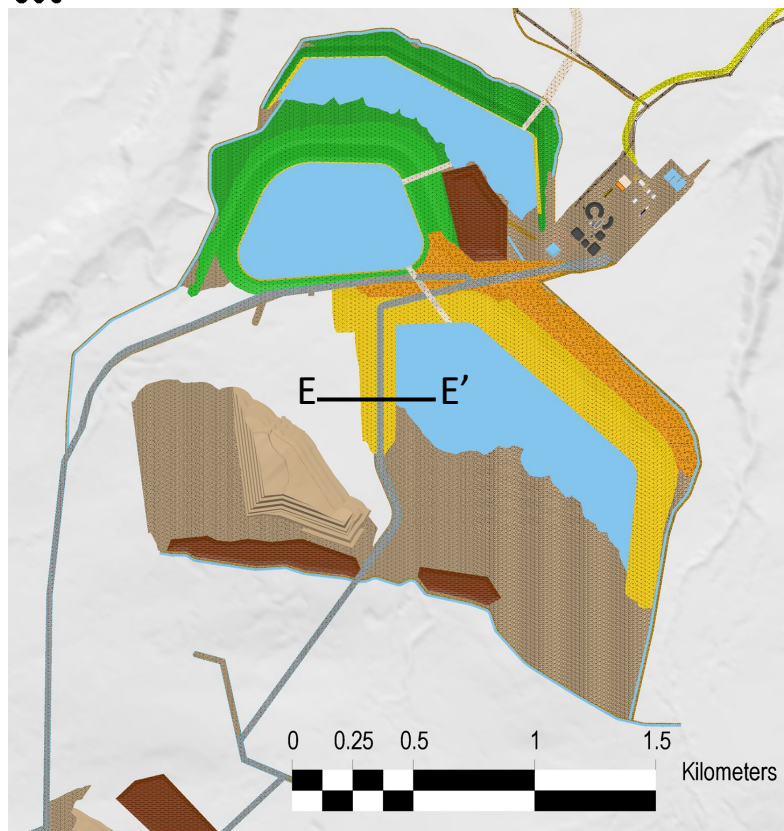
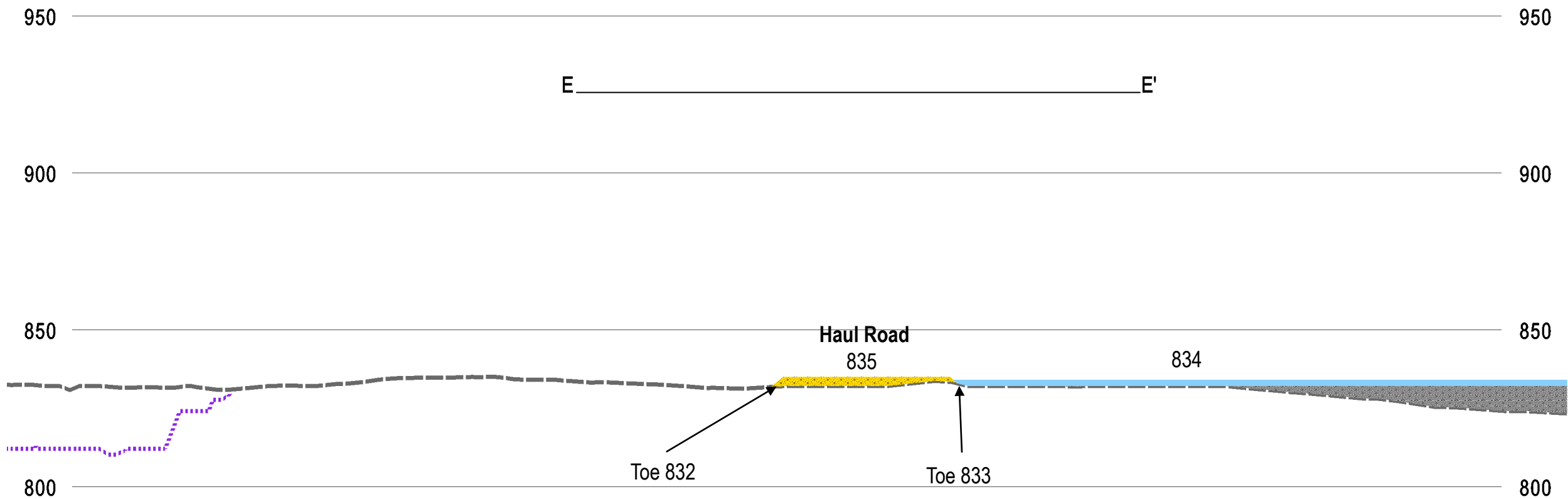




Embankment slopes are 2.5H:1V

Legend

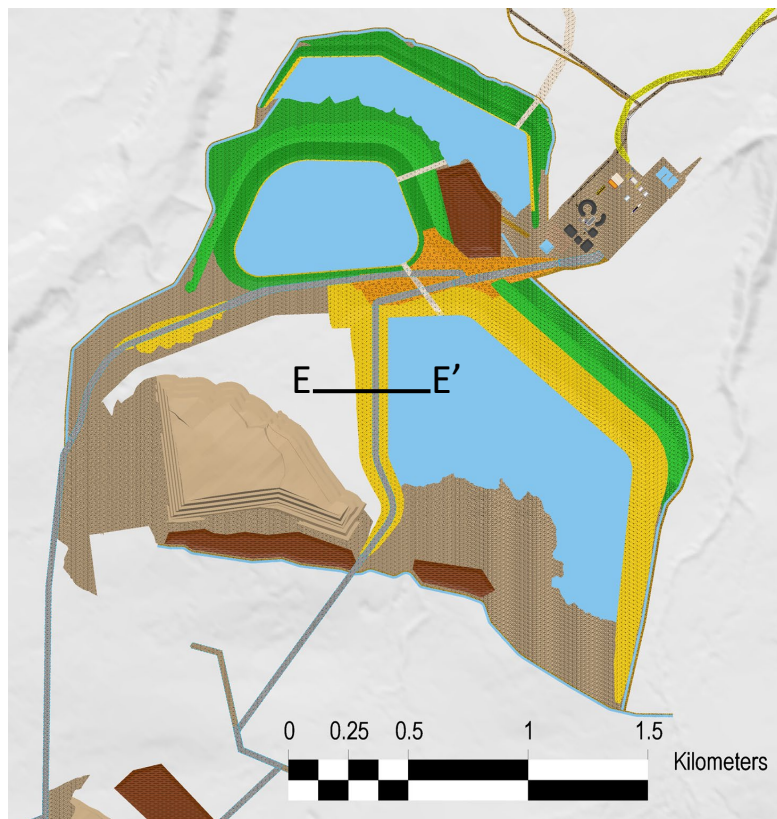
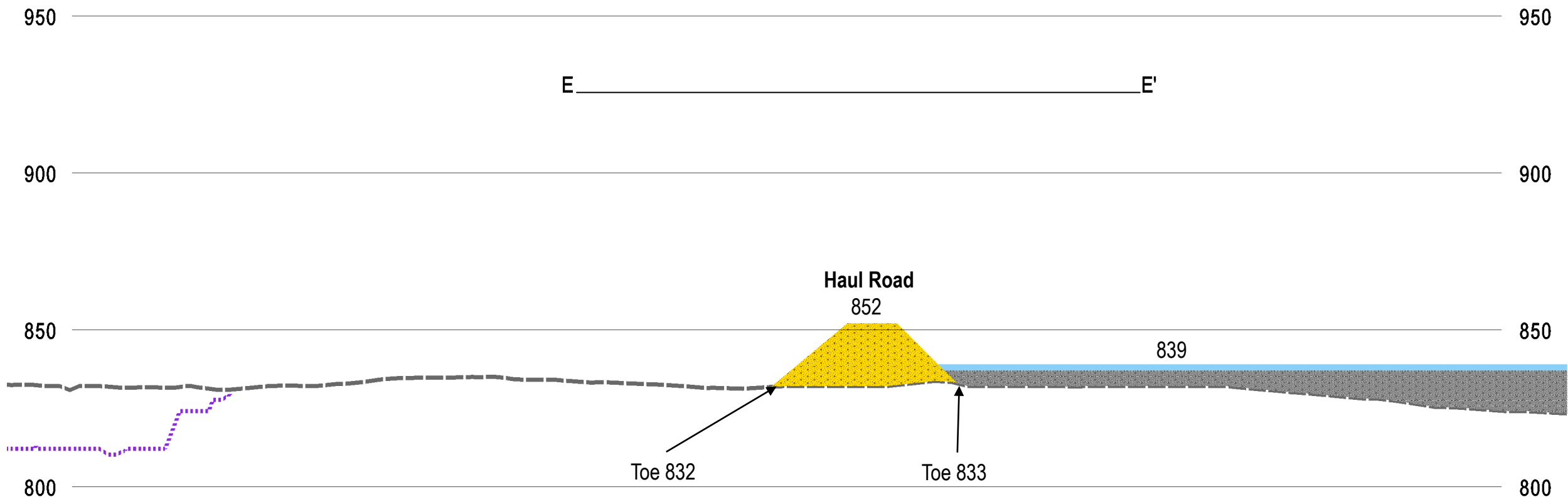
-  Embankment
-  Saturated PAG
-  Water Cover (~2 m)
-  Open Pit Outline
-  Surface Topography
-  masl
- meters above sea level

Tenas Project

East and West Management Pond separation embankment at end of Year 2

Vertical Exaggeration: 2.5 Vertical to 1.0 Horizontal
All elevations are masl

Figure 1.9-61



Embankment slopes are 2.5H:1V

Legend

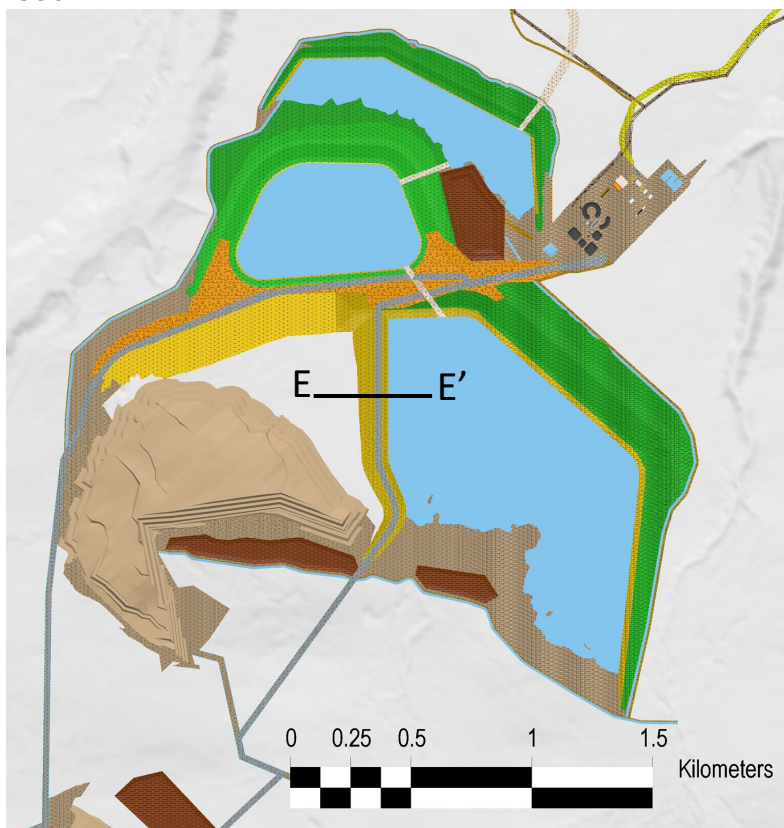
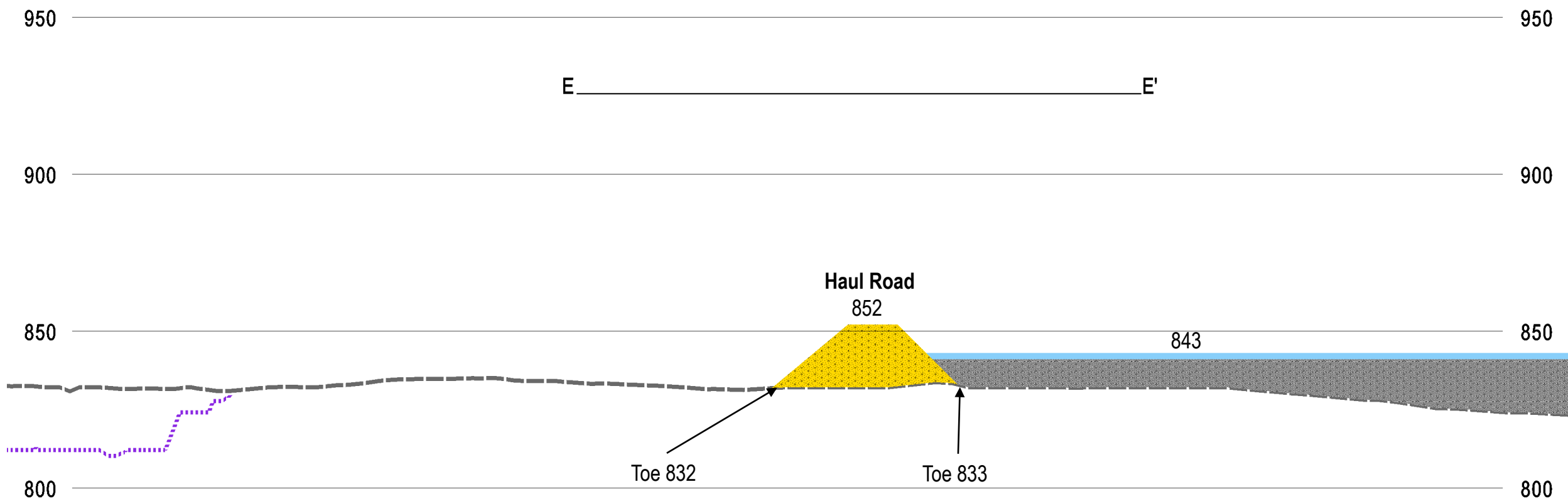
-  Embankment
-  Saturated PAG
-  Water Cover (~2 m)
-  Open Pit Outline
-  Surface Topography
-  masl
- meters above sea level

Tenas Project

East and West Management Pond separation embankment at end of Year 3

Vertical Exaggeration: 2.5 Vertical to 1.0 Horizontal
All elevations are masl

Figure 1.9-62



Embankment slopes are 2.5H:1V

Legend

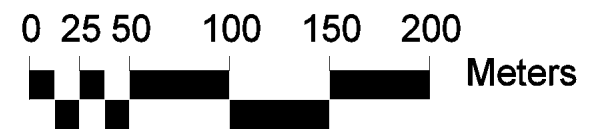
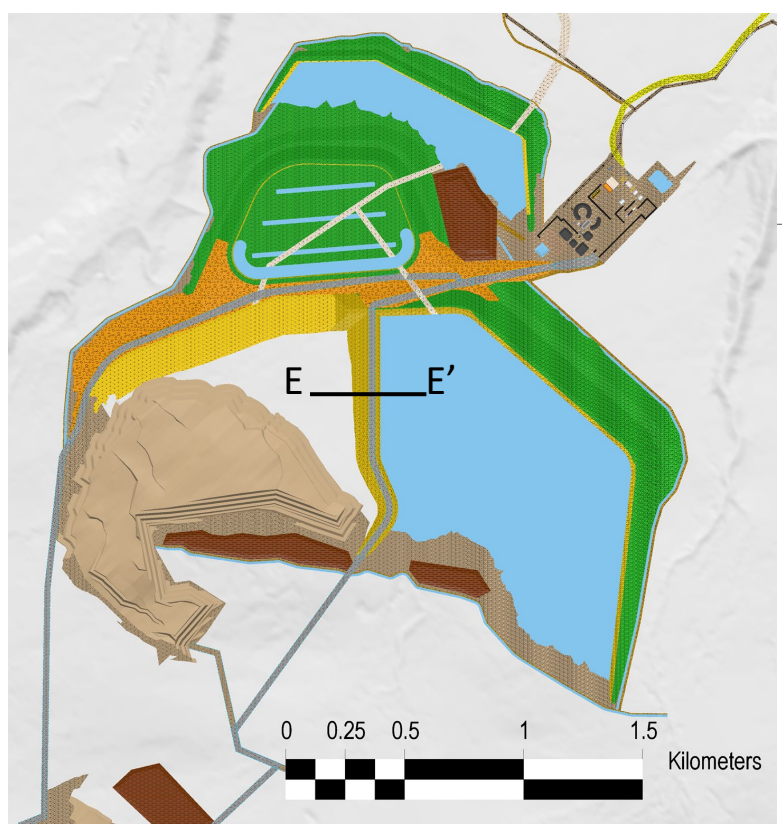
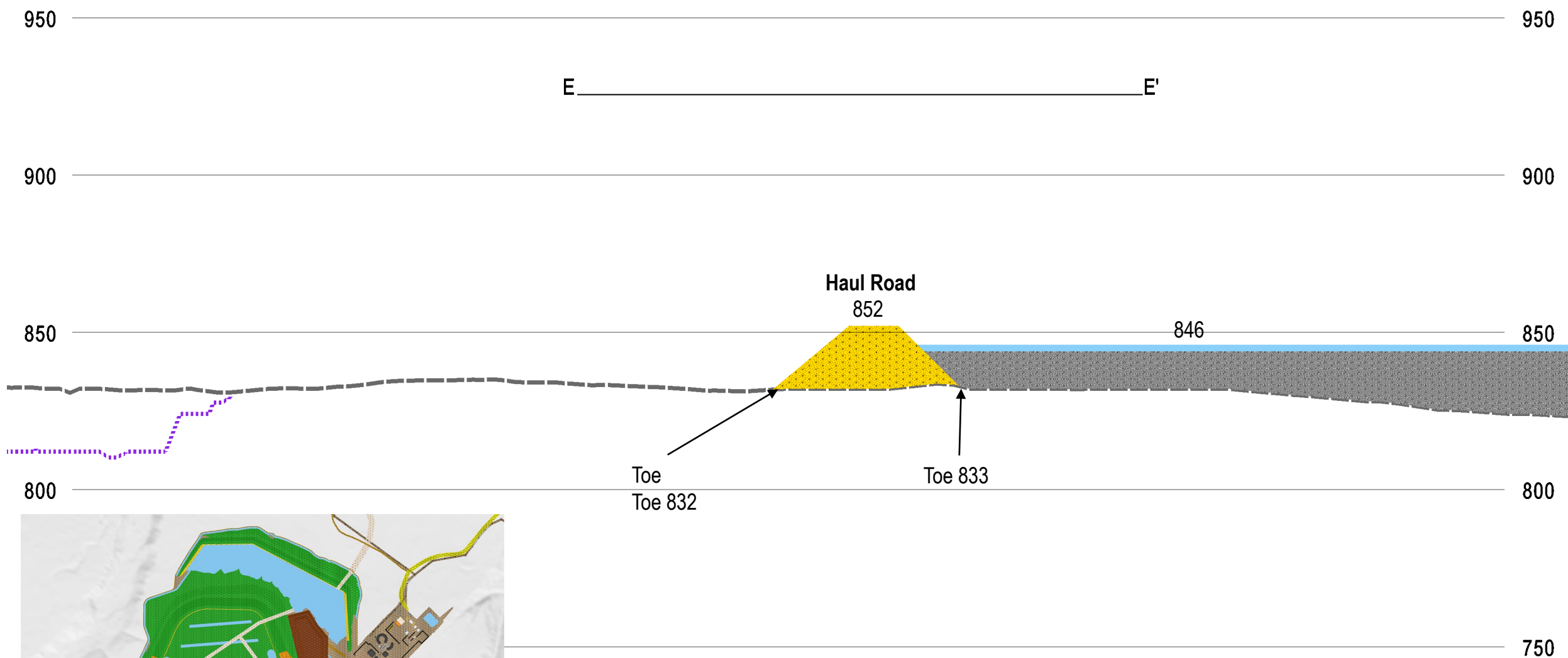
-  Embankment
-  Saturated PAG
-  Water Cover (~2 m)
-  Open Pit Outline
-  Surface Topography
-  masl
- meters above sea level

Tenas Project

East and West Management Pond separation embankment at end of Year 4

Vertical Exaggeration: 2.5 Vertical to 1.0 Horizontal
All elevations are masl

Figure 1.9-63

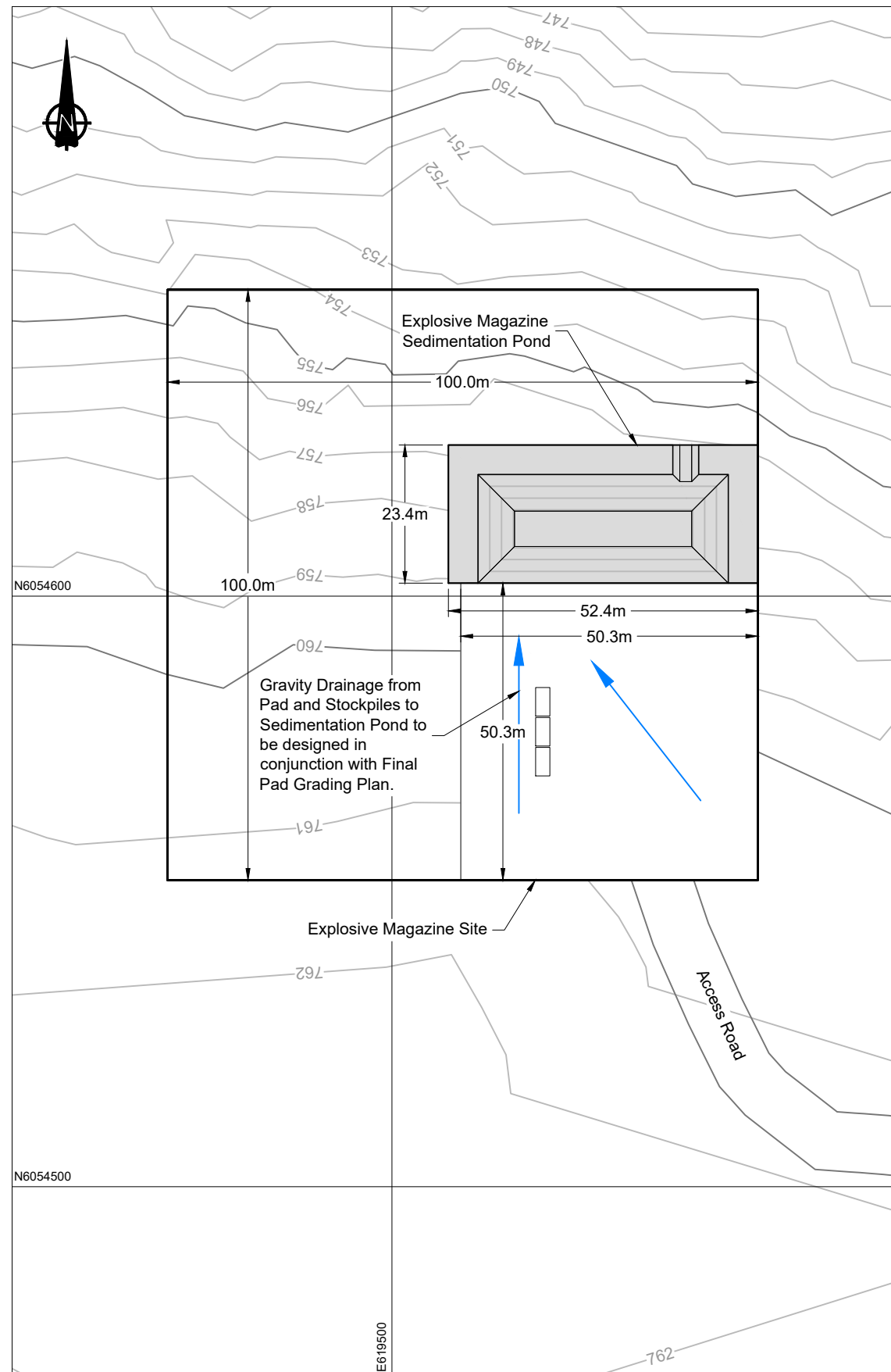


Embankment slopes are 2.5H:1V

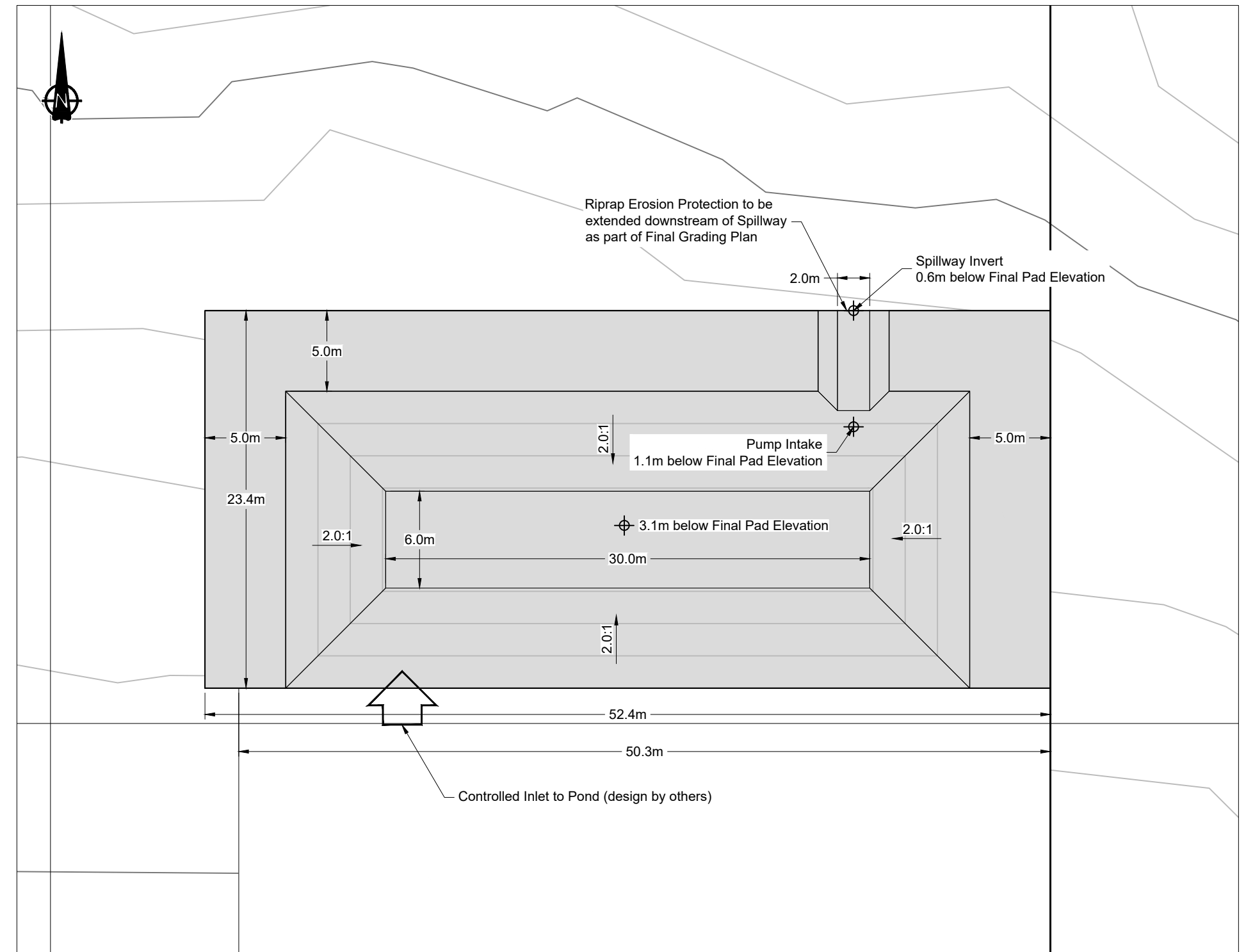
Legend	
	Embankment
	Saturated PAG
	Water Cover (~2 m)
	Open Pit Outline
	Surface Topography
	meters above sea level

Tenas Project	
East and West Management Pond separation embankment at end of Year 5	
Vertical Exaggeration: 2.5 Vertical to 1.0 Horizontal All elevations are masl	
Figure 1.9-64 	

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Magazine Storage Site Overview



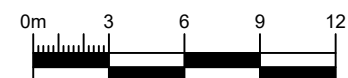
NOTES

1. Contours shown at 1.0m intervals.
2. All dimensions shown in meters unless otherwise stated.
3. Explosive Magazine Site features taken from Drawing 50003 Revision 5 in file "General R5.dwg" created by Orca Mining Services dated 2020/09/29.
4. Final grade of Explosives Storage Area pad is not known. Pond design based on depths relative to final pad elevation.
5. Pond to be unlined to promote infiltration. Coarse gravel layer to be placed across exposed ground to reduce erosion of pond slopes.

REFERENCE

NAD83 UTM Zone 9.

Explosive Storage Pond Detail



ISSUED FOR PERMITTING



SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Explosive Sites Ponds.dwg



Telkwa Coal Limited

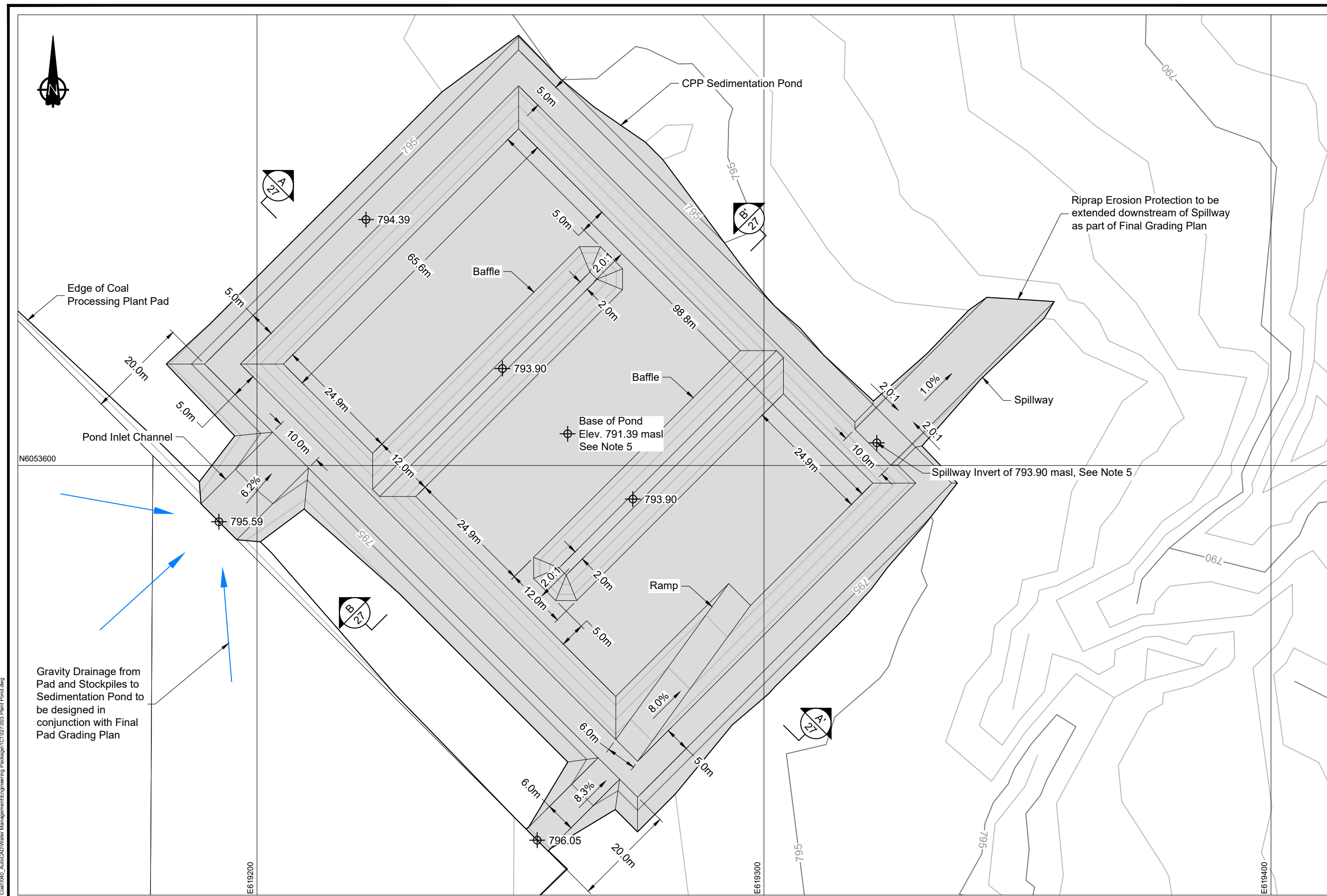
Tenas Project Water Management Design

Explosive Magazine Sedimentation Pond at end of Year 0 with no further activity in Years 1 through 5

DATE: 2021/07/16

APPROVED: SAB

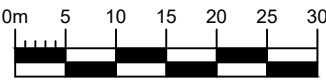
FIGURE: 1.9-65 b



- NOTES**
1. Contours shown at 1.0m intervals.
 2. All dimensions shown in meters unless otherwise stated.
 3. Mine Infrastructure designs by Telkwa Coal Limited (TCL).
 4. Pond to be unlined to promote infiltration. Coarse gravel layer to be placed across exposed ground to reduce erosion of pond slopes.
 5. CPP Sedimentation Pond modeling has been developed based on a pond invert elevation of 791.39 masl and spillway invert of 793.90 masl. Updated designs require a pond invert of 791.09 masl and spillway invert of 793.69 masl, as shown. Elevations shown to be updated in models prior to issuing for construction.

REFERENCE
NAD83 UTM Zone 9.

ISSUED FOR PERMITTING



\\ark-adf\share\env\Projects\01_SITES\Telkwa Coal\040_AutoCAD\Water Management\Engineering\Padage\1CT027.003 Plant Pond.dwg



SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Plant Pond.dwg



Telkwa Coal Limited

Tenas Project Water Management Design		
Coal Processing Plant (CPP)		
Sedimentation Pond at the Year -0.5 with no further activity in Years 1 through 5		
DATE: 2021/07/16	APPROVED: SAB	FIGURE: 1.9-66

N6058200



Rail Infrastructure
Area Boundary

1x1.0m dia. CSP Culvert
Crossing at 1.0% Slope

Riprap Apron

Road

Rail Lines

Road

Road

Rail Infrastructure Sedimentation Pond

Rail Loading Pad

N6058100

E629300

E629400

E629500

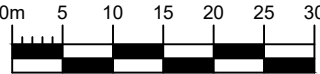
NOTES

1. Contours shown at 1.0m intervals.
2. All dimensions shown in meters unless otherwise stated.
3. Mine Infrastructure designs by Telkwa Coal Limited (TCL).
4. Pond to be unlined to promote infiltration. Coarse gravel layer to be placed across exposed ground to reduce erosion of pond slopes.
5. Gravity Drainage from Stockpiles to Sedimentation Pond to be developed in conjunction with Final Grading Plan.

REFERENCE

NAD83 UTM Zone 9.

ISSUED FOR
PERMITTING



SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Rail Load Out Pond.dwg

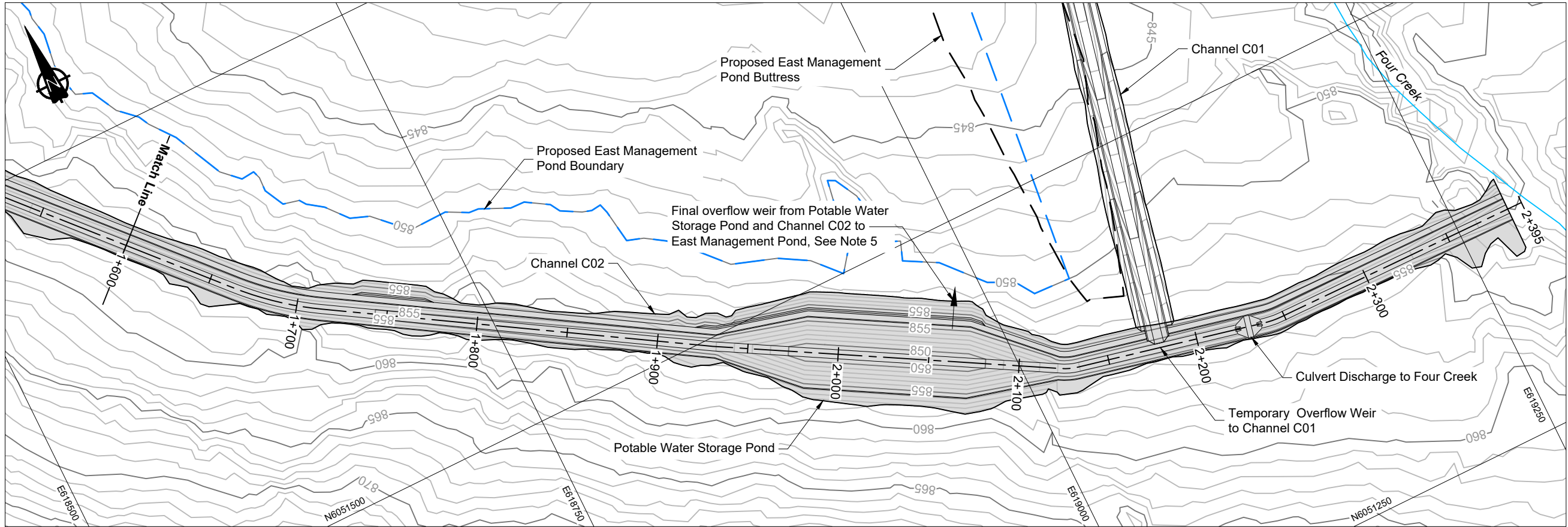


Telkwa Coal Limited

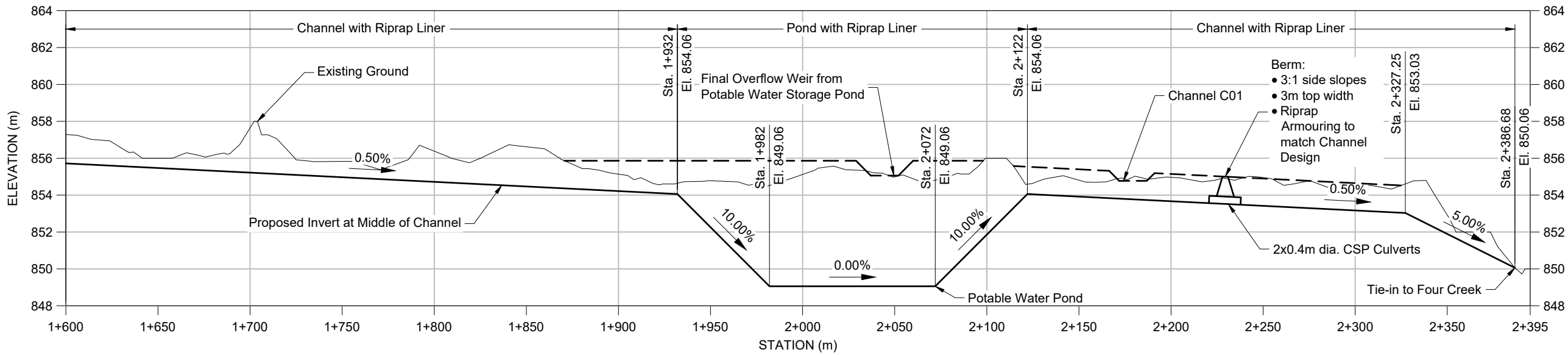
Tenas Project Water Management Design
Rail Infrastructure Sedimentation Pond
at the end of Year 0 with further activity
in Years 1 through 5

DATE: 2021/07/16	APPROVED: SAB	FIGURE: 1.9-67
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Channel C02 Plan View



Channel C02 Profile View

10x Vertical Exaggeration

LEGEND

- Existing Watercourse
- Proposed Buttriss Boundary
- Proposed Management Pond Boundary
- Proposed Channel

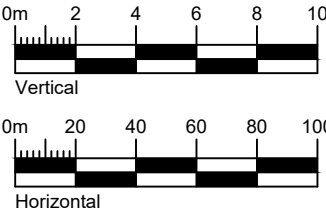
NOTES

- Contours shown at 1.0m intervals.
- All dimensions shown in meters unless otherwise stated.
- Mine Infrastructure designs by Telkwa Coal Limited (TCL).
- Infrastructure extents shown at End Of Mine.
- Temporary overflow weir from Channel C02 will be constructed at confluence with C01. Once EMP becomes operational, the permanent overflow weir will be constructed from the Potable Water Pond to EMP, and the original discharge to Channel C01 will be backfilled.

REFERENCE

NAD83 UTM Zone 9.

ISSUED FOR PERMITTING



SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Channel C02.dwg



Telkwa Coal Limited

Tenas Project Water Management Design
Potable Water Storage Pond completed in Year 0,
no further activity in Years 1 through 5

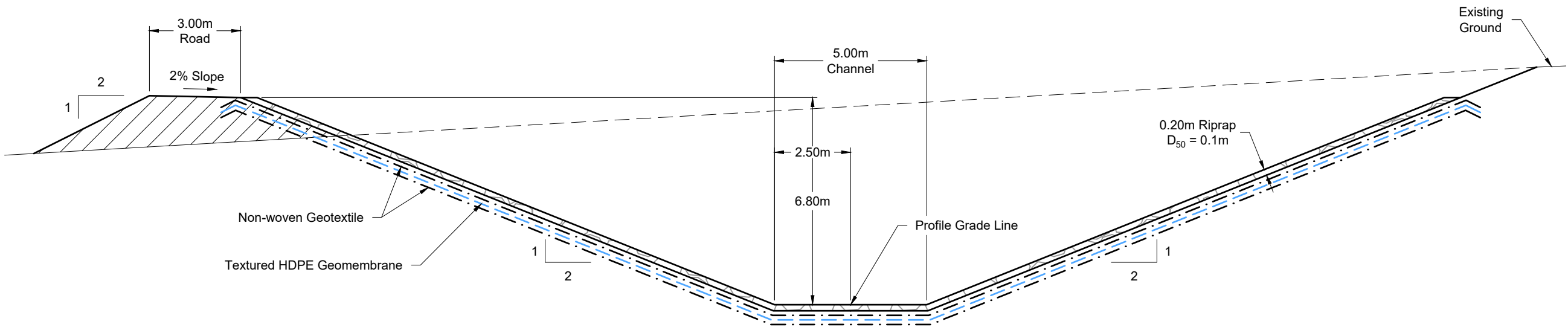
DATE: 2021/07/16
APPROVED: SAB
FIGURE: 1.9-68 a

LEGEND

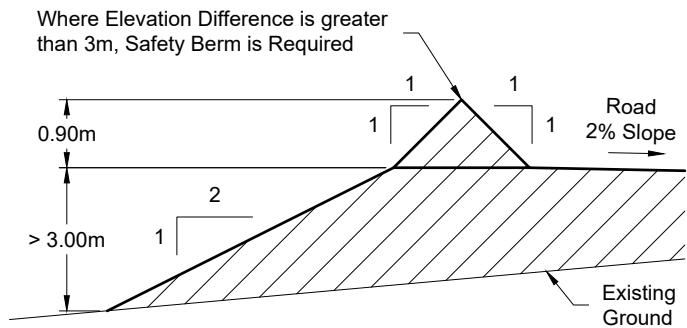
Engineered Fill

NOTES

1. All dimensions shown in meters unless otherwise stated.
2. Road surfaces to be finished with approved surfacing material.
3. Liner tie-in details as per manufacturer specifications.
4. Road width to be extended to accommodate safety berm where required.



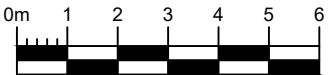
Potable Water Storage Pond



Safety Berm Detail

Not To Scale

ISSUED FOR
PERMITTING



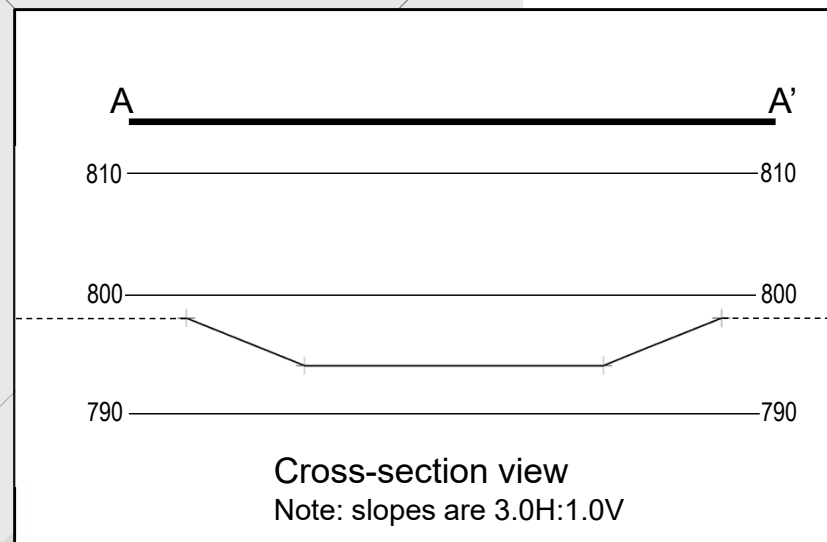
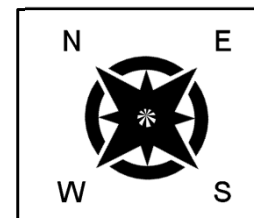
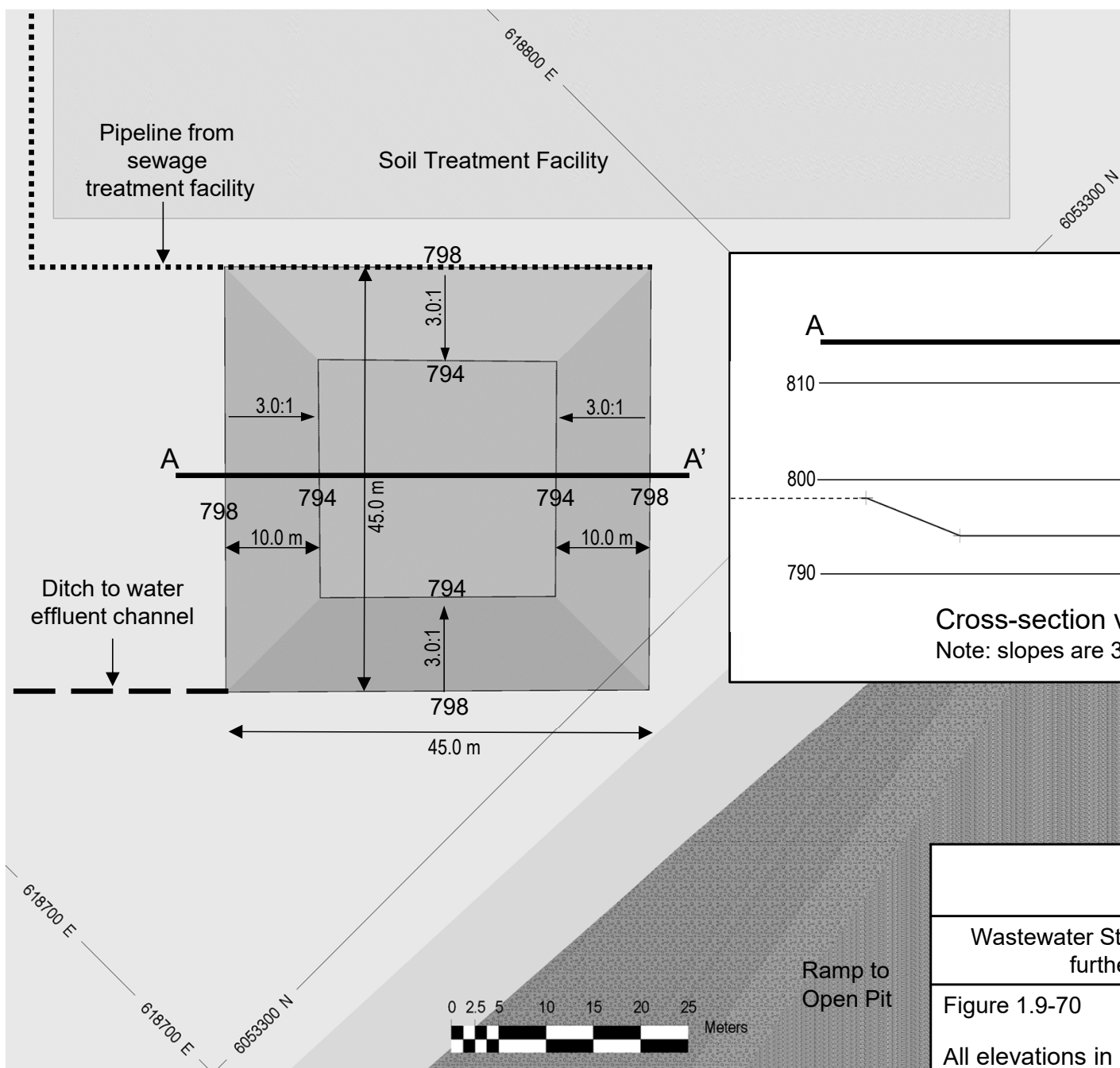
Tenas Project Water Management Design

Potable Water Storage Pond profile
completed in Year 0,
no further activity in Years 1 through 5

SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Channel C02 Typ Sec.dwg

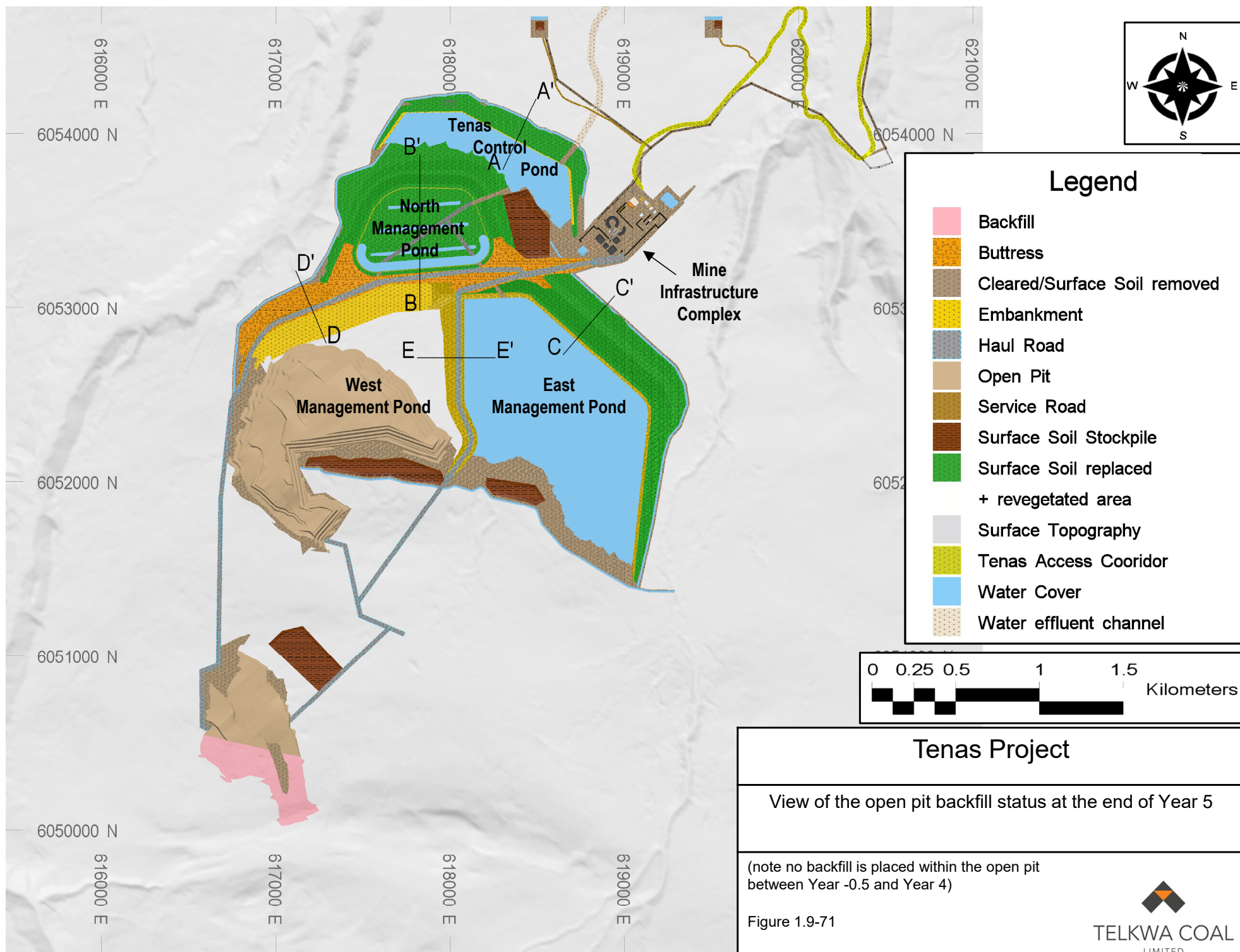
Telkwa Coal Limited

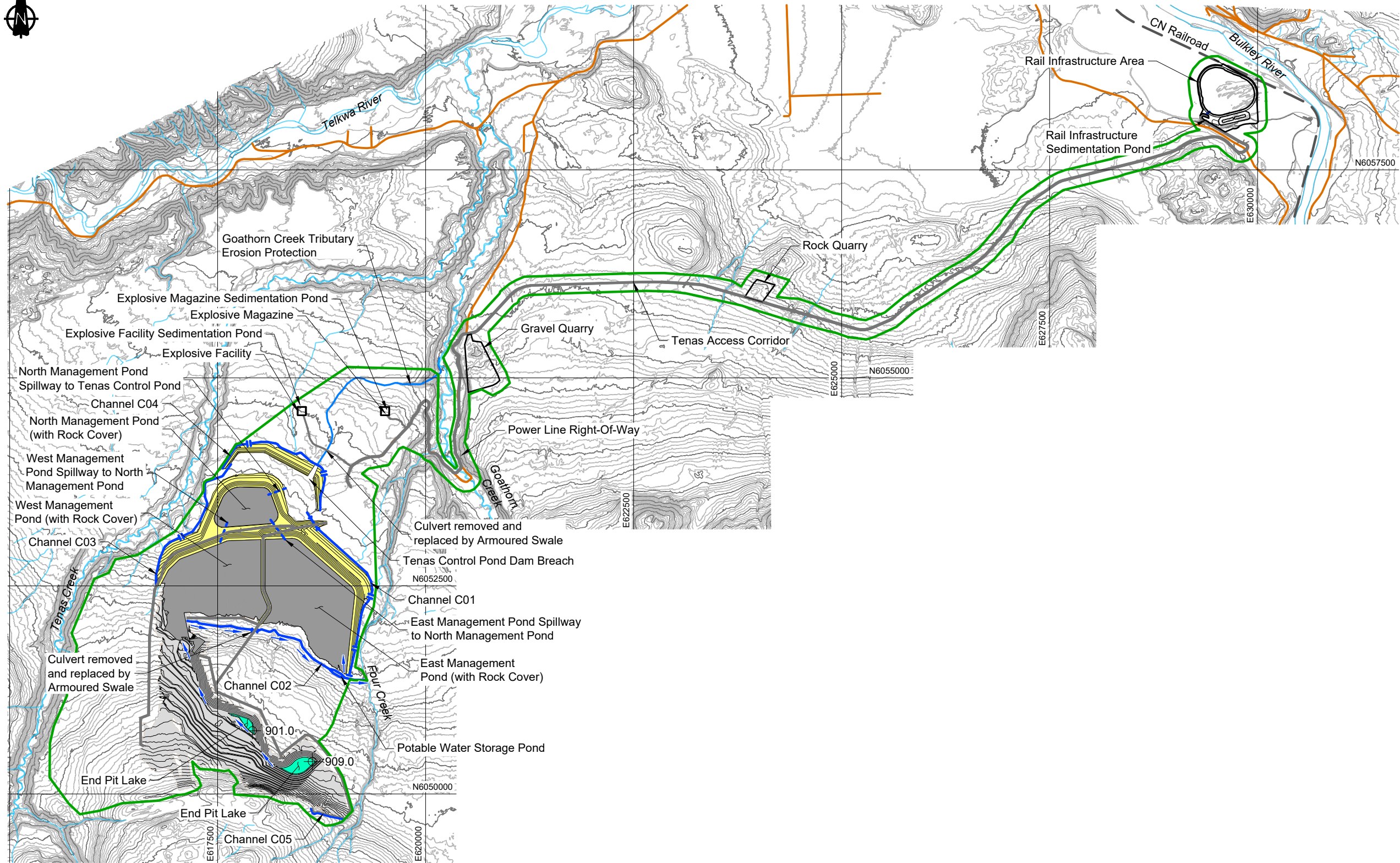
DATE: 2021/07/16
APPROVED: SAB
FIGURE: 1.9-68 b



Cross-section view
Note: slopes are 3.0H:1.0V

Tenas Project	
Wastewater Storage Pond competed in Year 0 with no further activity in Years 1 through 5	
Figure 1.9-70	
All elevations in meters above sea level Indicated ratios are horizontal (H) to vertical (V)	
 TELKWA COAL LIMITED	





LEGEND

- Water Management Feature
- Water Flow Direction
- Spillway
- Culvert
- Channel Breach
- Existing Watercourse
- Existing Road
- Proposed Road
- Project Area
- Dam and Buttress
- End Pit Lake
- Backfill / NAG Pile
- Rock Cover

NOTES

- Contours shown at 5.0m intervals.
- All dimensions shown in meters unless otherwise stated.
- Tenas Control Pond is breached and Goathorn Creek tributary erosion protection is extended to the outlet of the North Management Pond spillway.
- Closure spillways route runoff from covered Management Ponds to Goathorn Creek tributary.
- Channels C01, C03 and C04 are breached.
- Channel C02 and C05 continue to divert water to Four Creek.
- Pit lake forms in southern extents of open pit. Discharge flows through non-PAG rock backfill towards West Management Pond.
- Coal Processing Plant (CPP), CPP sedimentation pond, Wastewater Storage Pond and Soil Treatment Facility are decommissioned.
- Mine Infrastructure designs by Telkwa Coal Limited (TCL).

REFERENCE

NAD83 UTM Zone 9.



SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Post-Closure.dwg



Telkwa Coal

Environmental Assessment

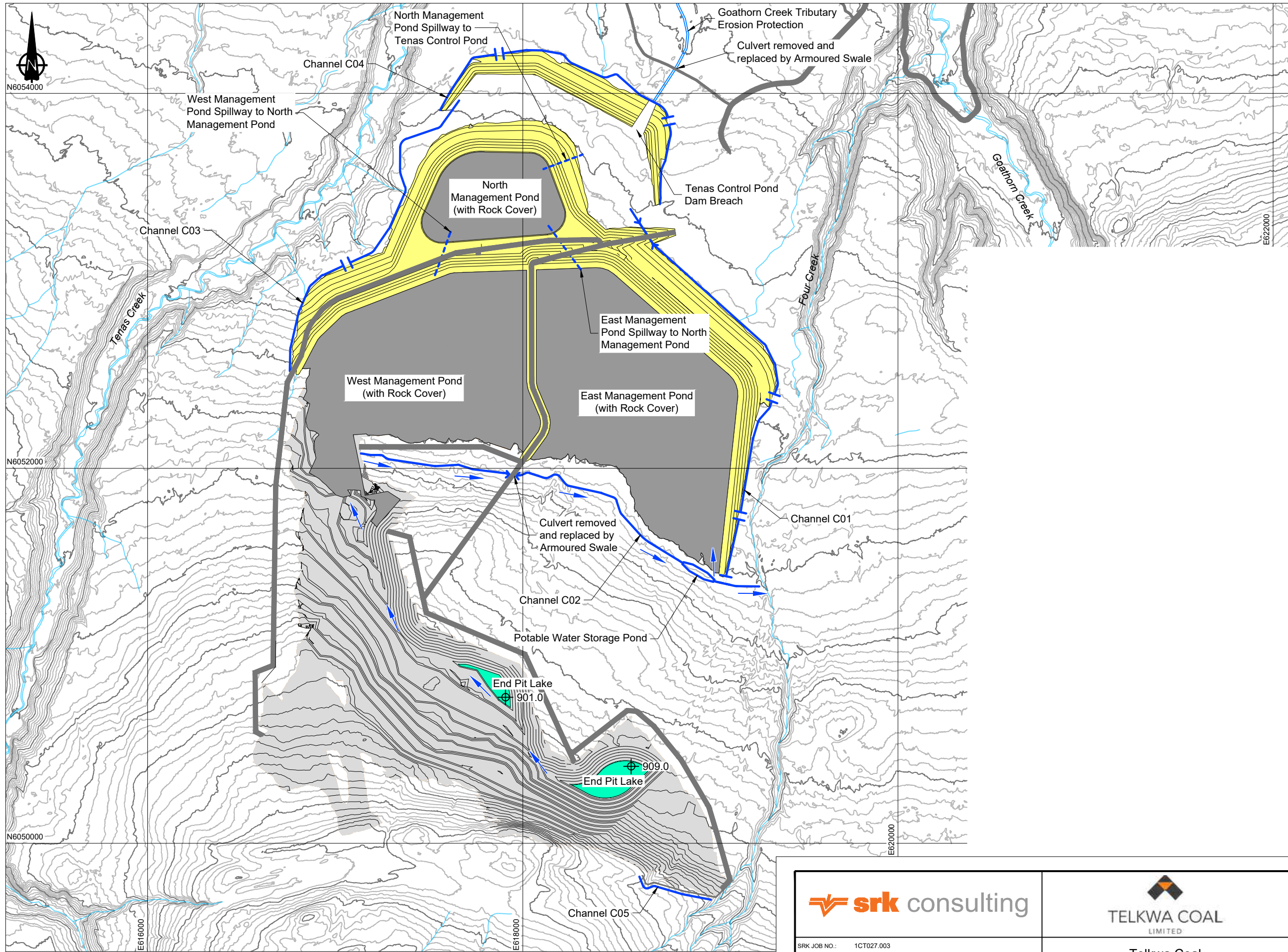
Water management infrastructure at
the end of the Decommissioning and
Reclamation Phase

DATE:
2022/04/05

APPROVED:
SAB

FIGURE:
1.9-72

\\ark-adf\share\env\Projects\01_SITES\Telkwa Coal\040_AutoCAD\Water Management\Mine Plan Progression\1CT027.003 Post-Closure.dwg



LEGEND

- Water Management Feature
- Water Flow Direction
- Spillway
- Culvert
- Channel Breach
- Existing Watercourse
- Proposed Road
- Dam and Butress
- End Pit Lake
- Backfill / NAG Pile
- Rock Cover

NOTES

- Contours shown at 5.0m intervals.
- All dimensions shown in meters unless otherwise stated.
- Tenas Control Pond is breached and Goathorn Creek tributary erosion protection is extended to the outlet of the North Management Pond spillway.
- Closure spillways route runoff from covered Management Ponds to Goathorn Creek tributary.
- Channels C01, C03 and C04 are breached.
- Channel C02 and C05 continue to divert water to Four Creek.
- Pit lake forms in southern extents of open pit. Discharge flows through non-PAG rock backfill towards West Management Pond.
- Coal Processing Plant (CPP), CPP sedimentation pond, Wastewater Storage Pond and Soil Treatment Facility are decommissioned.

REFERENCE

NAD83 UTM Zone 9.



srk consulting

SRK JOB NO.: 1CT027.003
FILE NAME: 1CT027.003 Post-Closure.dwg

TELKWA COAL
LIMITED

Telkwa Coal

Environmental Assessment

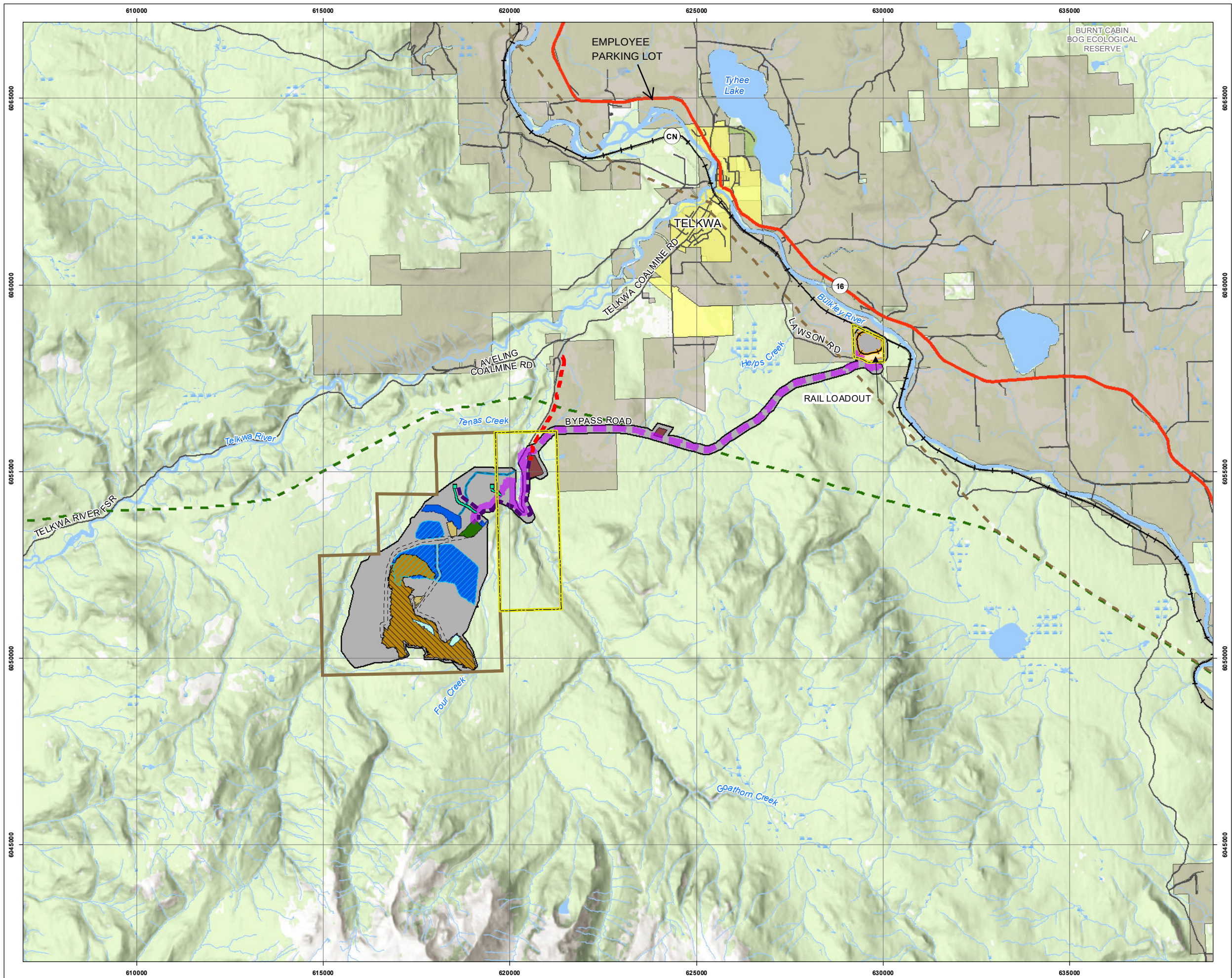
Water management infrastructure after
the Active portion of the Post-closure
Phase

DATE:
2021/10/01

APPROVED:
SAB

FIGURE:
1.9-73

Path: L:\PROJECT\S2018\BPV241_Tenas_Mine\Map\Info\RE-PORTING\Map_Template_11x17_20210423_ghcomp100000.mxd



Tenas Project

Site Plan showing Project Components

Legend

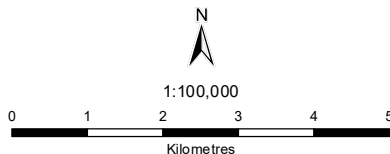
- | | |
|---------------------------|--|
| Rail Line | Backfill Area |
| Highway | Control and Plant Sedimentation Pond |
| Road | Explosive Infrastructure |
| Watercourse | Management Pond |
| Wetland | Mine Infrastructure Complex (Coal Processing Plant, Mine Administration and Dry Building, Maintenance Facility, Run-of-Mine and Processed Coal Stockpiles) |
| Waterbody | Open Pit |
| Park or Protected Area | Pit Lake |
| Municipal Area | Quarry |
| General Private Property | Rail Infrastructure |
| 138 kV Transmission Line | Topsoil Stockpile |
| 500 kV Transmission Line | Tenas Coal Licenses |
| 25 kV Power Line | Telkwa Coal Limited Private Property |
| Existing 25 kV Power Line | Project Area |
| Haul Road | |
| Rail Loop | |
| Discharge Path | |
| Tenas Access Corridor | |

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.
3. Project line features are for display only.

Sources

- Project Features: Allegiance Coal, April 21, 2021.
- Basedata: Government of British Columbia
- Basemap: World Topo Base

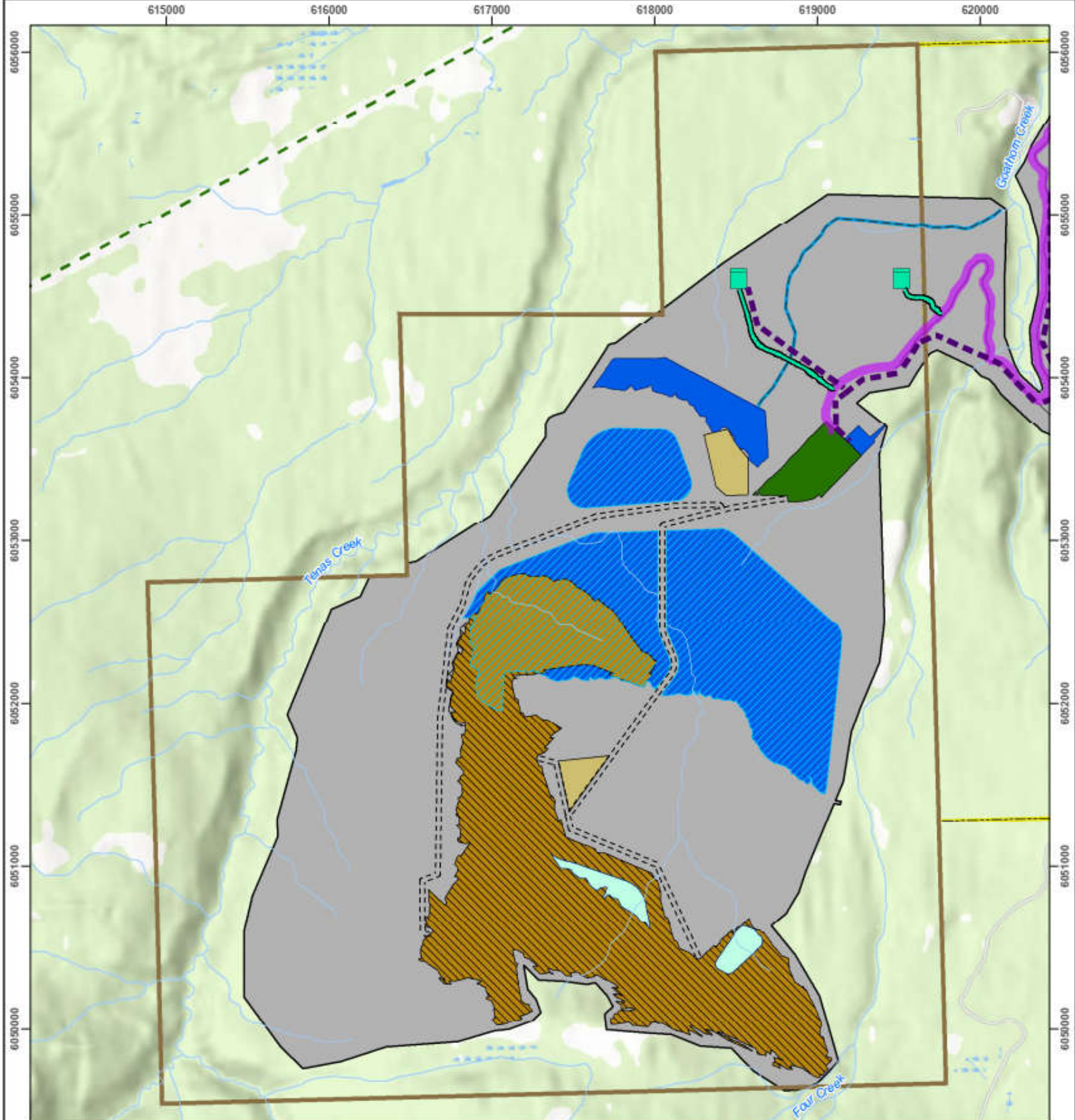


NAD 1983 UTM Zone 9N

Page Size: 11" x 17"

Project No.	Production Date: Apr 26, 2021	Figure 1.10-1
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Legend	
500 kV Transmission Line	Backfill Area
Project Features	Control and Plant Sedimentation Pond
25 kV Power Line	Explosive Infrastructure
Haul Road	Management Pond
Discharge Path	Mine Infrastructure Complex
Tenas Access Corridor	Open Pit
Tenas Coal Licenses	Pit Lake
Telkwa Coal Limited Private Property	Topsoil Stockpile
Project Area	

Tenas Project Project Components

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.
3. Project line features are for display only.

1:32,000
 0 250 500 750 1,000 Meters
 NAD 1983 UTM Zone 9N
 Page Size: 8.5" x 11"

Sources

- Project Features: Allegiance Coal, April 21, 2021.
- Basedata: Government of British Columbia
- Basemap: World Topo Base

Figure 1.10-2
 Production Date:
 Oct 29, 2021





COAL PROCESSING
PLANT
SEDIMENTATION
POND

SEWAGE
TREATMENT
PLANT

LV SHOP
MINE RESCUE

PIT FUELING
STATION

ADMINISTRATION

TIRE SHOP

LV PARKING

FIRE HYDRANT

WAREHOUSE
HV SHOP

PROCESSED ROCK
STOCKPILE

COAL PROCESSING
PLANT

HV PARKING

RUN OF MINE
COAL
STOCKPILES

FIRE HYDRANT

SUBSTATION

CRUSHER

DIESEL TANK
MIBC TANK

PROCESSED
COAL
STOCKPILE

COAL
LABORATORY

SOIL
TREATMENT
FACILITY

WASTEWATER
STORAGE
POND

TO OPEN PIT

TO TELKWA

25 KV
POWERLINE



TENAS CONTROL POND

NOTE: MIBC=METHYL ISOBUTYL CARBINOL

Tenas Project

Project related Mine Infrastructure
Complex (MIC) isometric view

Figure 1.10-3



