



March 20, 2015

Violet Camsell-Blondin
Chair, Wek'èezhii Land and Water Board
#1, 4905 – 48th Street
Yellowknife, NT
X1A 2L9

Dear Ms. Camsell-Blondin

Re: Lynx Access Road Caribou Crossings Location and Design Plan

Pursuant to Part C Items 30 and 31 of Land Use Permit W2013D0006, Dominion Diamond Ekati Corporation (DDEC) is providing the Wek'èezhii Land and Water Board (Board) with the design and locations of caribou crossing for the Lynx Access Road.

DDEC has a long and successful history of engagement with our aboriginal communities and is committed to continue and improved on this tradition as the new operator of the Ekati Diamond Mine. Previous to receiving the Land Use Permit and Water Licence for the development of Lynx Pit, DDEC senior management was directly involved in discussions with community leadership and members on the proposed plan.

Lynx Access Road Caribou Crossing Engagement

During 2014, DDEC conducted engagement and information sessions in all IBA communities to discuss proposed developments at Jay and the project plan for Lynx Pit. Table 1 outlines a list of the communities visited, date of the meeting, and the comments, concerns or suggestions made regarding the Lynx Access Road and how to mitigate potential effects on caribou. The concerns and suggestions expressed in these meetings were generally consistent across communities, and with the engagement previously completed for caribou crossing construction on Misery Road. Below is a summary of the suggestions, comments and concerns expressed:

Concerns and comments:

- Roads need caribou ramps.
- Roads need to be friendlier for caribou.
- Could you divert caribou around road?
- Caribou are further from our community than normal.
- Concerning regarding caribou crossings and breaking legs and getting stuck in moss.
- Caribou can injure themselves on roads.
- Caribou numbers are declining.

Suggestions for caribou crossing roads:

- Smoother sides on roads for caribou.
- Caribou crossings/ramps are very important.
- Divert caribou around the area.
- Finer crush for caribou migration.
- Use sand from eskers for crossings.

Record #: HSE RCD ENV 063
Document Owner: Environment Department
Date: 20-Mar-2015
Template # EKA TEM 1852.13

DOMINION DIAMOND EKATI CORPORATION

1102, 4920-52nd Street, Yellowknife, Canada X1A 3T1 T 1.867.669.6100 F 1.867.669.9293 www.ddcorp.ca



- Monitor crossings/ramps with cameras.
- Design the road to reduce its impact.
- Caribou friendlier mine operations.

In the fall of 2014, DDEC hosted two separate Caribou Camps with the Tlicho (Sept 3-8) and Yellowknives Dene First Nations (Sept 12-15). As part of these camps participants were asked how caribou moved across the land in the Lynx area and where caribou crossings would be most effective. The attached map (Figure 1) shows the paths by which caribou would move through the Lynx area.

Caribou & Roads Engagement

From 2002 to 2005, Ekati underwent an extensive community engagement program to gather Traditional Knowledge and incorporate this in to wildlife monitoring at Ekati. The report *"Caribou and Roads Implementing Traditional Knowledge in Wildlife Monitoring at the Ekati Diamond Mine, 2005 Annual Report"*, contains 4 years of detailed engagement with communities regarding concerns and recommendations to manage caribou interactions with roads and site infrastructure.

In addition to the above mentioned engagement on caribou, DDEC conducts annual site tours with community participants to address concerns surrounding the potential effects of Ekati on caribou movement. During these site visits the following information was shared:

- o Caribou are most likely to interact with roads where the adjacent habitat is predominately heath tundra, esker complex or tussock hummock.
- o Roads with steep shoulders, comprised of large jagged material pose the greatest risk for injuring caribou,
- o Road structure can block caribou movement and make them vulnerable to predators,
- o Road height
- o Crossings need to be created to allow caribou to cross roads more easily.

During 2013, DDEC upgraded the Misery Haul Road and realigned three sections. As part of this project, DDEC reviewed and used all of the Tradition Knowledge collected on caribou crossings and caribou movement along the Misery Haul Road. This information became the foundation for understanding how changes to roads could impact caribou movements and where crossings might be placed to reduce that potential impact. As a result DDEC has now constructed 15 caribou crossings along the Misery Haul Road, the locations of which were indicated by elders. In person monitoring and the results of the 2013 WEMP Addendum – Wildlife Camera Monitoring Summary Report indicated that these crossings were placed on sections of the Misery Haul Road that were more frequently used by caribou and that their design allowed for caribou use.

Lynx Access Road Caribou Crossing Location and Design

DDEC has compiled the information collected in each of the different engagement sessions (in communities and at Ekati) and programs to select and design the caribou crossing for the Lynx Access Road. The design was based on:

- Jay and Lynx engagement sessions;
- Misery Haul Road realignment engagement and site visits;

- Traditional Knowledge, Roads and Caribou Project;
- 2014 Caribou Camps; and
- Wildlife Monitoring Camera Summary Report

For the purpose of providing adequate caribou crossing along the Lynx Access Road, which is only 1 km long, (Figure 2), DDEC is proposing two 50 m wide crossings with a 4:1 slope from shoulder to tundra (Figures 3, 4 & 5). The Designed road height will be minimized where possible considering engineering constraints and safety. These locations were selected by Traditional Knowledge holders because the topography and adjacent habitat would likely cause caribou to encounter the road at these locations while moving through the area. Two locations are selected, one in the lower valley to provide safe crossing adjacent to the Pit activities, and one at the top of the hill toward the Winter Access Road. Figure 1 below shows how YKDFN members expected caribou would move through the area. In addition to the crossings on the Lynx Access Road, DDEC will be constructing one crossing on the Winter Access Road to further reduce the potential impacts on caribou choosing to travel east of Lynx pit (Figure 4). As with many of the caribou ramps on the Misery Haul Road, the Lynx Access Road crossings will be constructed of compacted and smoothed clean 6 inch minus granite rock. This construction has not only been proven effective at existing crossing but allows economical construction of larger crossings. The crossing design proposed above has been in use by caribou along the Misery Haul Road and the Sable Haul Road successfully as documented in the wildlife monitoring at Ekati..

DDEC provides this letter as fulfilment of the requirement to submit caribou crossing locations and design as per Part C Items 30 and 31 of Land Use Permit W2013D0006. The requirement in the Land Use Permit is for caribou crossings located on the Lynx Access Road and these have been designed with the consideration and incorporation of engagement with communities, best practices, learning from the Misery Haul Road realignment, and results from the Camera Monitoring Program. In addition to the two crossings proposed for the Lynx Access Road, DDEC is proposing an additional crossing on the Winter Road Access Road. This crossing does not require approval from the Board, but has been selected and designed in line with the above information. These three crossings are located in areas identified by community members and elders where caribou would likely to be traveling in the Lynx area.

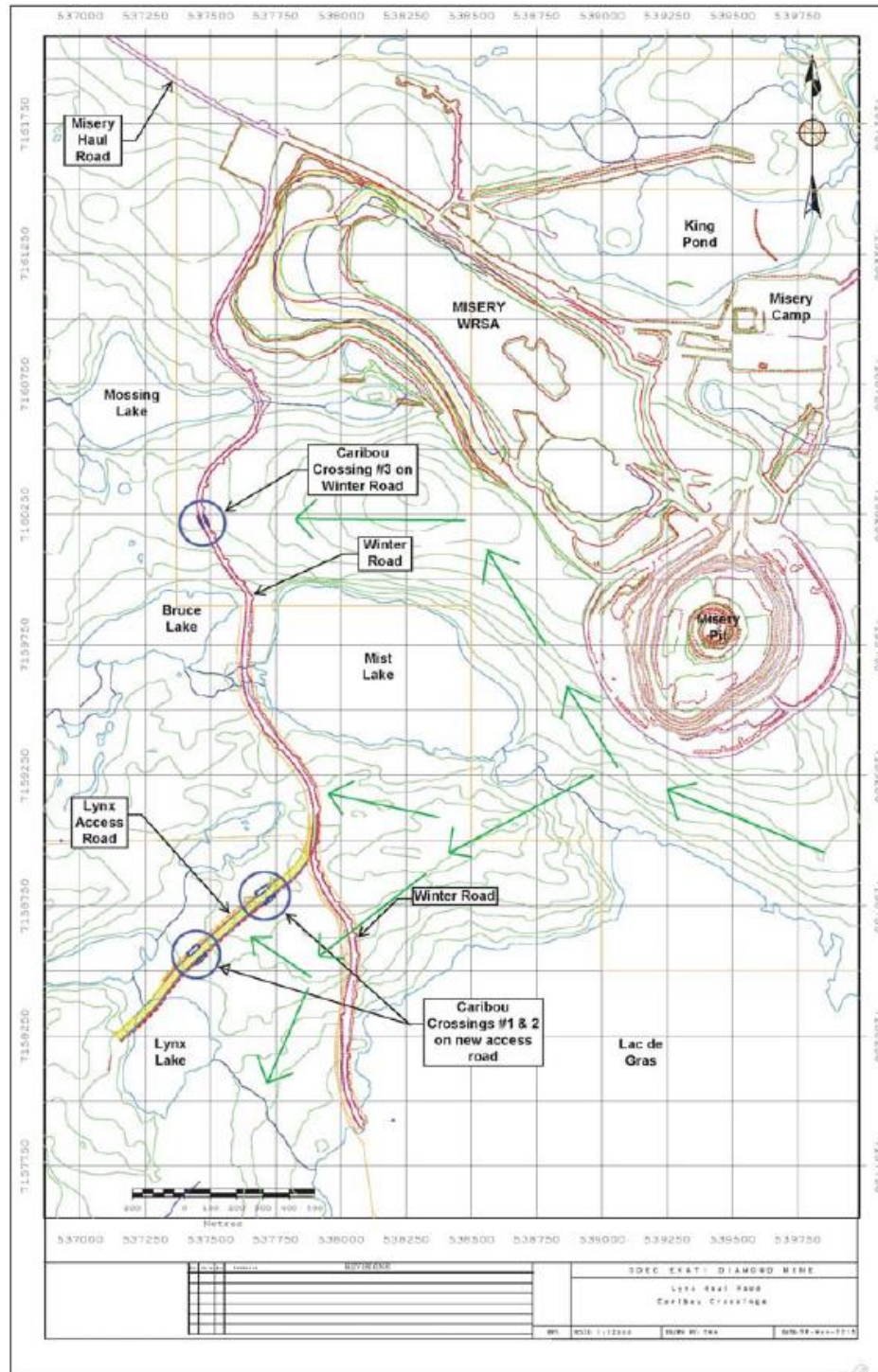
Please contact the undersigned at Claudine.lee@ekati.ddcorp.ca or 867-669-6116 or Harry O'Keefe, Team Leader – Environmental Projects at Harry.O'keefe@ekati.ddcorp.ca or 867-669-6164 with question pertaining to this submission.

Yours sincerely,



Claudine Lee, M.Sc. P.Geol.
Superintendent - Environment

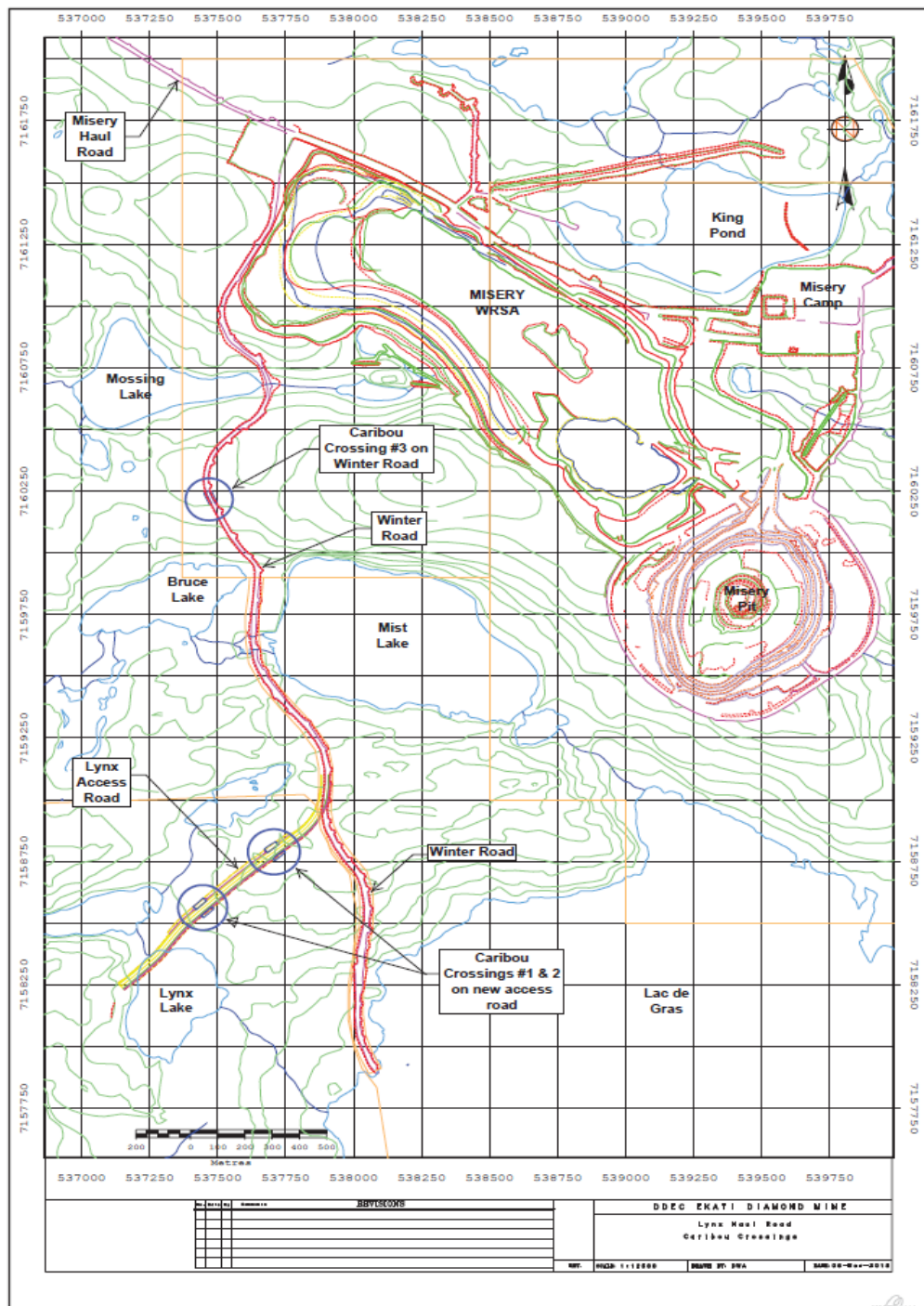
Figure1: Caribou Travel Corridors in the Lynx area as identified by Traditional Knowledge Holders (direction indicated in green).





DOMINION
DIAMOND

Figure 2: Lynx Access Road Overview



Record #: HSE RCD ENV 063
Document Owner: Environment Department
Date: 20-Mar-2015
Template # EKA TEM 1852.13

DOMINION DIAMOND EKATI CORPORATION

1102, 4920-52nd Street, Yellowknife, Canada X1A 3T1 T 1.867.669.6100 F 1.867.669.9293 www.ddcorp.ca

Figure 3: Lynx Access Road Crossing #1

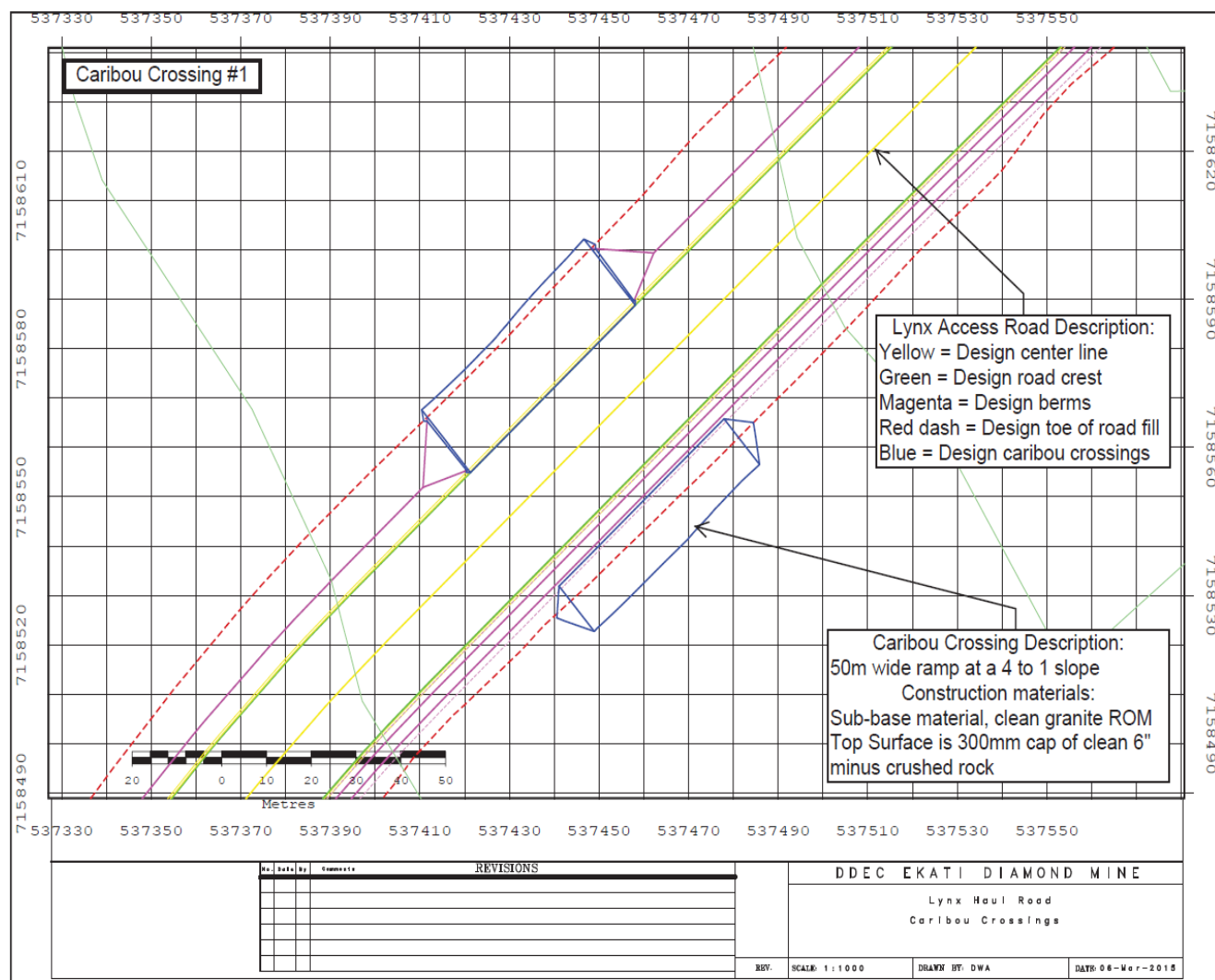
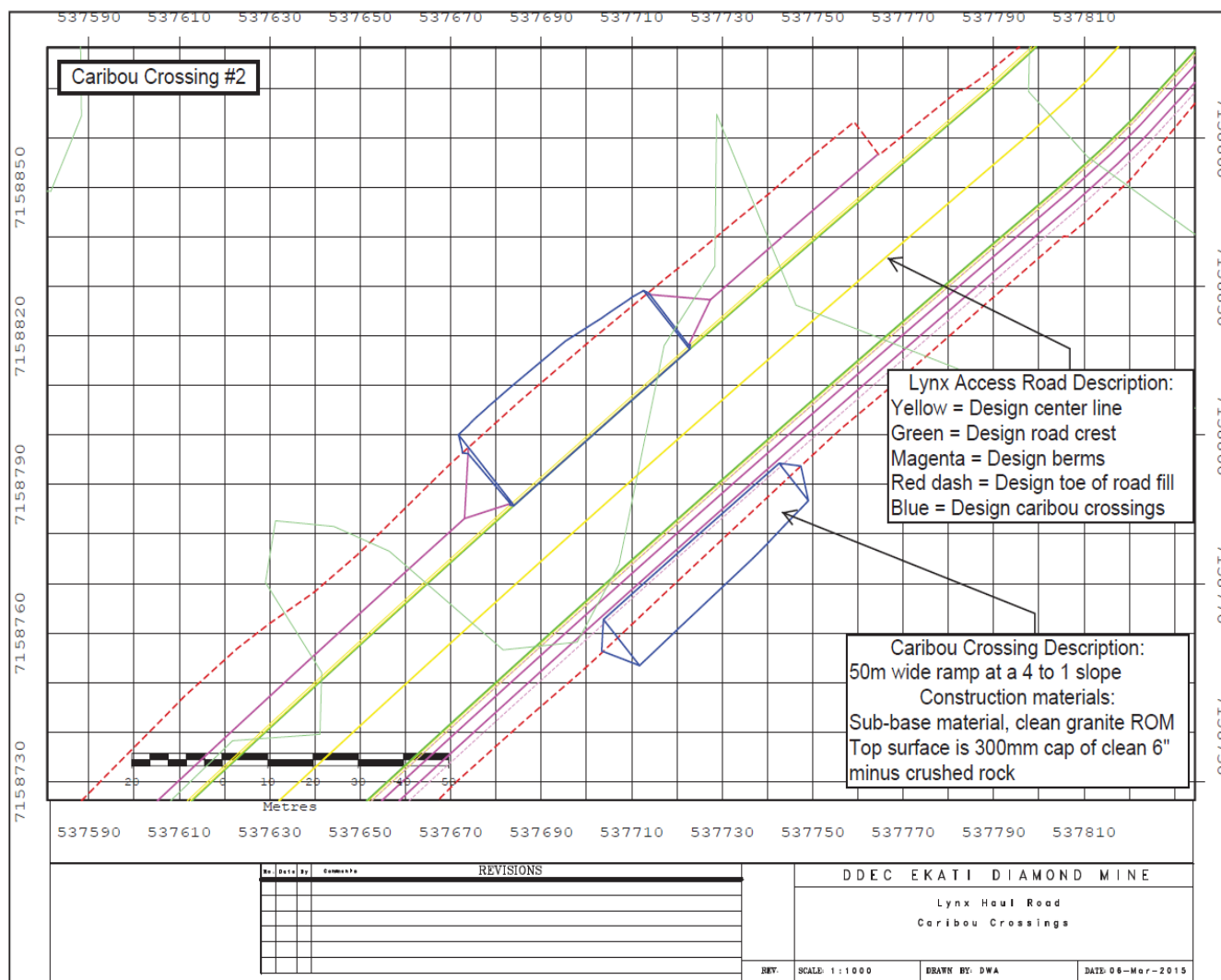


Figure 4: Lynx Access Road Crossing #2

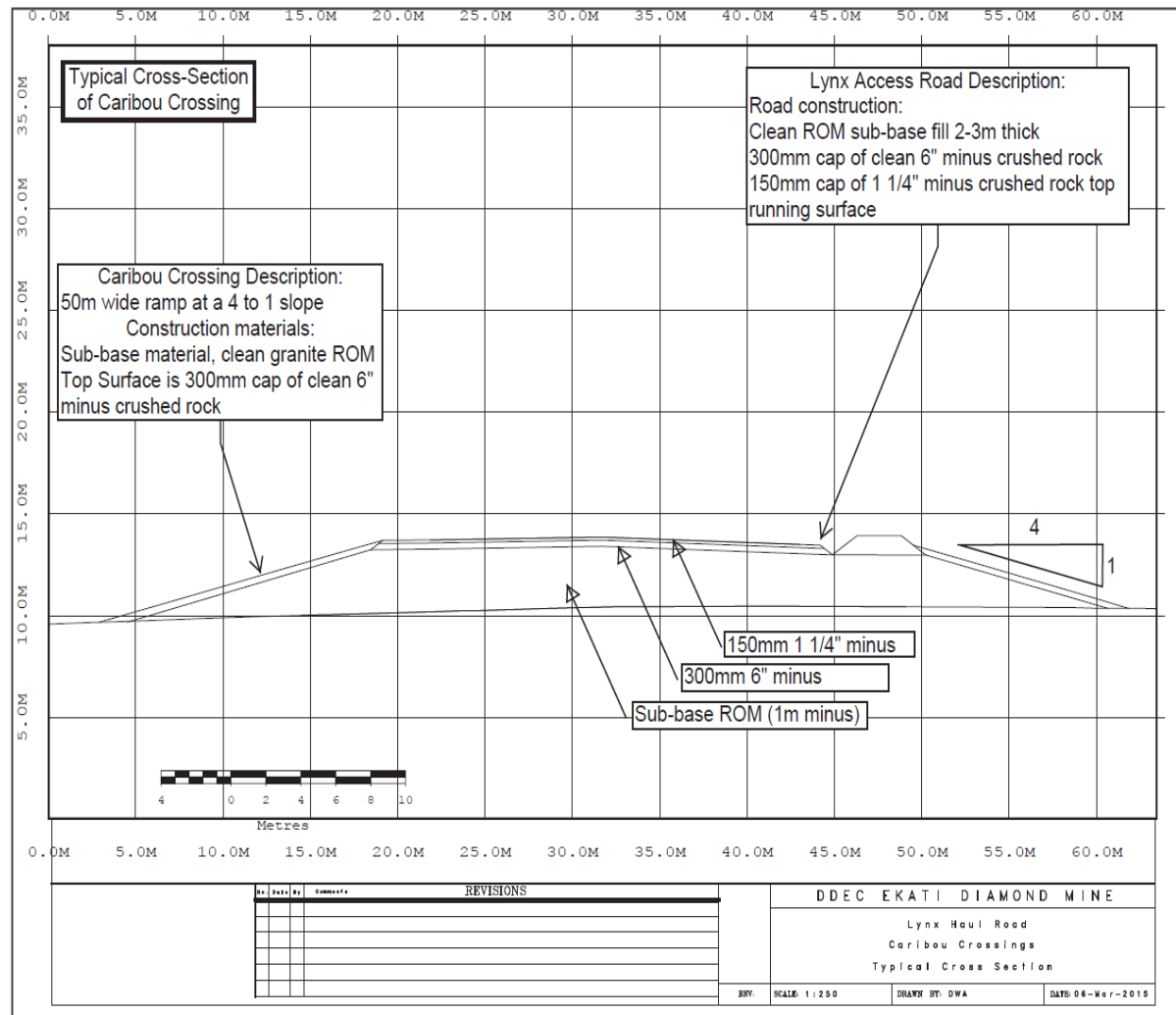


Record #: HSE RCD ENV 063
 Document Owner: Environment Department
 Date: 20-Mar-2015
 Template # EKA TEM 1852.13

DOMINION DIAMOND EKATI CORPORATION

1102, 4920-52nd Street, Yellowknife, Canada X1A 3T1 T 1.867.669.6100 F 1.867.669.9293 www.ddcorp.ca

Figure 6: Typical Cross-Section of a Caribou Crossing



Record #: HSE RCD ENV 063
Document Owner: Environment Department
Date: 20-Mar-2015
Template # EKA TEM 1852.13

DOMINION DIAMOND EKATI CORPORATION

1102, 4920-52nd Street, Yellowknife, Canada X1A 3T1 T 1.867.669.6100 F 1.867.669.9293 www.ddcorp.ca

Table 1: Community Engagement Summary

Lynx Community Engagement					
Community		Date Visited		Community	
Gameti		13-Feb-14		Behchoko	
Comments:				Comments:	
Caribou friendly operation of the mine				Location of Lynx	
Caribou ramps on roads				Friendlier roads for caribou	
Workshop to discuss caribou				Workshops to discuss caribou	
Caribou ramps needed				concern regarding injured caribou due to roads	
Divert caribou complete around the mine				Continued discussion on the importance of caribou ramps	
KIA		25-Feb-14		Kugluktuk	
Discussed the general location of Lynx				20-Feb-14 8-May-14	
Caribou ramps needed				Lynx is a separate project from Jay	
Some suggestions to divert caribou round the mine				General discussion about the location of Lynx	
Design the road to reduce impacts				Caribou ramps for caribou to cross	
Lutsel K'e		18-Feb-14 13-Nov-14		road design to reduce impact	
Comments:				Wekweeti	
Caribou crossings on roads				10-Feb-14	
Concern regarding caribou crossings and breaking legs and getting stuck in moss				Comments:	
Concern regarding caribou being further away than normal				Caribou crossings	
Use sand from eskers for caribou crossing				Road designs that are sensitive to caribou migrations	
Whati		12-Feb-14		DDEC requested feedback on whether to divert caribou or make the roads easier to cross - None provided at this time	
Comments:				General discussion about pit location	
Discussed Road Design - Smooth sides for caribou crossings				YKDFN	
Finer crush for caribou migration				19-Feb-14 21-May-14	
Concern over declining caribou numbers				Comments:	
				5-Jun-14	
				Monitor caribou ramps with cameras	
				Caribou crossing on roads	
				Workshop to discuss caribou	

Community	Date Visited	
Kwe Beh Working Group	10-May-14	28-May-14
Comments:		
Caribou crossings for roads		
TK was used previously to build roads		
NWT Metis Nation	11-Jul-14	
Lynx is a small project		

Community	Date Visited
North Slave Metis Alliance	14-May-14
Comments:	
General discussion on Lynx location	
Bathurst Inuit	14-Oct-14
No Concerns or Questions regarding Lynx Road or Crossings	