

FOUNDATION AND KEY TRENCH PREPARATION AND ACCEPTATION

CERTIFICATE OF ACCEPTANCE OF FOUNDATION CONDITION - VAULT DIKE

Acceptance No.:

FND-VD-03

Date:

2013-02-05

This Certificate of Acceptance includes the following items, reviewed and accepted by the undersigned:

- 1) Foundation and Key Trench Preparation and Excavation Checklist (from SNC);
- 2) Sketch of the approximate accepted area, incl. Station and Offset (according to Vault Dike Stations);
- 3) Photo of the accepted area, at the moment of the acceptance;
- 4) Any other relevant documentation complementary to this approval.

The area has been inspected and accepted by authorised personnel representing Quality Control (QC) Program, Quality Assurance (QA) Program and the Owner Representative.

Topography of the approved foundation surface has been surveyed for documentation and as-built purposes, as confirmed by the undersigned surveyor.

The area is accepted as per the foundation conditions at the time of the inspection and the condition of the foundation is required to be maintained prior to and during fill placement.

Owner Representative

Name:

Rebecca Cameron

Position:

AEM-

Rebecca Cameron

QC Representative

Name:

Position:

INSPEC-SOL-

QA Engineer

Name:

Jean-François St-Laurent

Position:

SNC-

Jean-François St-Laurent

Surveyor

Name:

Robert Cloutier

Position:

FGL-

Robert Cloutier

NOTES: 1. Original signed certificate must be given to the Owner Representative for documentation records. 2. Survey files from the approved area must be saved in appropriate location as required by the Owner Representative. 3. Photos of approved area must be saved in appropriate location as required by the Owner Representative.



Sustainable Mine Development
Global Mining & Metallurgy
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Canada H2Y 1P5

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Fax: (514) 390-2765
www.snc-lavalin.com

APPROBATION FORM

PROJECT : Construction of Vault Dike
PROJECT # :
DOCUMENT # : /
(YYYYMMDD-01)
DATE: Feb 5 / 2013
CLIENT: AEM

APPROBATION FOR :
☒ Foundation Approval (Footprint)
☐ Foundation Approval (Key Trench)
☐ Fill Placement ()
☐ Other

LOCATION	PREVIOUS APPROVALS
FROM STATION: 0+150 Footprints	FROM: 0+075 (WP)
TO: 0+250 working platform	TO: 0+150 (WP)
ELEVATION: <input checked="" type="checkbox"/> VARIES m	

RESPECT TO THE SPECIFICATIONS ACCORDING TO:

1. Quotes and lines respected
2. Free of Ice / Snow / Water
3. Gradation (visual)
4. Placement (in regards to segregations, lift thickness)
5. Compaction
6. Foundation on Bedrock
7. As built survey completed
8. /
9. /

VERIFICATIONS MADE BY:				
QA AEM		QC		N/A
Y	N	Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DETAILS (REFER TO NUMBER ABOVE)

ITEM	
/	/
/	/
/	/

APPROVED BY:

QA	QC
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

APPROVED BY: QA REPRESENTATIVE
QC REPRESENTATIVE
OWNER REPRESENTATIVE

SIGNATURE
François G...
Reuben C...

DATE
Feb 5 / 2013
Feb 5 / 2013
Feb 5 / 2013

Approved Area

Station: 0+150 (Offset): 0 To Station: 0+250 (Offset): 0

Footprint & Working Platform

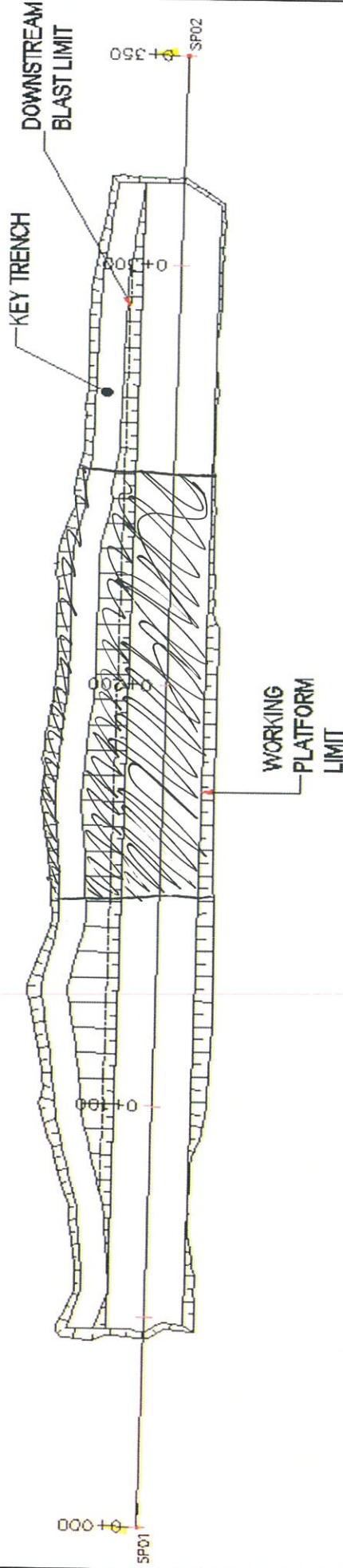


Figure 1 - Approximate approved foundation area

Date: 2013-02-05

Sketch by (Initial) : *RC*



Photo 1- Approximate approved foundation area

Date:2013-02-05

Photo by (Initial) :

RC

FOUNDATION AND KEY TRENCH PREPARATION AND ACCEPTATION

CERTIFICATE OF ACCEPTANCE OF FOUNDATION CONDITION - VAULT DIKE

Acceptance No.:

FND-VD- 04

Date:

Feb. 9, 2013

This Certificate of Acceptance includes the following items, reviewed and accepted by the undersigned:

- 1) Foundation and Key Trench Preparation and Excavation Checklist (from SNC);
- 2) Sketch of the approximate accepted area, incl. Station and Offset (according to Vault Dike Stations);
- 3) Photo of the accepted area, at the moment of the acceptance;
- 4) Any other relevant documentation complementary to this approval.

The area has been inspected and accepted by authorised personnel representing Quality Control (QC) Program, Quality Assurance (QA) Program and the Owner Representative.

Topography of the approved foundation surface has been surveyed for documentation and as-built purposes, as confirmed by the undersigned surveyor.

The area is accepted as per the foundation conditions at the time of the inspection and the condition of the foundation is required to be maintained prior to and during fill placement.

Owner Representative

Name:

[Signature] Feb 09, 2013

Position:

AEM- Owner. Rep. Ing-geotech.

QC Representative

Name:

Melissa Lapointe Desbiens

Position:

INSPEC-SOL- *[Signature]*

QA Engineer

Name:

[Signature]

Position:

SNC- *[Signature]*

Surveyor

Name:

Robert Cloutier

Position:

FGL- *[Signature]*

NOTES: 1. Original signed certificate must be given to the Owner Representative for documentation records. 2. Survey files from the approved area must be saved in appropriate location as required by the Owner Representative. 3. Photos of approved area must be saved in appropriate location as required by the Owner Representative.



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APPROBATION FORM

PROJECT : Construction of Vault Dike
PROJECT #: 611614 - Vault
DOCUMENT #: 2013 0209-01
(YYYYMMDD-01)
DATE: 2013-02-09
CLIENT: AFM

APPROBATION FOR :
☐ Foundation Approval (Footprint)
☒ Foundation Approval (Key Trench)
☒ Fill Placement (0-150mm / 0-20mm) / 0-20mm + Ben^{to}.
☐ Other

LOCATION FROM STATION: 0+455.50 TO: 0+490.90 ELEVATION: <input checked="" type="checkbox"/> VARIES m	PREVIOUS APPROVATIONS FROM: TO:
---	--

RESPECT TO THE SPECIFICATIONS ACCORDING TO:

1. Quotes and lines respected
2. Free of Ice / Snow / Water
3. Gradation (visual)
4. Placement (in regards to segregations, lift thickness)
5. Compaction
6. Foundation on Bedrock
7. As built survey completed
- 8.
- 9.

VERIFICATIONS MADE BY:				
QA		QC		N/A
Y	N	Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Not on
Field

DETAILS (REFER TO NUMBER ABOVE)

ITEM	
2	Not saw outfill PM-90 → should be remove tomorrow
3	OK
4	OK
5	OK with bucket.

APPROVED BY:

QA	QC
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

APPROVED BY:
QA REPRESENTATIVE
QC REPRESENTATIVE
OWNER REPRESENTATIVE

SIGNATURE
[Signature]

DATE
2013-02-09

Approved Area Key trench ~~bottom~~ bottom & Filters

Station: ~~0+000~~ 0+50 (Offset):

To Station: 0+090 (Offset):

Key trench floor
• Filter placement & compaction

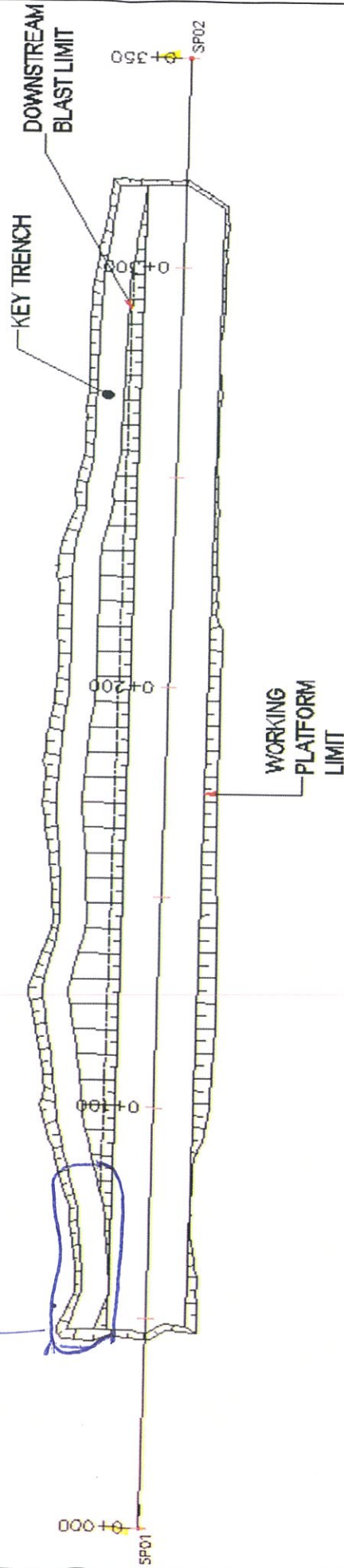


Figure 1 - Approximate approved foundation area

Date: 2013-02-09

Sketch by (Initial): JFSL

FOUNDATION AND KEY TRENCH PREPARATION AND ACCEPTATION

CERTIFICATE OF ACCEPTANCE OF FOUNDATION CONDITION - VAULT DIKE

Acceptance No.:

FND-VD-

05

Date:

11 Feb. 2013

This Certificate of Acceptance includes the following items, reviewed and accepted by the undersigned:

- 1) Foundation and Key Trench Preparation and Excavation Checklist (from SNC);
- 2) Sketch of the approximate accepted area, incl. Station and Offset (according to Vault Dike Stations);
- 3) Photo of the accepted area, at the moment of the acceptance;
- 4) Any other relevant documentation complementary to this approval.

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The area is accepted as per the foundation conditions at the time of the inspection and the condition of the foundation is required to be maintained prior to and during fill placement.

Owner Representative

Name:

Position:

AEM-

QC Representative

Name:

Position:

INSPEC-SOL-

QA Engineer

Name:

Position:

SNC-

Surveyor

Name:

Position:

FGL-

NOTES: 1. Original signed certificate must be given to the Owner Representative for documentation records. 2. Survey files from the approved area must be saved in appropriate location as required by the Owner Representative. 3. Photos of approved area must be saved in appropriate location as required by the Owner Representative.



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www.snc-lavalin.com

APPROBATION FORM

PROJECT : Construction of Vault Dike
PROJECT #: 611619 DATE: 11 Feb. 2013
DOCUMENT #: 20130211-01 CLIENT:
(YYYYMMDD-01)

APPROBATION FOR : ☐ Foundation Approval (Footprint)
☒ Foundation Approval (Key Trench)
☒ Fill Placement (0-200mm / 0-20mm)
☐ Other

LOCATION		PREVIOUS APPROVATIONS	
FROM STATION:	0+75 } fill placement	FROM:	0+90 } foundation
TO:	0+90 }	TO:	0+110 }
ELEVATION:	<input checked="" type="checkbox"/> VARIES m		

RESPECT TO THE SPECIFICATIONS ACCORDING TO:

- Quotes and lines respected
- Free of Ice / Snow / Water
- Gradation (visual)
- Placement (in regards to segregations, lift thickness)
- Compaction
- Foundation on Bedrock
- As built survey completed
-
-

VERIFICATIONS MADE BY:				
QA		QC		N/A
Y	N	Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DETAILS (REFER TO NUMBER ABOVE)

ITEM

APPROVED BY:

QA QC
☐ ☐
☐ ☐
☐ ☐

APPROVED BY: QA REPRESENTATIVE
QC REPRESENTATIVE
OWNER REPRESENTATIVE

SIGNATURE DATE
[Signature] 2013-02-11

Approved Area

Station: 75 (Offset): _____

To Station: 110 (Offset): _____

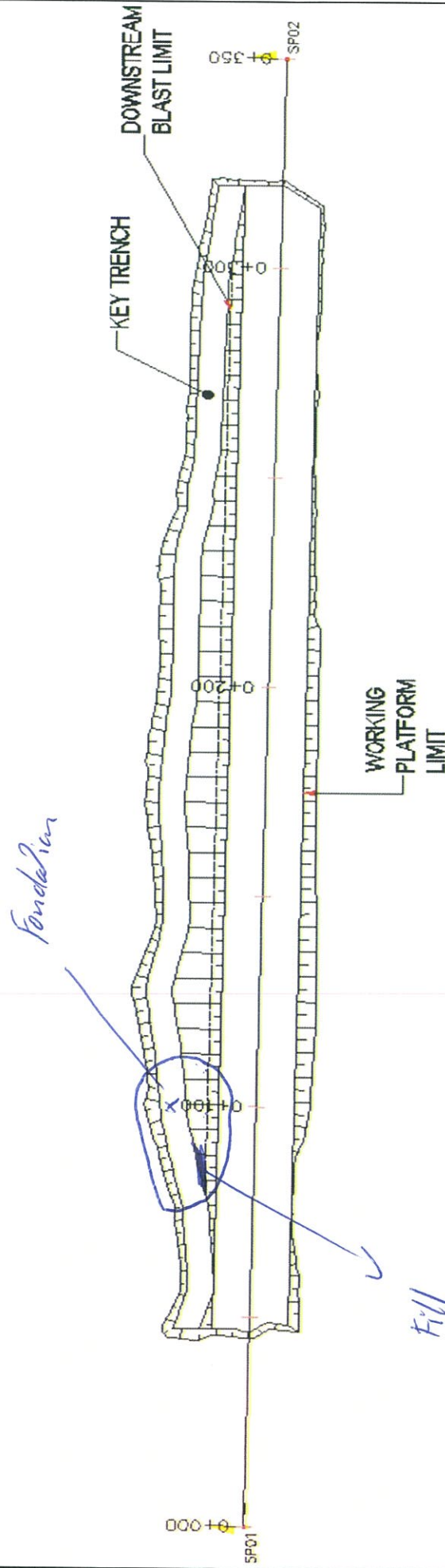


Figure 1 - Approximate approved foundation area

Date: 2013-02-11

Sketch by (Initial): JSK

FOUNDATION AND KEY TRENCH PREPARATION AND ACCEPTATION

CERTIFICATE OF ACCEPTANCE OF FOUNDATION CONDITION - VAULT DIKE

Acceptance No.:

FND-VD-

6

Date:

2013-02-12

This Certificate of Acceptance includes the following items, reviewed and accepted by the undersigned:

- 1) Foundation and Key Trench Preparation and Excavation Checklist (from SNC);
- 2) Sketch of the approximate accepted area, incl. Station and Offset (according to Vault Dike Stations);
- 3) Photo of the accepted area, at the moment of the acceptance;
- 4) Any other relevant documentation complementary to this approval.

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Owner Representative

Name:

AEM-

Position:

QC Representative

Name:

Position:

QA Engineer

Name:

Position:

Surveyor

Name:

Position:

FGL-

NOTES: 1. Original signed certificate must be given to the Owner Representative for documentation records. 2. Survey files from the approved area must be saved in appropriate location as required by the Owner Representative. 3. Photos of approved area must be saved in appropriate location as required by the Owner Representative.



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APPROBATION FORM

PROJECT : Construction of Vault Dike
PROJECT #: 611614
DOCUMENT #: 20130212-01
(YYYYMMDD-D1)
DATE: 12 Feb. 2013
CLIENT: AEM

APPROBATION FOR :
☐ Foundation Approval (Footprint)
☒ Foundation Approval (Key Trench)
☒ Fill Placement (0-20 mm / 0-200 mm / 0-20 mm + Ben to
☐ Other

LOCATION	PREVIOUS APPROVALS
FROM STATION: 110 to 120 (0-20 mm / 0-200 mm) 85 to 90 (0-20 mm + Ben to)	FROM: 110 TO: 190
ELEVATION: <input checked="" type="checkbox"/> VARIES m	As per fill (see pour)

RESPECT TO THE SPECIFICATIONS ACCORDING TO:

- Quotes and lines respected
- Free of Ice / Snow / Water
- Gradation (visual)
- Placement (in regards to segregations, lift thickness)
↳ visual
- Compaction
- Foundation on Bedrock
- As built survey completed
after discussion with SAHA surveyor
-
-

VERIFICATIONS MADE BY:				
QA		QC		N/A
Y	N	Y	N	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
X				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DETAILS (REFER TO NUMBER ABOVE)

ITEM

APPROVED BY:

QA	QC
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

APPROVED BY: QA REPRESENTATIVE
QC REPRESENTATIVE
OWNER REPRESENTATIVE

SIGNATURE
Kramo's 5th
[Signature]

DATE
2013-02-12
2013-02-12

Approved Area

Station: 0+050 @ 0+090 (Offset):

↓
0-20mm + bentonite
compact

To Station: 0+110 @ 0+120 (Offset):

↓
granular fill (0-25mm at 0-200mm)

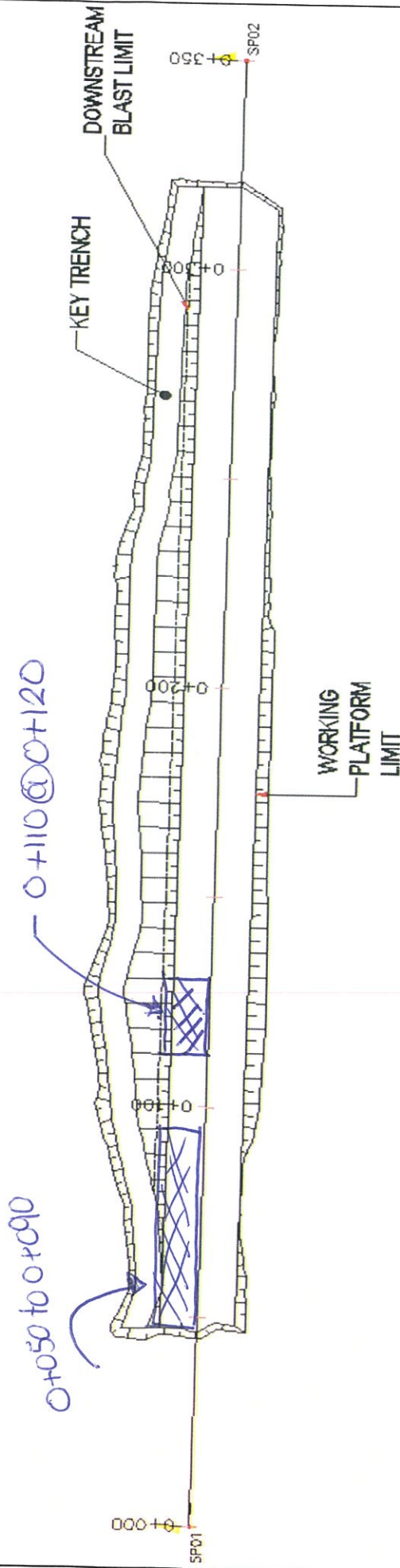


Figure 1 - Approximate approved foundation area

Date: 13-02-12

Sketch by (Initial) : MD