

DAILY REPORT #29 – DORIS NORTH INFRASTRUCTURE/ NORTH DAM

Prepared by:	John Kurylo/ Megan Miller	Date:	2012.02.03
Reviewed by:		Project #:	1CH008.058.0320
Role	Company	Personnel – Position	On Site
Client	Hope Bay Mining Limited (HBML)	Angela Holzapfel – ESR Compliance Manager David Vokey – ESR Coordinator Don Ethelston – HSLP Advisor Dean Wold - Safety Jill Turk – ESR Coordinator Katsky Venter – ESR Manger Michelle Tanquay – ESR Site Manager Stirling Kelly – HSLP Advisor	No Out Out No In Yes No In
	JDS	Lloyd Jackson – Mechanical Superintendent Sven Archimowtiz – Electrical Superintendent Doug Fielding – Construction Manager Ishan Fechter – Construction Coordinator Jerry Graham – Construction Manager Kevin Whieldon – Project Coordinator Mark Valeriote – Construction Manager	Yes Yes Out No In Yes Yes
Engineering Design Consultants	SRK Consulting (Canada) Inc.	John Kurylo – Site Engineer Megan Miller – Site Engineer Lawrence Borowski – Site Engineer Murray McGregor – Site Engineer Iozsef Miskolczi – Site Engineer	Yes Yes No In No
	EBA Engineering Consultants Ltd.	Jeff Orr – Project Manager Jennifer Stirling – Geologist Thomas Bradshaw – Junior Engineer Ernest Palczewki – Geologist	Out Yes No Yes
Earthworks Contractor	Nuna Logistics	Ben Vostermans - Foreman Bradford Watkin – QC Manager Doug Haverland – Area Superintendent Gary Sodhi – Field Engineer Georges Cornelissen – Survey Manager Jeff Roberts - Surveyor Jim Cardinal – Foreman Kevin Oakes – Project Engineer Kevin Kozdrowski – Foreman Kyle Kuntz – Project Engineer Margaret Caley – Surveyor Matt McKay – Civil Supervisor Mike MacMaster – Surveyor Mike Price – Field Engineer Nick Stoneberger – Superintendent Rick Peters – Foreman Ron MacMaster – Surveyor Simon Chipper – Civil Supervisor	Out No Out Yes Yes No No Yes In No Yes No Yes No In In No Yes
External Distribution List:	SRK: Maritz Rykaart (out), Lowell Wade, Seema Kang, Silkie Wong EBA: Robert Zschuppe Nuna: Chris Petrovic (out) JDS: Bob Prince-Wright, Calvin Goldschmidt (out) HBML: Dave Power, Gerry Benson		
This Construction Daily Report is produced as an internal communication document between SRK site and head office staff. Any distribution of this report outside of SRK is done as a courtesy, and the information contained in this report are for information only to those external parties.			

WEATHER (ROBERTS BAY)

<http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=INUNAVUT3>

Temperature/Wind Chill (°C)	6AM: -21/-35	12PM: -24/-35	6 PM: -26/-36	12 AM: -28/-43
Precipitation (mm)	Rain: None		Snow: ~10 to 20	
Conditions	Day Shift: Moderate wind		Night Shift: Moderate wind progressing to Whiteout conditions.	
Daily norms (°C)	24 hour high: -10		24 hour low: -28	

The Hope Bay weather station is down; the daily weather reported above is for Cambridge Bay
<http://www.theweathernetwork.com/index.php?product=obs24h&placecode=canu0005>.

HEALTH, SAFETY AND ENVIRONMENT

- Ernest Palczewski attended the daily toolbox meeting.
- Megan Miller attended the nightly toolbox meeting.
- Murray McGregor attended/ completed the site refresher orientation.
- Nightshift activities were suspended at ~3 am due to 'Whiteout' conditions.

COMMENTS, CORRESPONDENCE AND ACTIVITIES**DAILY MEETING WITH NUNA AND HBML TEAM:**

- The daily meeting was attended by ADCO, Nuna [Doug Haverland, Kevin Oakes, Chris Petrovic], Newmont Safety [Don Ethelston], ESR [Katsky Venter], JDS [Doug Fielding, Mark Valeriote, Kevin Whieldon, Calvin Goldschmidt, Sven Archimowtiz], SRK [John Kurylo, Maritz Rykaart].

Topic	Status
Health and Safety and Environment	<ul style="list-style-type: none"> • A spill, associated with oil from a compressor, was reported yesterday. • ESR requested generator specifications, for regulatory reporting, from JDS. • ESR reminded Nuna of the recent request for vehicle hours (since 2008). This request is in progress. •
North Dam	<ul style="list-style-type: none"> • SRK provided an update for construction activities on 2012/ 02/ 02. <ul style="list-style-type: none"> ○ No significant activity resulted at the dam yesterday. ○ Some snow removal at the Secondary Road Buttress has resulted. ○ A few loads of transition material were hauled to the FCP Pad. ○ Due to crew change no placement at the dam is expected to result today. Efforts will be focused on getting the crusher up and running. • Additional drilling and blasting will be required to produce enough material to construct the North Dam this year. JDS and Nuna to further look into expected volumes required in the coming days.
Water Management Structures	<ul style="list-style-type: none"> • JDS is planning on sending out an RFI that will outline that they would like to use ~20" culverts for the Doris North Diversion berm. At the current time no culverts suitable for the DN Diversion Berm are noted to be on site. • Five plus blasts are expected to result at the DN Diversion berm in the coming few days. These are all planned to be small blasts. Nuna to have additional discussions with HBML safety after the meeting (on DN Diversion Berm blasting). • There are no plans to pour at the batch plant until crew change. The earliest a pour would be expected for would be 2012/02/03.

	<ul style="list-style-type: none"> Nuna indicated that the Sump #2 excavation is near completion. SRK requires an as-built of the top of the excavation (i.e. at the area where the excavation meets the original ground) to do a preliminary as-built review. The required files are expected to be submitted today.
General	<ul style="list-style-type: none"> SRK outlined that they have a 15 bead thermistor string that was rescued / salvaged previously from the North Dam that could be installed at the Jetty. ESR and Nuna to coordinate a time for this installation. SRK to be informed when logistics of this drilling have been sorted out. The lift for the stacks will not result until after crew change. At least one full day or preparation is still required for this. JDS requested a crush and ROQ reconciliation for Quarry #2.
<ul style="list-style-type: none"> After the daily meeting and additional meeting was held to discuss the North Dam construction. Nuna [Doug Haverland, Kevin Oakes, Chris Petrovic], JDS [Doug Fielding, Mark Valeriote, Kevin Whieldon, Calvin Goldschmidt] and SRK [John Kurylo, Maritz Rykaart] were present. 	
Topic	Status
Equipment used for FCM placement	<ul style="list-style-type: none"> Nuna inquired about using a dozer (D4 or D6), rather than an excavator to spread FCM. JDS and SRK are fine with the use of a dozer to spread FCM if it can be demonstrated that this would be more favourable (i.e. result in a smoother lift which would require less cleaning etc...). Based on past project experience JDS has noted that approximately the underlying FCM lift (i.e. the lift being placed on) can become notably damaged by a dozer. In the past the excavator has been noted to be less disruptive to the underlying lift and thus leads to less material losses when cleaning. The use of smaller excavators (with finishing buckets) was touched on. Currently there are a few excavators down and some need for excavators at other areas of site.
Haul Routes	<ul style="list-style-type: none"> To reduce haul time Nuna proposed that the haul route used last year (i.e. across Doris Lake towards the downstream of the dam at Tailings Lake) be used. It was noted that loaded 730 would require in the range to ~46.2" of ice thickness to be allowed to travel on the ice. Due to the large loads only 730's would be planned to be used across the ice (i.e. 773's would not travel over the ice). The focusing of reducing haul times would be for the Transition and ROQ material placement. JDS to see if required paperwork has been submitted. JDS and Nuna to further assess potential benefits with creating a shorter winter haul route over a snow/ ice road.
Increased Productivity Versus Consistent Placement	<ul style="list-style-type: none"> Nuna inquired about ways to increase belt speeds to increase short term productivity at the dam (i.e. slightly increase the potential volume of material placed in a shift). Rather than focusing on increasing belt speeds focusing on increasing the hours of the plant running in a day was discussed. SRK pointed out that based on the 2012/01/31 as-built ~6.8m remained to be placed in the central area of the core. This means that ~ 27 to 28 lifts are still required to be placed to complete the core of the dam. SRK pointed out that time (for example waiting for freezeback) is

	<p>expected to become a limiting factor in the construction of the core.</p> <ul style="list-style-type: none"> • Overall increases in belt speeds are expected to have some short term benefits however, based on the 3D core geometry the required volumes/ surface area for placement is expected to decrease as the core increases in elevation. • Frozen core material placement (especially in the central areas) needs to result whenever possible. • Most importantly construction activities in general at the North Dam need to results whenever possible and should be a high priority.
General/ Other	<ul style="list-style-type: none"> • In addition to core material placement there is transition material placement, as well as exposing of the lower GCL on the fillet hinge that needs to result in the near future. • The current schedule was suggested to be revisited to better include/ consider tasks that can/ should occur concurrently.

SURVEY:

Required	<ul style="list-style-type: none"> • Survey of core material placed Feb 1, 2012 • Survey of transition material placed Feb 3, 2012. • Survey of thermistor cable and bedding material at station 1+30.
Data Received	<ul style="list-style-type: none"> • As-built survey of Sump 2 crests. • As-built survey of frozen core material placed Jan 31, 2012
Outstanding	•
Upcoming	• Survey of placed core material (ongoing)

NORTH DAM/FROZEN CORE PLANT PAD:**Frozen Core Plant***Dayshift*

- The FCP was not run on dayshift today.
- A few loads of transition material were hauled and stockpiled on the FCP Pad.

Nightshift

- No significant activity.
- The FCP was not run on nightshift today.

Dam Shell*Dayshift*

- Transition material was placed and compacted along the downstream edge of the central dam core, after snow clearing/ cleaning of the side slopes, from ~ station 0+75 to 1+10. The adjacent ROQ slope in this area was trimmed back by the 325 excavator to create an access 'bench' for the trucks and compactor. See Photo 14.

Nightshift

- Transition material was placed along the downstream edge of the dam from station 0+70 to ~1+65.
 - Transition material was placed with the CAT 325 excavator with cleanup bucket.
 - The edge of transition was walked with survey. In a few areas where the key trench was over blasted and consequently the core overbuilt and the design line for the toe of transition material was located on the core. In these areas the line marking the toe of the transition material was offset such that the toe of transition material was beyond the edge of the core material by the width specified in the design.
 - In most places the transition material was tied into the ROQ slope (slightly overbuilding the transition).
 - The thermistor cables at station 1+30 were bedded in dry ¾" material. These cables were

- o brought to the edge of the core material. Survey picked up the location of the bedded cable.
- o Labourers started to expose the multi-bead thermistor cable in the hole at station 0+60 in preparation for transition material placement. However work was shut down due to weather before this could be completed.

Key Trench/ Central Core

Dayshift

- No core material was placed on dayshift today. This was primarily due to crew change.
- Three cores were drilled today.
 - o One core was drilled around station ~1+00 US, in the material that was previously placed on dayshift. See Photo 4.
 - o Due to the poor quality of the first core (damaged from drilling) a second core was taken in the central key trench area around station 0+90 DS. See Photo 5.
 - o A third core was taken around station 0+42 DS. See Photo 6.
- Figure 1 presents the North Dam dayshift construction progress, for 2012/02/03.

Nightshift

- No FCM placement occurred on nightshift.
- Freezback of the lift placed 2012/02/01 nightshift was obtained at 11 pm.
- Snow around the thermistor cables at 1+30 was removed by labourers. Once the cables were exposed the excavator cleared the bulk of the snow off the slope above the cables.
- The downstream thermistors and the key trench thermistors at stations 0+40 and 0+60 were read. The thermistors were in working order, with the exception of one bead on ND-HTS-060-28.8.
- ND-VTS-060-KT was removed from the steel pipe used to protect the thermistor when the ROQ cover was placed last spring.
- Thermistor cable ND-VTS-130-DS which is suspended on a two-by-four pole above the ground surface is currently waist high above the drifted snow in this area. The pole holding the thermistor above the ground will have to be extended or the base of the pole uncovered and moved on top of the drifted snow to ensure that this thermistor string does not become buried.
- Figure 2 presents the North Dam nightshift construction progress, for 2012/02/03.
- The table below present the cumulative as-built volume (as provided by Nuna Survey) for FCM placed to February 1st.

SUMMARY OF CORE MATERIAL PLACED (AS-BUILT)

Date	FCM Placed/ Incremental Volume (m ³)	Cumulative FCM Volume Placed (m ³)
February 1 st	325.5	2984.5

Field Geotechnical Testing, Laboratory and Sampling

- Single bead 45, 43 and 49 were monitored today. Single bead 60 was decommissioned.

SINGLE BEAD THERMISTOR STATUS

Installed Today			Active			Destroyed / Abandoned		
ID	Station	US/DS/Center	ID	Station	US/DS/Center	ID	Station	US/DS/Center
			SB43	1+15	D/S	SB60	1+60	Center
			SB45	0+45	U/S			
			SB49	1+60	CL			

- A summary of today's material testing progress is presented in the tables below.
- No compaction testing was performed and no moisture content testing was done as no FCM was placed; therefore these tables are not included in today's daily report.

DRILLED CORE

Collected	Processed	Completed
HB12-ND-CORE-DC17-QA-20120203 HB12-ND-CORE-DC18-QA-20120203 HB12-ND-CORE-DC19-QA-20120203		

DORIS NORTH CAMP:

- Westarc continues drilling along the DN Diversion berm alignment. A few small shots/ matt blasts occurred today at the Doris North Diversion Berm key trench alignment. See Photo 11.
- No significant work occurred around the sump locations today. Some blown snow has drifted into the base of the Sump #2 excavation and is expected to be required to be removed at a later date (closer to the time of the sump installation).
- Base a quick/ preliminary as-built review of the Sump #2 excavation it looks like the Sump #2 area has been excavated to an appropriate depth however, the annulus of the sump excavation is greater than the maximum 0.3m specified (i.e. appears closer to 0.5m to 0.6m on average). Sump #2 installation is expected to be further discussed in the coming days.
 - The lid of the sump is expected to be increased in diameter to ensure that the area of disturbance, caused by the excavation, will be protected from direct exposure to the sun (see RFI NL-RFI-079 for additional details).

SECONDARY ROAD:

- Snow was cleared from within the Secondary Road Buttress footprint. Snow clearing was done with the 325 excavator (equipped with finishing bucket). At the end of dayshift the snow clearing in this area looked adequate. See Photo 13.
 - Unfortunately due to high winds and blowing and falling snow additional cleaning in this area is now expected.

QUARRY #2:

- The recommissioning of the Quarry #2 crusher continued today. At ~12 am the crusher started running, however there were some remaining issues with the belts that had to be addressed. The crusher only crushed a small amount of material for a brief period today.

GENERAL:

- Jeff Orr and Maritz Rykaart left site. Murray McGregor arrived on site today.

PHOTOS:



Photo 1: ~ WNW view of the 325 excavator working on snow clearing activities along the side slopes of the Secondary Road, taken in the am.



Photo 2: ~ ESE view of snow clearing progress at the Secondary Road Buttress area, taken in the pm.



Photo 3: ~Excavator finishing snow clearing at the Secondary Road Buttress footprint.



Photo 4: Drilled Core 17 (HB12-ND-CORE-DC17-QA-20120203). Core taken from ~1+00 US. Poor quality of core is due to dislodged gravel spinning/ drill spin.

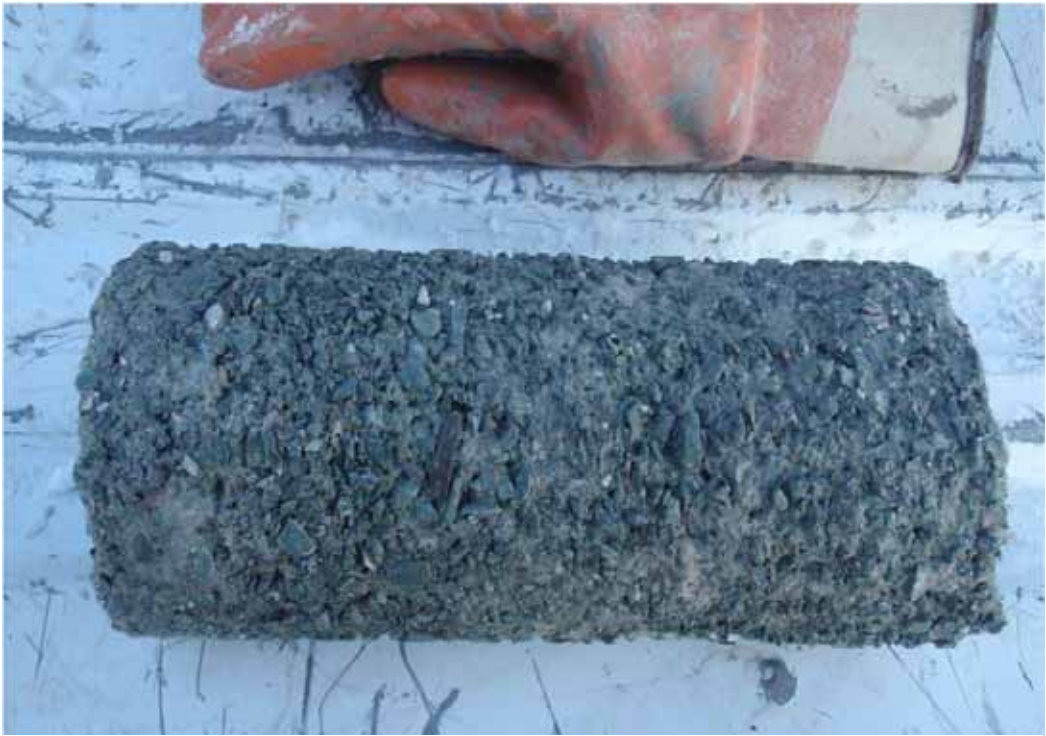


Photo 5: Drilled Core 18 (HB12-ND-CORE-DC18-QA-20120203). Core taken from ~0+90 DS.



Photo 6: Drilled Core 19 (HB12-ND-CORE-DC19-QA-20120203). Core taken from ~0+42 downstream.



Photo 7: Progress photo of North Dam from photo point 1. ~SW view. The dam is difficult to see due to blowing snow.



Photo 8: Progress photo of North Dam from photo point 2. ~WNW view.



Photo 9: Progress photo of North Dam from photo point 3. ~ENE view.



Photo 10: ~SSE view of the North Dam area. Note the excavator cleaning downstream area around station 0+90.



Photo 11: ~ WNW view of the Doris North Diversion Berm after early afternoon blasting. Note the large quantity of frozen overburden encountered along this section (near the east to east central portion of the alignment).



Photo 12: ~WNW view down the Secondary Road, past the Doris Creek Bridge, towards the Vent Raise Pad and adjacent slope buttress area.

Photo 13: ~WNW view of snow clearing completed in the Secondary Road Buttress footprint.



Photo 14: ~NE view of the 325 excavator placing transition material around station 1+00.



Photo 16: Downstream side of key trench with snow cleared in preparation for transition material placement.



Photo 15: Labourers cleaning snow away from the thermistor cables at station 1+30.

FIGURES:
Figure 1 – North Dam Progress – February 2nd DAYSHIFT

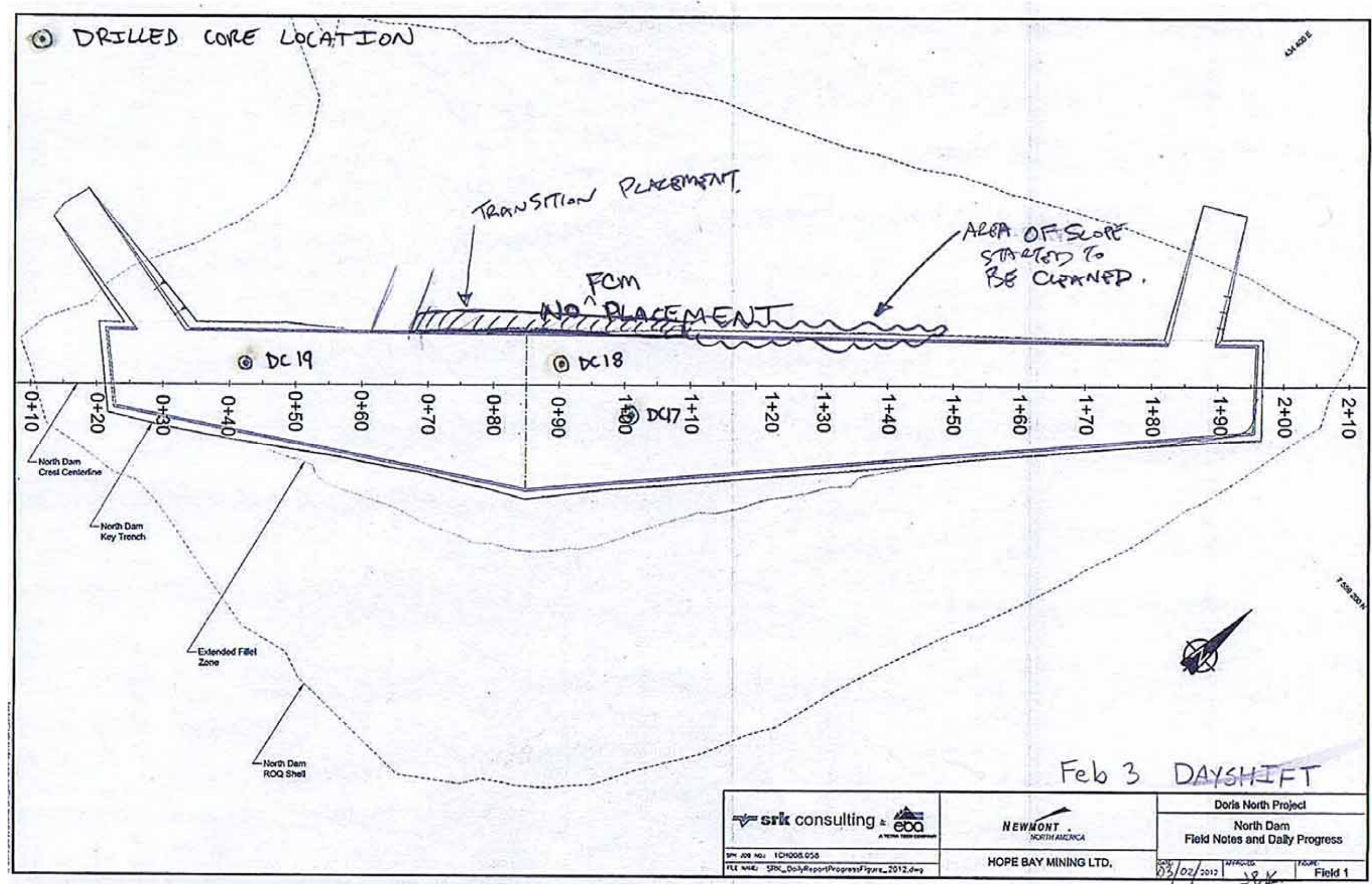


Figure 2 - North Dam Progress – February 2nd NIGHTSHIFT

