Developing the Ambler Mining District to Produce Metals for the Future

Our Partnership with AIDEA

AIDEA BOARD PRESENTATION
January 15, 2020

Infrastructure Partnership - AIDEA

Advancing the Ambler Mining District in Alaska by Forming Strong Partnerships

- **Key Partnerships**
  - ✓**Local Native Partnership with NANA –** Business Relationship with strong community relationships
  - ✓**Financial Partnership with South32**
  - ✓**Infrastructure Partnership with State of Alaska - AIDEA** currently permitting to build road access
  - ✓**Alaska Railroad – a Key Transportation Partner to Develop the Ambler Mining District**

AIDEA

Alaska Industrial Development and Export Authority

Infrastructure Partnership - AIDEA

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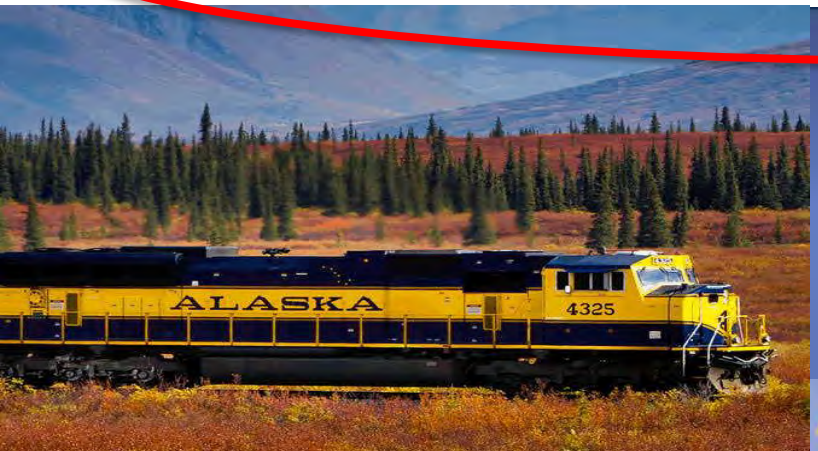


AIDEA

Alaska Industrial Development and Export Authority

Ambler Mining District - Alaska

Safe Jurisdiction – Mining District Hosts Deposits Rich in *Copper, Zinc, Lead, Gold, Silver & Cobalt*

- Politically Stable
- Rule of Law
- Recognized Mineral Potential
- Resource Extractive Industries are the Largest Contributors to Alaska's Economy
- Well Established Permitting Process
- Supportive Borough Gov't – tax base for region
- NANA Agreement

- NANA - Alaskan Regional Native Corporation with 14,000 Iñupiat shareholders
- Land owner and Joint partner with Teck on Red Dog
- Red Dog is the largest Zinc mine in the world operating for nearly 30 years
- Good jobs and Local taxes from Red Dog supports NW Arctic Borough Government and School District

➔ **Strong local support for Mining**

Truck Transportation Plan

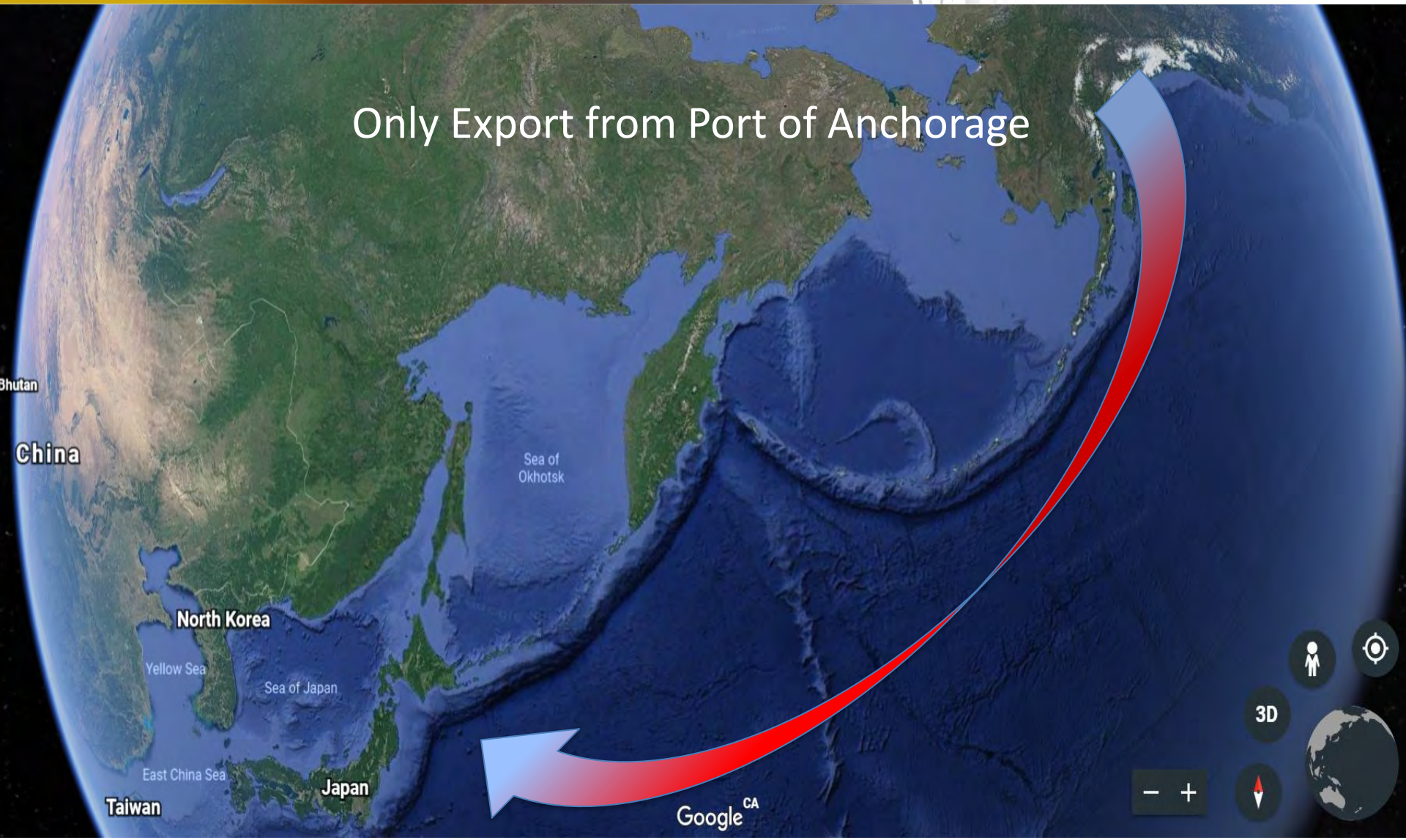
Concentrates Containers – Sealed and Easy to Stack and Load Directly into Ship

Sloped side walls and end walls to allow easy discharge and no hang up – "ICE CUBE" design

Port of Alaska - Anchorage

Concentrates Loaded Directly into Ship
Port of Alaska - Anchorage

Concentrates Shipped to Asia Processed in Usable Metals



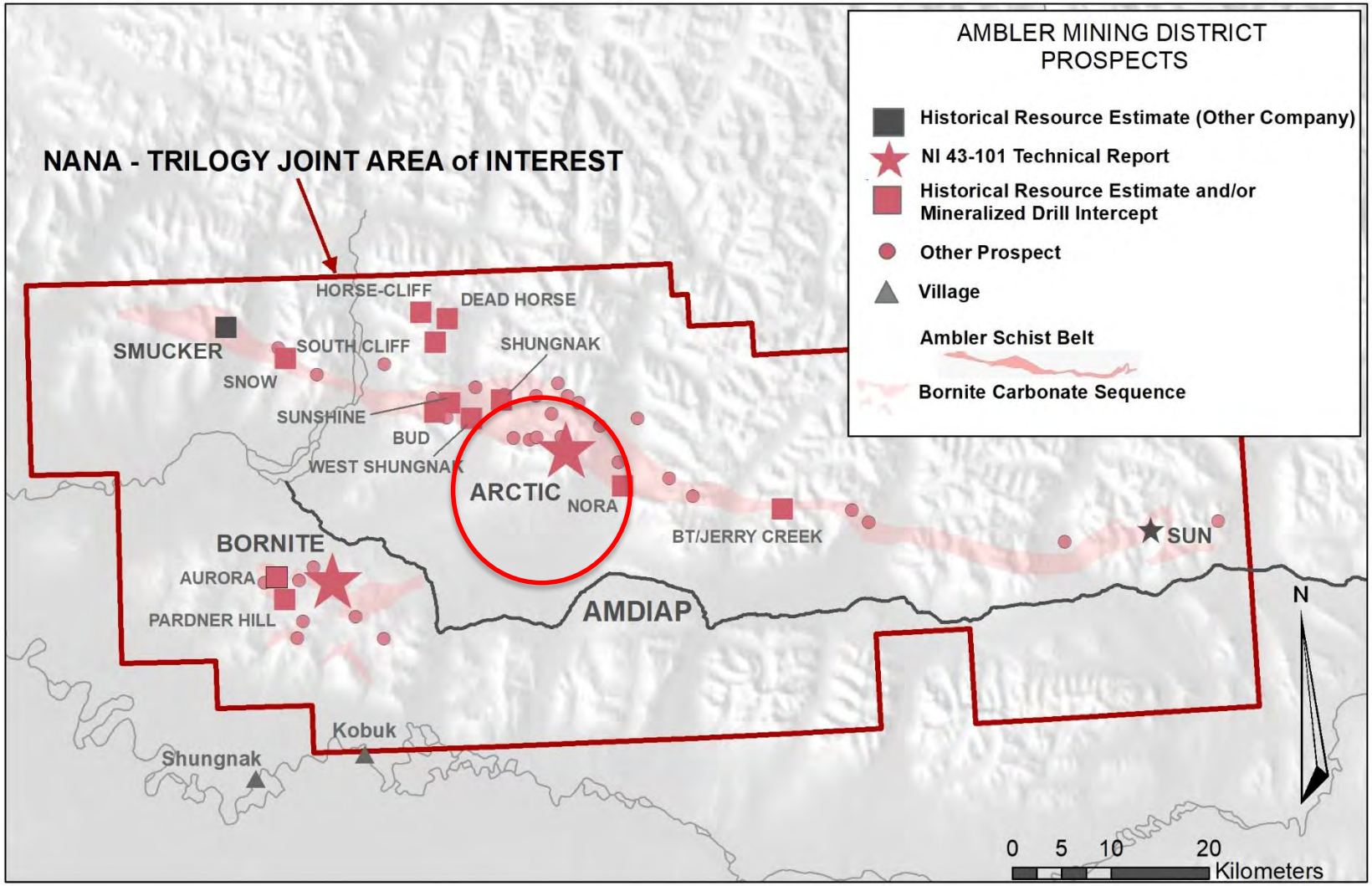
Stats on Concentrates Containers

- The containers look like 20’ Sea Containers and Measure: 20’L X 8’W X 6.6’H
- The containers will carry 30 tons of concentrate (separate for copper, zinc and lead/precious metals)
- The containers can be stacked 3 to 4 high when loaded
- Approximately 300 containers transferred per week
- The number of containers we would have at the port between ships would range from 1,350 – 1,700
- Will require between 2.5 – 3.0 acres for our year round storage and movement of containers at both the Port in Anchorage and Fairbanks Rail Yard

➔ No Metal Contaminants along Transportation Route

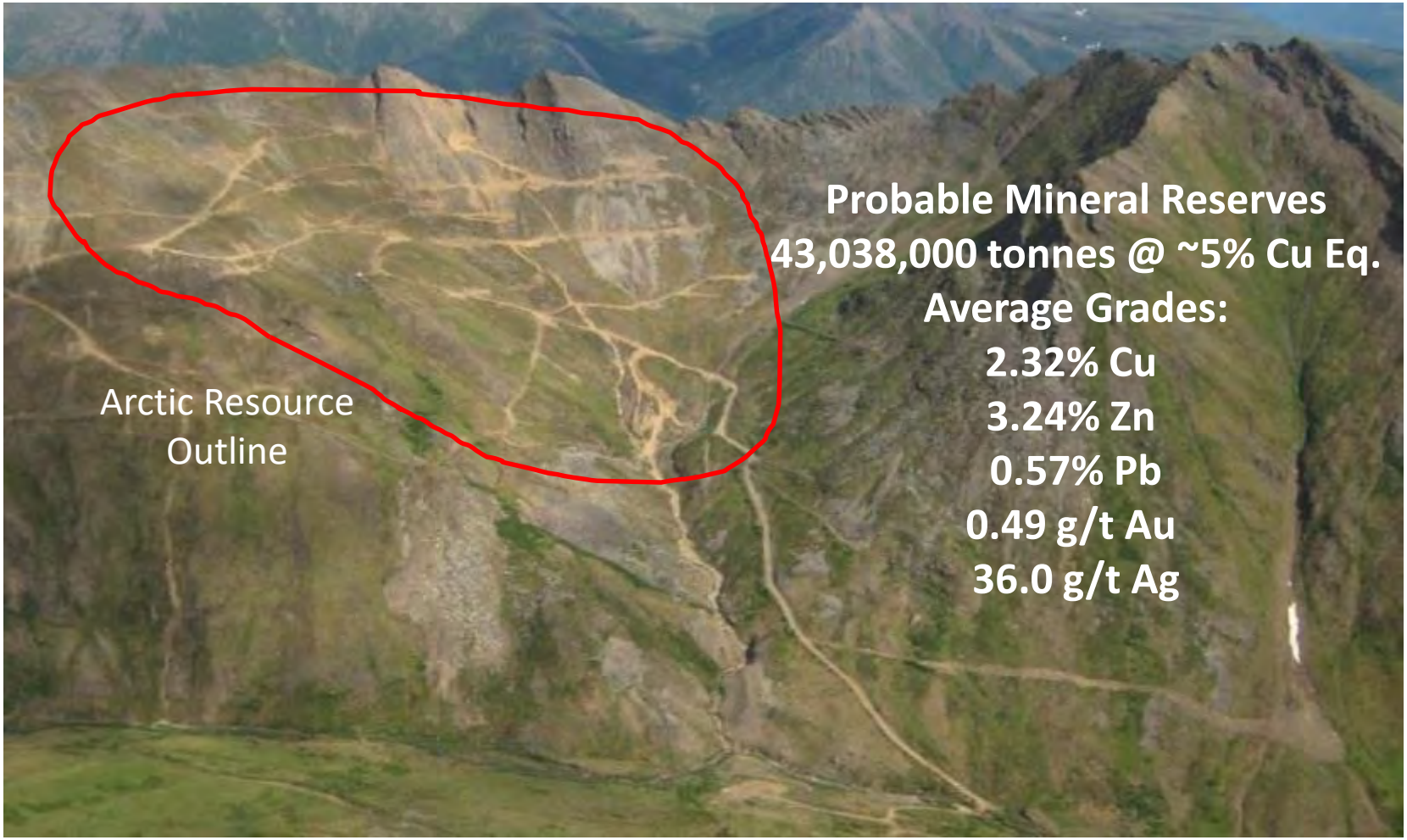
Ambler Mining District

Ambler Mining District Hosts Deposits Rich in Copper, Zinc, Lead, Gold and Silver & Cobalt



Reserves at the Arctic Project

Probable Mineral Reserves



Additional Inferred Resources of 3.5 Mt, with average grades of 1.71% Cu, 2.72% Zn, 0.60% Pb, 0.36 g/t Au and 28.69 g/t Ag.
See Appendix for Reserve Estimate for the Arctic Project.

Arctic Project Development Plan

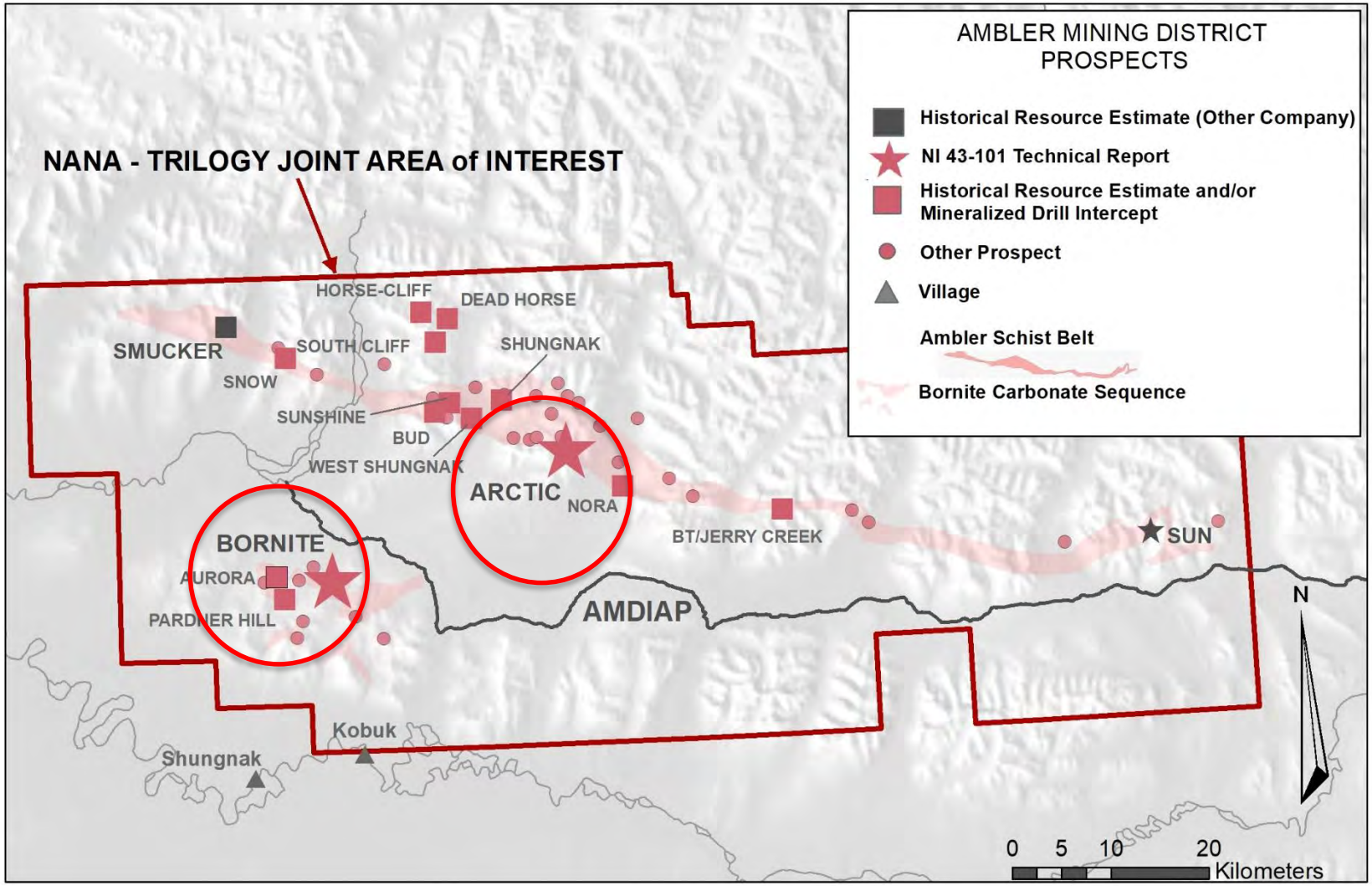
Overview of Valley – Looking Northeast

Arctic Project Development Plan

Feasibility Design Stage: Overview of Mine Site – Looking Northeast

District Exploration Upside

Ambler Mining District Hosts Deposits Rich in Copper, Zinc, Lead, Gold and Silver & Cobalt



Camp at Bornite

Bornite Exploration Drilling

Six Billion Pounds of Copper, 77 Million Pounds of Cobalt and Growing

2011-2019 Programs

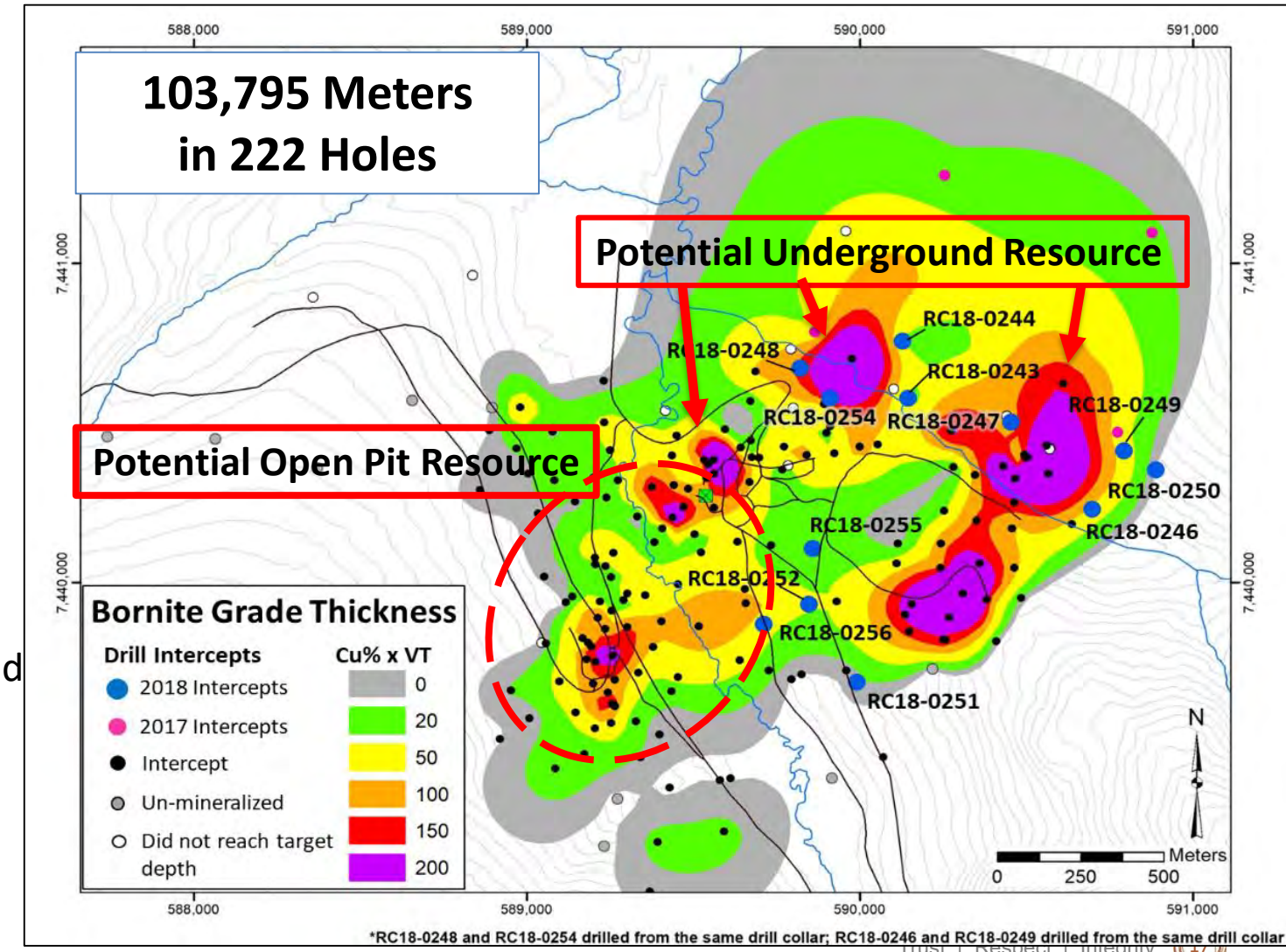
$US60 Million

56,000 Meters drilled in 87 holes

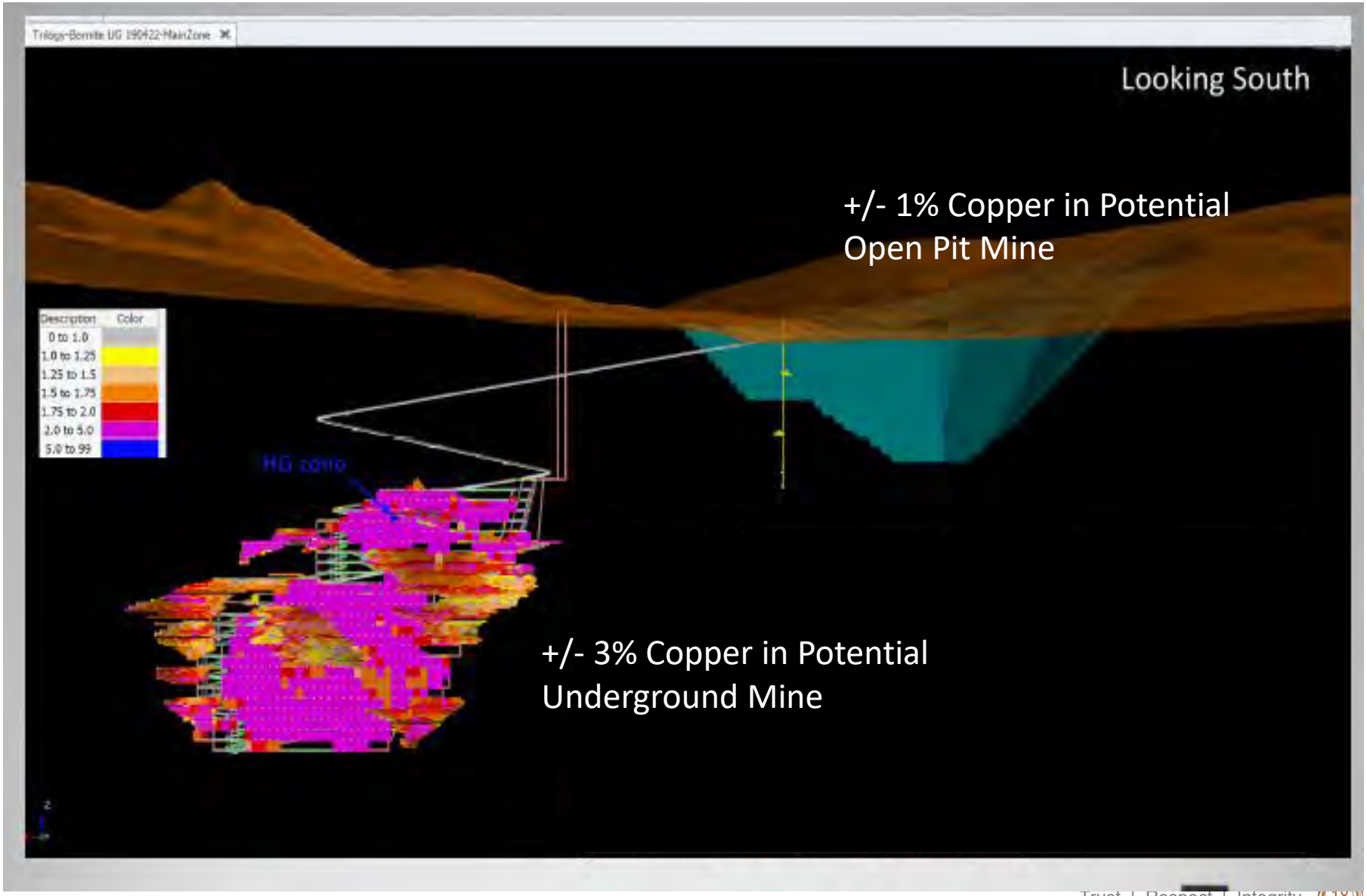
Potential Open Pit Resource:
2.7 Billion lbs Copper grading ~1% Cu

Potential Underground Mine Resource:
3.7 Billion lbs Copper grading 2.89% Cu

Discovery Cost of <1 cent/lb of Copper

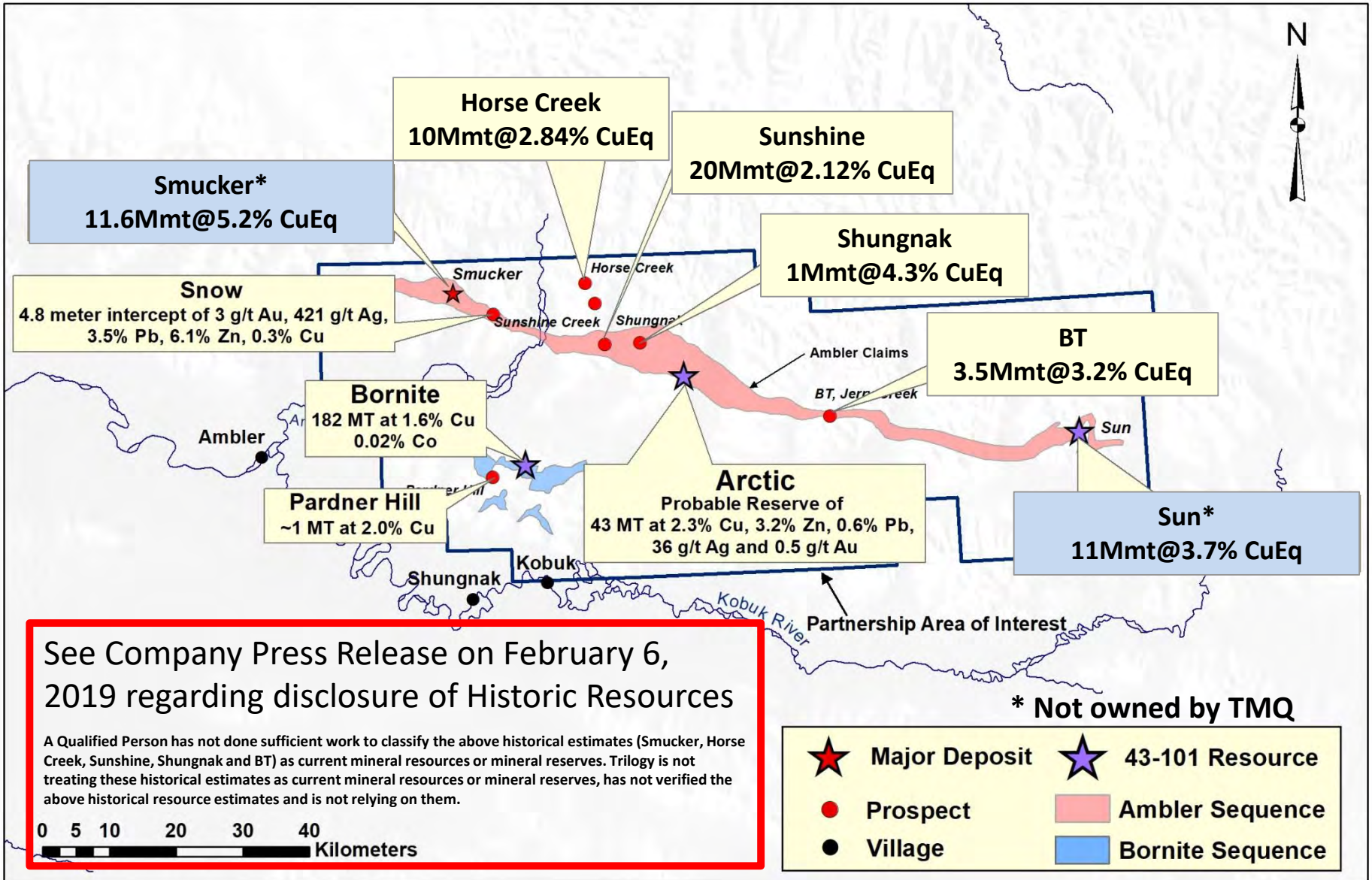


Bornite: Potential Combined Open Pit and Underground Mine



District Exploration – Pearls on a String

Over 250 Million tonnes of Potential Ore-Grade Resources Identified in the District



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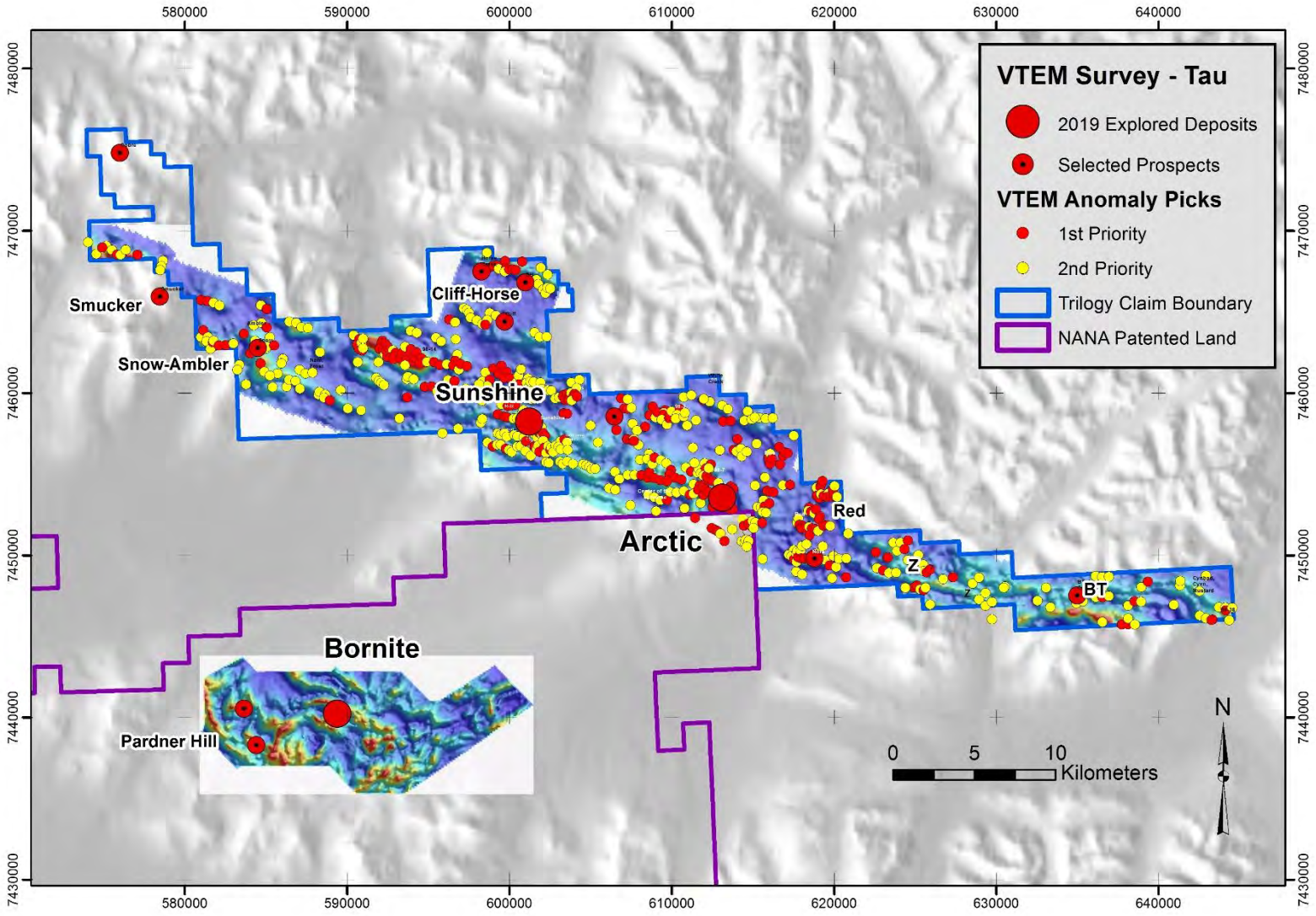
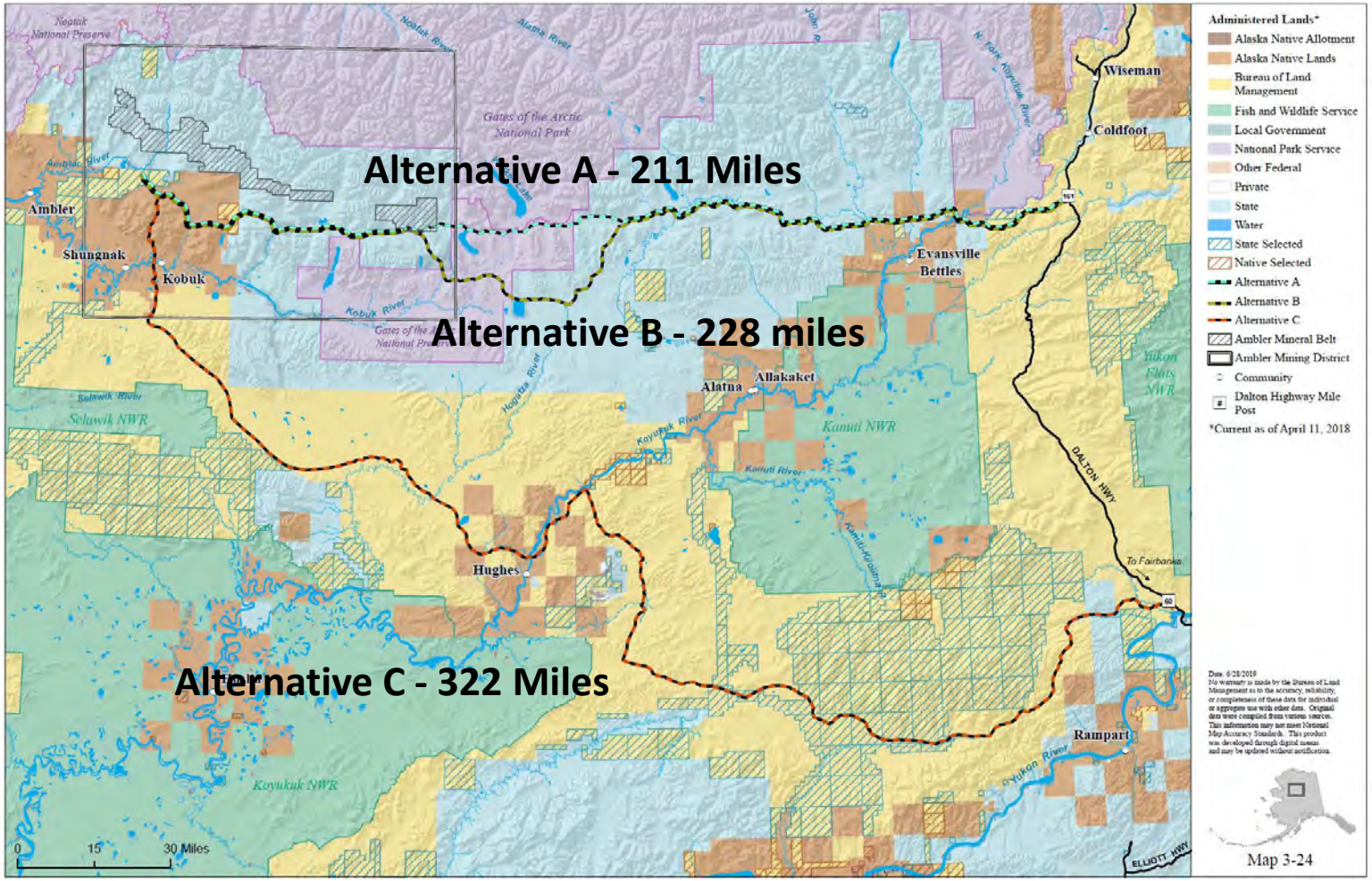


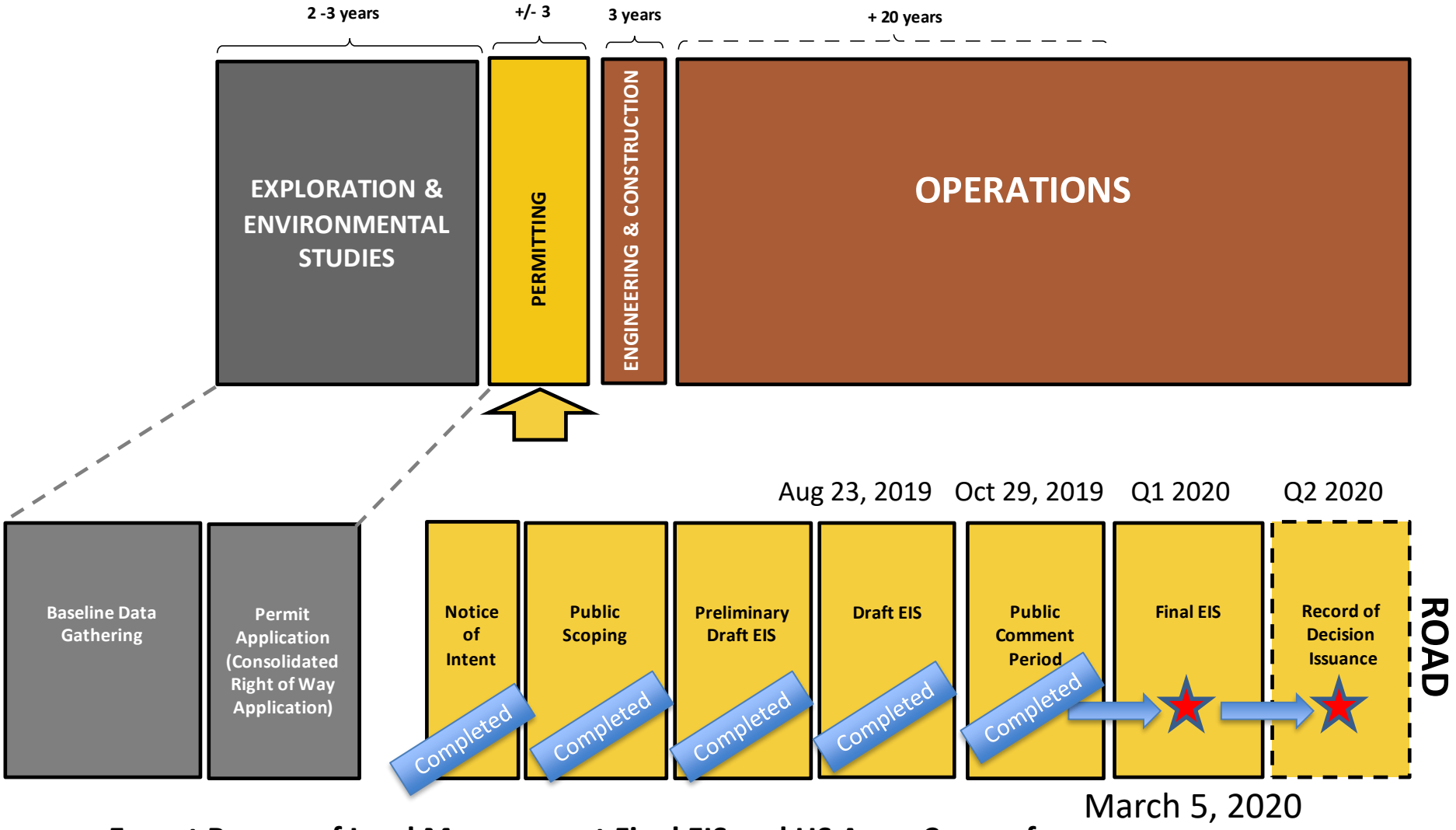
Ambler Mining District Industrial Access Project (AMDIAP)



Two parallel processes underway:

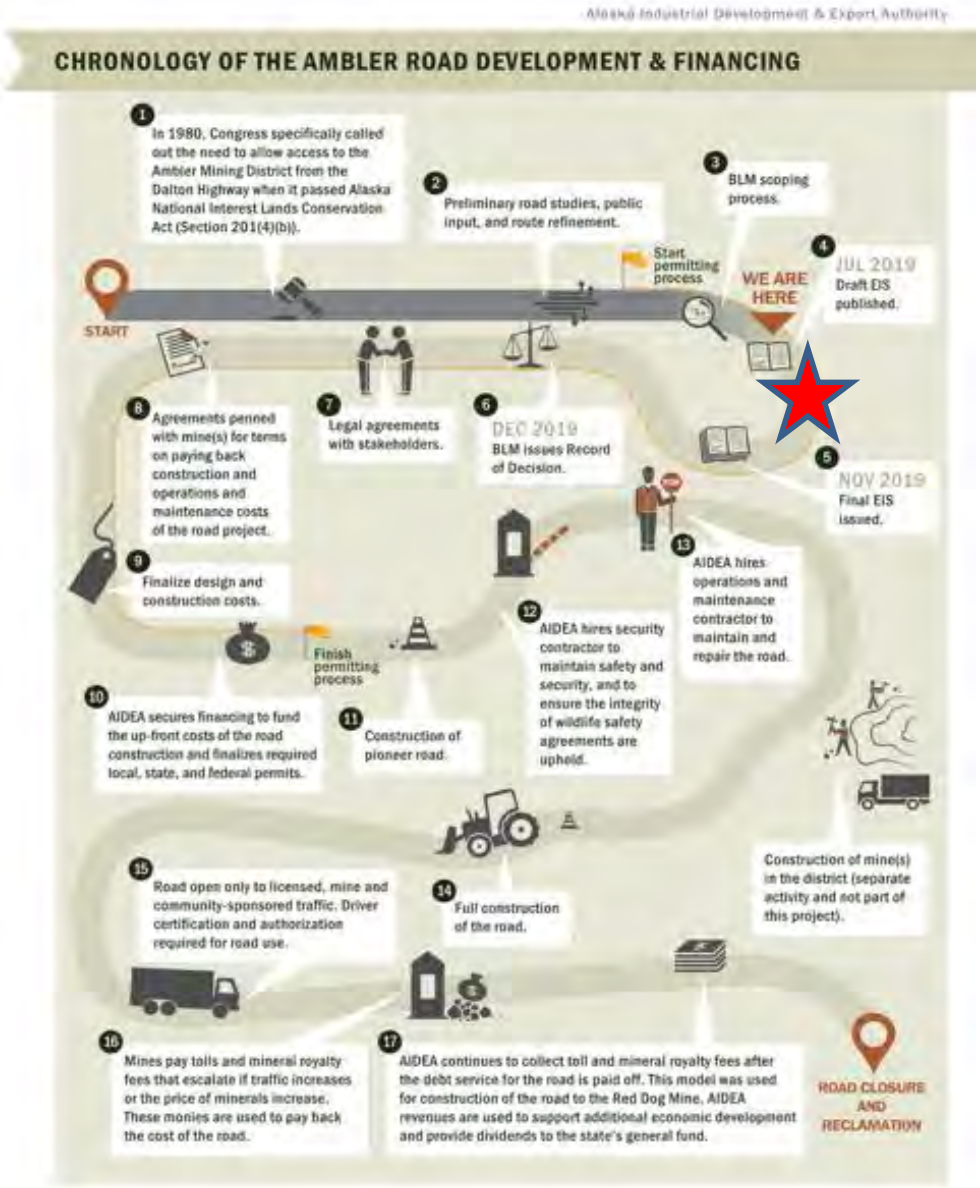
1) **BLM lead NEPA Review – Environmental Impact Statement (EIS)**
2) **NPS Environmental Economic Assessment as per ANILCA (EEA)**

NEPA Road Permitting Process (EIS)



Expect Bureau of Land Management Final EIS and US Army Corps of Engineers 404 Permit by March 5, 2020 and Joint ROD 30 to 60 Days later

NEPA – NOT the End of the Road Permitting Process



Still a lot of work to do before AIDEA starts building the Ambler Road

Legal Agreements with Land Owners

Legal Agreements with Users

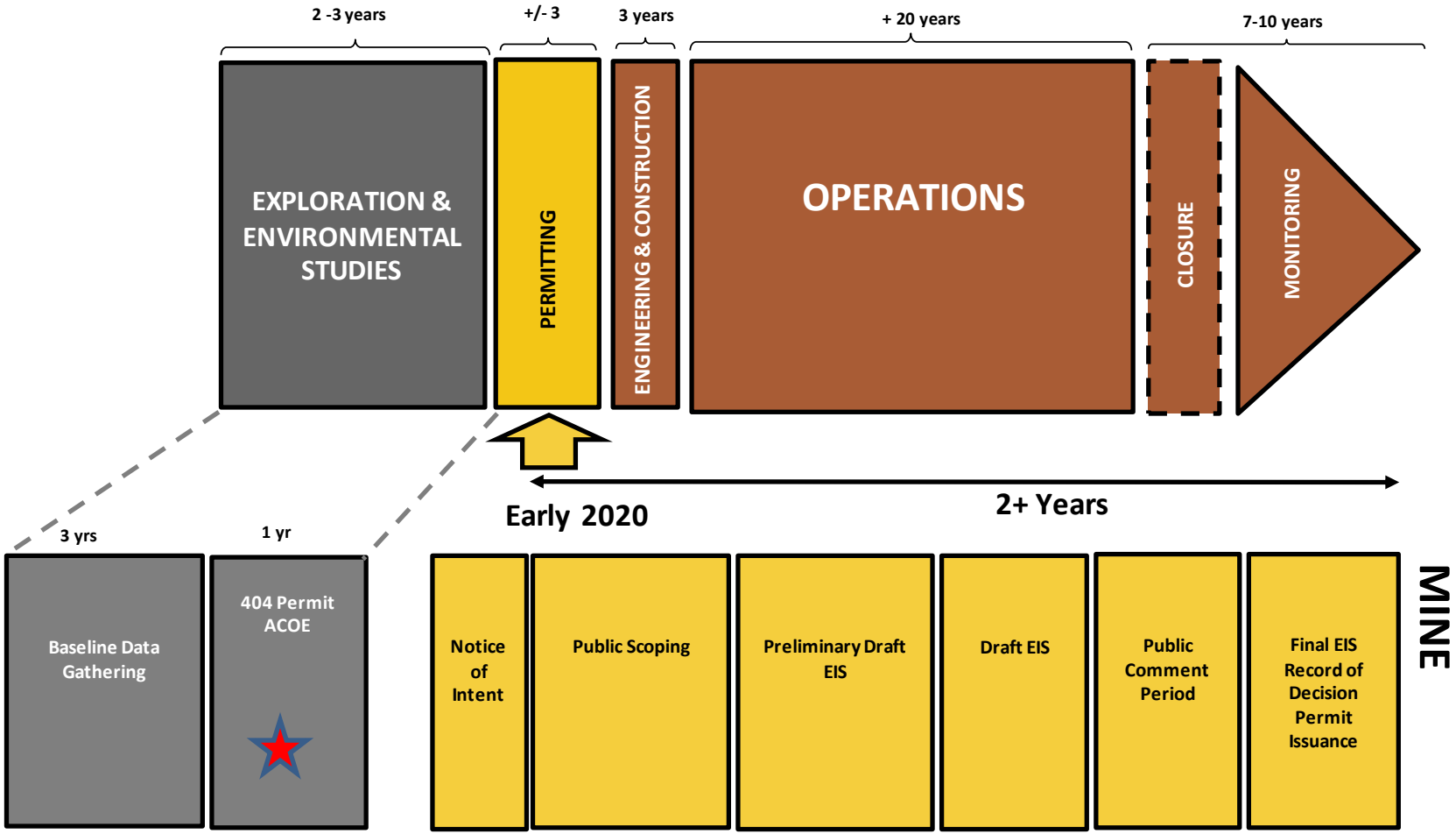
Establish Subsistence Committee

Finalize Design and Costs

Financing Plan

➔ **Construction**

Arctic Mine Permitting - Same NEPA (EIS) Process



EED Being Finalized

Start Permitting Process - Submit NOI for Mine in 2020

Army Corp of Engineers (ACOE) is expected to be the lead agency

AIDEA-Trilogy/South32 Partnership

- Trilogy and South 32 Finalizing JV Formation (Mid-February)
- JV and AIDEA then Enter into an MOU to Develop an Execution Plan and Budget for AMDIAP - Including: timelines and milestone dates; responsible parties; and financing plan
- Should Cover
  - Finalize Permitting
  - Final Feasibility Engineering and Design (FEED)
  - Ownership and Owners Rights
  - Construction, Operations and Closure
  - Facilitate alignment with local Governments, Alaska Native Corporations and Tribal Groups
  - Establish Subsistence Committee
- Enter into a Cost Reimbursement Agreement

Copper and Other Metals are Critical for a Green Energy and Transportation Future

Reducing CO2 Requires Global Electrification

None-CO2 Energy: Wind; Solar; Hydro; Geothermal; and Nuclear

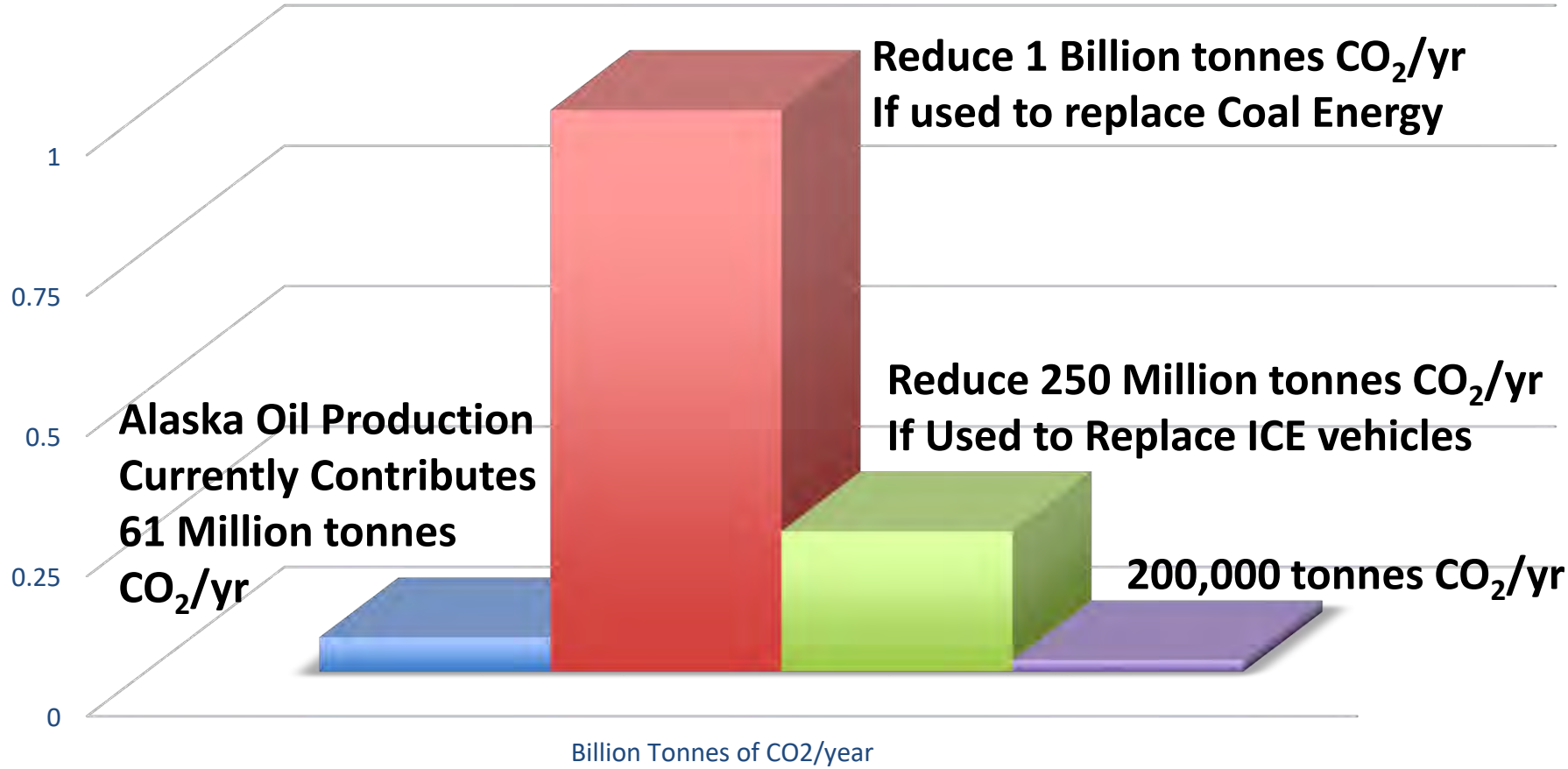
Smart Grid Connectivity

Battery Storage

➔ Require HUGE amounts of Copper and other metals

Another Inconvenient Truth

CO_2 Contributions to the Atmosphere Comparisons
Ambler Mining District Copper Deposits



Remarkable, Irreplaceable and Infinitely Recyclable

TRILOGY metals inc

Copper plays a significant role in transition to a low-carbon economy

More and More… copper

80% Recycled

Think Green Think Copper

Plus Zinc and Precious Metals


Taikuu!