Ekati Mine
- New opportunities during operations will be filled by Northern and Northern Aboriginal candidates wherever possible

## ECONOMY

- Jay Project continues production at the current Ekati Mine
- Continues GDP contributions to Territorial economy
- Local contracting opportunities during construction and operations

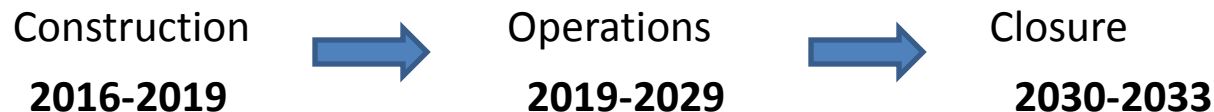
## COMMUNITY

- Continuation of IBAs and community development
- Continued support for TK Activities and community programming
- Continued commitment to Health, Safety, and the Environment



# Jay Project – Socio-economic Benefits

## Project Timeline:



## Employment:

- The Diavik and Snap Lake Mines are predicted to close over the next decade - the Jay Project reduces effects of these closures on the economy and population of the NWT
- **434** (FTE) during construction and **1,000 – 1,200** (FTE) during operations

## Economics:

- Significant contribution to the territorial economy in terms of capital expenditures, GDP, and employment
  - Input into the NWT's GDP **\$5.3 billion** (direct operations)



# Jay Project – Incorporation of Traditional Knowledge

- Dominion Diamond respects the importance of TK to Northern Aboriginal people, and actively seeks out ways to incorporate TK at the Ekati Mine.
- The importance of TK is recognized and preserved in the Ekati Mine's Engagement Plan, Environmental Agreement, four IBAs, and in regulatory approvals.
- TK was used to provide important long-term information in the assessment such as:
  - selecting valued components such as caribou, fish, water and air quality, traditional plants and land use
  - identifying potential effects from the Project on the land, water, animals, and people
  - recommending mitigation to avoid and reduce effects
  - importance of the Narrows and Lac du Sauvage esker to caribou migratory movements
  - selection of the Jay Road route
  - importance of Narrows to fish movement because it does not freeze in winter
- Dominion Diamond understands and embraces the inclusion of TK alongside science in Project planning and design, and will continue to work with TK holders in future Project activities and monitoring programs.
- Dominion Diamond will continue to be open to discussing ideas for improving or creating new TK projects with IBA communities.
- Dominion Diamond supports community-based TK projects on an application basis.



# Jay Project – Air Quality

- Air quality has been identified by communities as being important to people, as well as for potential effects on wildlife, vegetation, fish, and water.
- Particular concerns have been raised around dust.





# Jay Project - Draft Air Quality and Emissions

- Dominion Diamond submitted a draft Conceptual Air Quality and Emission Monitoring and Management Plan (AQEMMP) for the Jay Project on June 1, 2015.
  - Based on feedback from April Technical Sessions, incorporated adaptive management
- An initial workshop on the draft AQEMMP with communities and regulators was held on June 26, 2015 with a follow-up technical workshop on July 20, 2015.
  - Dominion Diamond will apply the NWT Ambient Air Quality Guideline as standards for air quality monitoring and management at the Project.
  - The adaptive management approach in the AQEMMP includes trigger levels set below the NWT guideline values. Appropriate management action will be taken if monitoring data exceeds a trigger level.
  - Jay Project dust mitigation, monitoring, and management is included in the conceptual AQEMMP, as well as snow and lichen sampling.
- Dominion Diamond has committed to further engagement on the AQEMMP following the Environmental Assessment approval and prior to construction of the Project.



# Jay Project – Caribou

- Dominion Diamond recognizes the importance of caribou to communities.
- The Bathurst herd is presently at a low point in its cycle
  - TK indicates lows in 1920s, 1950s to 1970s, and highs in 1940s and 1990s
- Questions from communities focused around wildlife/caribou monitoring plans (including traffic and road mitigation), alignment/design of the Jay Road and esker crossing, and offsetting.





# Jay Project – Road Design for Caribou and Wildlife

- Dominion Diamond engaged with members of the IBA communities, including aerial and on-the-ground reconnaissance, to gather input on the route with the least impacts to caribou and the esker
  - feedback was incorporated into the proposed alignment and design of the Jay Road.
- Selected alignment (#3) is shorter, flatter, has smallest impact to the esker, and allows most of the road to be developed as a caribou crossing.
- Other routes (including #4) are less caribou friendly (longer; higher grade, requiring more safety berms/fewer caribou crossings; greater impact to esker).
- Pipelines will be covered except where inspection is required.
- Use of an overpass on the esker is not feasible due to size of equipment and the need for fencing to funnel caribou (instead of allowing caribou to cross in multiple areas along the road).
- Powerlines require visual inspection and elevated lines avoid an additional impact to the esker.
- Dominion Diamond has and will continue to engage with communities on caribou and wildlife mitigation and monitoring and provide opportunities to integrate TK into all phases of the Jay Project





# Jay Project - Conceptual Caribou and Wildlife Monitoring Plans

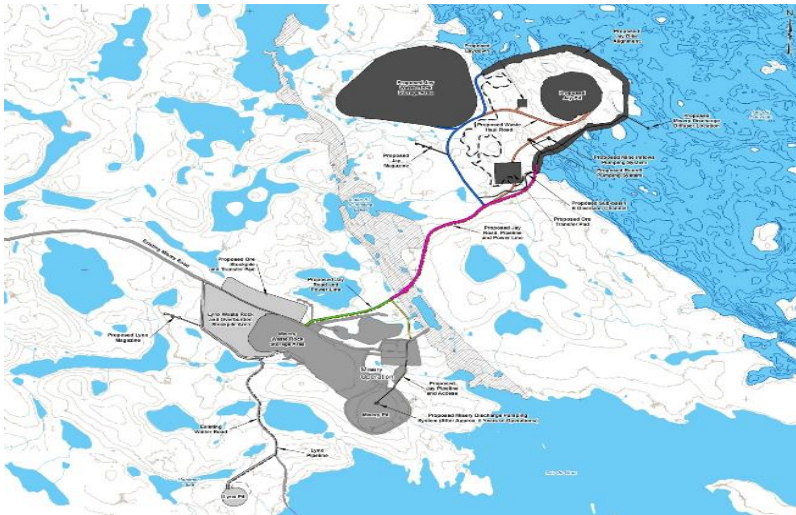
- Dominion Diamond submitted a revised Wildlife Effects Monitoring Plan (WEMP) on June 1, 2015 ; the revised Caribou Road Mitigation Plan (CRMP) is an Appendix.
- A workshop for the CRMP was held on May 22, 2015 and another workshop was held on June 25, 2015 to discuss the WEMP and a revised version of the CRMP.
- The workshops provided an opportunity for important input from communities, government, technical specialists, and the Independent Environmental Monitoring Agency.
- Dominion Diamond provided revisions based on workshops
  - CRMP (two workshops, two revisions)
  - WEMP (one workshop, one revision)
- Most recent versions submitted on July 31, 2015.
- WEMP will evolve as a result of future engagement activities following Environmental Assessment Approval.





# Jay Project - Caribou Road Mitigation Plan

- Dominion Diamond recognizes the concern from communities regarding impacts to caribou and other wildlife from traffic.
- The Caribou Road Mitigation Plan (CRMP) gives further details on strategies to reduce the impacts from the Jay and Misery roads to wildlife
  - includes trigger levels and adaptive management
- The objectives of the CRMP are:
  - To avoid and minimize the risk of caribou and other wildlife mortalities from traffic.
  - To avoid and minimize the barrier effect of the Jay and Misery roads (and other Ekati Mine roads) to caribou movement and migration.





## Jay Project - Other Wildlife

- Questions from communities related to other wildlife focused on wildlife monitoring plans
  - As previously described, a conceptual WEMP was submitted on June 1, 2015.
  - An engagement workshop on the WEMP with communities and regulators was conducted on June 25, 2015 with an updated version submitted on July 31, 2015.
  - Additional engagement on the WEMP will occur following the Environmental Assessment Approval.





# Jay Project – Water and Fish

## Offsetting and Fish-Out

- Conceptual offsetting and fish-out plans were submitted with the Developer's Assessment Report
- The plans will be finalized through continued engagement with communities and DFO during the regulatory phase of the Project (for the *Fisheries Act* Authorization)
- Like the recent Lynx fish-out, community residents will be used on the fishing crews and there will be opportunities to provide fish to communities





# Jay Project – Water

## Aquatic Effects Monitoring Program (AEMP)

- A workshop was held on June 26, 2015 with communities and regulators to discuss the conceptual AEMP.
- Dominion Diamond will conduct additional engagement on the development of the AEMP with communities and regulators during the permitting phase of the Project.
- Community Concerns Addressed to date include:
  - changes to water quality and fish health from spills, dust, sedimentation during runoff, and increased metals and nutrients
  - the Narrows between Lac du Sauvage and Lac de Gras stays open in the winter due to the swift currents through the area
  - importance of the Narrows for fish spawning and movement between Lac du Sauvage and Lac de Gras
  - the effects assessment area for fish incorporated both Lac du Sauvage and Lac de Gras as TK indicates that the Narrows provides connectivity year-round
- Dominion Diamond has and will continue to engage with communities on aquatic mitigation and monitoring and provide opportunities to integrate TK into all phases of the Jay Project



## Jay Project – Water

- Dominion Diamond is confident in the water management plan and the water quality modelling conducted to confirm meromixis.
- All the modelling completed to date indicates that that meromixis will develop in the pits following back-flooding and the pits will remain stable and stratified in the long-term
  - i.e., water with higher salt content (total dissolved solids) staying isolated in the bottom of the pit from the fresher water on top.
- Dominion Diamond believes that through the mandate of the Wek'èezhìi Land and Water Board, the appropriate review, feedback, and approval process is already in place to meet the recommendation of an independent review panel.
- Monitoring will be conducted during operations and closure to confirm predictions and allow for adaptive management if required.



## Jay Project – Other Recommendations

- Dominion Diamond accepted recommendations to:
  - Submit a revised water management plan within 2 years of initiating dewatering
  - Submit a revised waste rock and ore storage management plan within 1 year of overburden removal
  - Prepare a revised WRSA management plan
- Dominion will also:
  - Undertake supplemental sediment sampling in the proposed diked area to verify reported sediment mercury concentrations
  - Seepage monitoring will be conducted as part of the WROMP under the Water Licence requirements



# Summary

- Dominion Diamond has worked with communities and the Parties to address concerns with the Project starting with the change of the Project from the mining of the Jay and Cardinal kimberlite pipes to the mining of the Jay Pipe only.
- Other significant engagement with communities has occurred with respect to the incorporation of Traditional Knowledge including the routing of the Jay Road, the location of the cut through the esker, and the design of the Caribou Road Mitigation Plan.

Dominion Diamond responded to a total of 93 recommendations from regulatory agencies and community organizations in the Technical Reports

- Dominion Diamond agreed fully to 46 (50%) of these recommendations and agreed in part to another 26 recommendations
- Dominion Diamond is committed to future engagement through the permitting process

**Dominion Diamond thanks all the Parties for their contributions and input during the Jay Project Environmental Assessment Process**