TECHNICAL MEMORANDUM 24053C

Matakanui Gold Limited
15A Chardonnay Street
CROWMELL NZ 9310

02 February 2026

BENDIGO-OPHIR GOLD PROJECT
RESPONSE TO TECHNICAL REVIEW

Attention: Cheryl LOW

1.0 Introduction

This memorandum responds to requests from the Otago Regional Council (ORC) in relation to the *Matakanui Gold Limited fast-track application for the Bendigo-Ophir Gold Project* and presents:

- Further information requested by ORC in relation to satellite open pits
- Responses to queries raised by ORC in relation to open pit wall stability both operationally (short term) and following completion of mining (long- to very long-term).

The memorandum was compiled at the request of Mark Mitchell, Technical Services Manager, Matakanui Gold Limited (MGL) made via email in December 2025.

2.0 Background

The Bendigo-Ophir Gold Project is centred dominantly on open pit and underground mining of the Rise and Shine (RAS) deposit and open pit mining of the lesser Come in Time (CIT), Srex (SRX) and Srex East (SRE) satellite deposits.

Geotechnical assessment of proposed open pit and underground mining at the Bendigo-Ophir Gold Project was performed by Peter O'Bryan & Associates (Document B.28).

This memorandum provides responses to comments/ queries raised by GeoSolve Consultants [3] who reviewed the geotechnical report on behalf of the ORC.

It provides discussion related to expected short and long-term stability performance of walls of the Rise and Shine (RAS) open pit (and satellite pits) which lie adjacent/ proximal to zones protected under covenant by the New Zealand Department of Conservation (DOC), with particular regard to:

- Issues related to open pit wall stability
- Potential for interaction between pit walls and the DOC protected zone. .Wall relaxation will continue following completion of mining and deterioration of slopes can lead to crest retreat. The configuration of pit slopes on abandonment must be such that anticipated slope deterioration does not interact with adjacent public or third party property, in particular in this case, the area protected by the DOC covenant.
- Preliminary assessment of wall stability in the CIT, SRX and SRE open pits.

2.1 Excerpt from Otago Regional Council letter to Matakanui Gold Ltd

Request for further information (RFI)
Matakanui Gold Limited fast-track application for the Bendigo-Ophir Gold Project
12 December 2025

Geotechnical Engineering, River Engineering, Erosion and Sediment Control

The below questions have been raised following a peer-review of the application material by GeoSolve Limited, on behalf of ORC. The GeoSolve memoranda are attached as Appendices A and B.

1. The proposed consent conditions (D.01 – D.04) of the application do not appear to capture the recommendations of report B.28 in relation to pre-mining investigations and operational stability monitoring for the RAS Pit, nor does there appear to be a management plan specific to the RAS Pit (or the CIT, SRX, and SRE open pits).

   Please explain how the recommendations in B.28 for the RAS Pit will be implemented on site, including how they may be secured by consent conditions, and to what extent these pre-mining investigations and operational monitoring methods will also be delivered for the CIT, SRX, and SRE pits.

   In your response, please discuss the recommendations of GeoSolve which can be found at pages 4 and 5 of the memorandum attached as Appendix A.

2. Report B.28 does not appear to contain an assessment of the potential external effects of the proposed RAS underground mining operation. The primary potential external effect is mining induced subsidence. Please indicate whether (and when) a full subsidence assessment report will be undertaken, and how it is proposed to secure any recommendations of this assessment in consent conditions and/or management plans.

2.2 Excerpt from GeoSolve report 240480.03

Geotechnical Engineering Assessment Memo
Bendigo-Ophir Gold Project Fast-Track Application Assessment

The Otago Regional Council commissioned the report, it is dated 03 December 2025.

The following excerpt relates to establishment and maintenance of wall stability of open pits planned to be mined at the Bendigo-Ophir Gold Project, the *Rise and Shine* (RAS, the major excavation), *Come in Time* (CIT), *Srex* (SRX) and *Srex East* (SRE) pits.

Pit Stability

Pit Details

…

The pit stability of the RAS pit has been assessed in document B.28 [#]. The stability of the other pits does not appear to have been assessed at this stage.

We understand that backfilling is not proposed for the RAS and SRX pits; these are instead to remain as open pits with associated pit lakes in perpetuity. There will therefore remain an unstable zone around these pit margins on closure and bunding is proposed to prohibit public access.

…

[#] **Document B.28**
Peter O'Bryan & Associates report 25043 to Matakanui Gold Limited, June 2025
Geotechnical Assessment Open Pit and Underground Mining - Rise & Shine Deposit

A comprehensive report has been provided on the stability of the RAS pit. The report has been prepared using existing data and acknowledges that additional investigations and analysis are required to fully assess the pit stability. We understand that it is proposed to update the stability assessment as excavation progresses based on observations of performance.

The report notes that pit stability will be influenced by defects within the rock, particularly the schist foliation and the various shear zones associated with known faulting. The Thomson Gorge Fault (TGF) in particular has been identified as being potentially problematic due to its low shear strength.

Pit monitoring using remote techniques is recommended.

The report does not specifically look at abandonment and provides no indications of potentially unstable zones around the pit margins on completion. This is not a significant issue as any recommendation at this stage would be preliminary and subject to a detailed assessment once additional investigations had been carried out and the performance of the batters of the pit had been assessed during excavation. One potential issue is noted below given the proximity of the pits to the site boundary.

For the mine operator, pit stability is critical to ensure the safety of the workforce and to prevent delays to mining.

However, it is important that any land outside the mine site is not destabilised by the mining operations as public access may be possible in these areas (i.e. the land bordering the southwest of the CIT pit and the RAS pit is public conservation land). Typically, a long-term factor of safety (FoS) of at least 1.5 under static loading conditions would be required within land accessible to the public and it appears from the stability analysis of the RAS pit when at full depth that this may not be achieved.

Based on the basic section and the analysis results there is a risk that these typical target factors of safety are not achieved in public land, and as noted this analysis is preliminary. The section above would also suggest there is the potential for sliding along the TGF to extend beyond the site boundary, although likely not onto Department of Conservation (DoC) land.

The other issue is that as the RAS pit will not be backfilled, an exclusion zone around the pit will need to be established on abandonment as noted above to permanently restrict the public from approaching the pit edge. Typically, this involves the construction of a rock bund (generally 2 m high by 5 m wide) and this exclusion zone could encroach on DoC land, although buttressing of the pits walls could mitigate this issue on closure.

As noted above, the stability of the other pits does not appear to have been assessed and hence the risk to land outside the site has not been adequately addressed. If the additional investigations and assessment indicate that there are stability concerns, then as for the RAS pit these could likely be mitigated by buttressing.

Suggested Consent Conditions

The consent holder must ensure that the stability of ground outside the project site boundary is not adversely affected by the construction or operation of any of the deep mining pits.

1. A minimum FoS of 1.5 shall be maintained under static loading for all ground outside the site boundary, unless an alternative FoS is agreed in writing by the Consent Authority.
2. Prior to excavation, the consent holder shall provide a geotechnical stability assessment prepared by a suitably qualified and experienced practitioner. The assessment must:
   - Model potential failure surfaces and assess FoS for areas outside the site boundary.
   - Identify any mitigation measures or monitoring required to maintain compliance.
3. All stability assessments and monitoring reports shall be prepared by a suitably qualified chartered geotechnical or mining engineer.

Upon abandonment or closure of the mining pit, the consent holder must:

1. Designate an exclusion zone around the pit to prevent public access. The extent of the exclusion zone shall be determined based on residual stability risks and safety considerations and must be approved by the Consent Authority.
2. Construct and maintain physical barriers (e.g. bunds) and install appropriate signage to restrict entry and warn of hazards.
3. Ensure that these measures are designed and implemented to remain effective in perpetuity, including provisions for ongoing maintenance or transfer of responsibility to a suitable entity.
4. Submit an Exclusion Zone and Public Safety Management Plan to the Consent Authority for certification prior to site abandonment. The plan must detail:
   - Location and dimensions of the exclusion zone.
   - Type and specifications of barriers and signage.
   - Long-term maintenance arrangements.

Underground Mine Stability

The assessment of underground mining primarily considered the development of the working from a mining perspective rather than looking at the potential external effects of this operation.

Review Comments

The main issue that needs consideration is mining-induced subsidence. We understand that this has not been assessed by the applicant due to key inputs required for the assessment being dependent on the mining techniques adopted, which are yet to be finalised.

The land that is potentially affected by subsidence is currently undeveloped and future development is unlikely given its location. The effects of any subsidence are therefore unlikely to be significant.

The panel could consider a consent condition requiring a full subsidence assessment report.

The portal for the underground mining will be constructed at the toe of an ancient schist landslide.

3.0 Responses to Otago Regional Council RFI

The proposed consent conditions (D.01 – D.04) of the application do not appear to capture the recommendations of report B.28 in relation to pre-mining investigations and operational stability monitoring for the RAS Pit, nor does there appear to be a management plan specific to the RAS Pit (or the CIT, SRX, and SRE open pits).

3.1 General Issues

Report B.28 outlines requirements for further and ongoing geotechnical investigation in relation to proposed open pit and underground mining.

Additional geotechnical drilling relevant to open pit mining commenced in January 2025 and to date seven (7) of eight (8) boreholes have been completed and logged. Assessment is continuing.

Observation of pit wall behaviour during pit development is fundamental to expanding knowledge of rock mass characteristics (and variations thereof) and hence improving prediction of the response of the ground to mining. This process of confirmation and/ or amendment of wall design parameters will be ongoing throughout the life of the mine. It is the essential link to understanding the complexities of the rock mass and slope systems.

The process will be based on information obtained from wall mapping (confirmation and extension of the geological and structural geological models) and quantitative wall monitoring (of displacement rates and deformation patterns). Further modelling will be a component of this process.

Quantitative pit slope monitoring can be based on a number of methods, the most basic being electro-optical distance measurement (EDM) monitoring of the displacements of prisms installed in an array or arrays over the slope(s). An automated system with telemetric connection to Mine Control can provide near-real time monitoring.

Unmanned aerial vehicle (UAV (drone)) captured data will be provided by Mine Survey. These data permit ready and frequent construction of high-resolution digital terrain models (DTM) and successive models can be overlaid to identify wall displacements (as well as assessing compliance to design). With currently available technology models can be updated readily if prescribed trigger displacements are approached or exceeded.

Ground Control Monitoring Plans (GCMP) will be developed to describe and inform the implementation of the open pit and underground mining plans.

The objective of the GCMP is to prevent ground-related injuries, damage, and loss of access by systematic management of geotechnical risk. The GCMP defines accountabilities for ground control; the technical foundation of the mining plans and the GCMP must:

1. Define accountabilities for ground control
2. Specify the technical foundation of the mining plans and the GCMPs
3. Identify credible ground-related hazards (geohazards) and means of avoidance/ mitigation
4. Define how stability is achieved by design
5. List day to day controls to manage geohazard risks
6. Specify how ground/ slope/ stope behaviours are measured and assessed
7. List and define Trigger Action Response Plans (TARPs)
8. Define the manner of response to sudden or significant ground events
9. Outline personnel training in recognising and reporting geohazards
10. Describe incident management procedures and back-analysis
11. Describe how changes / deviations from design are to be derived and implemented
12. Include a formal audit and continuous improvement program.

Separate GCMPs will be prepared for and applicable to the open pit and underground operations. The open pit GCMP may include all pits provided separate sub-sections describe differences in mining geometry and geology/ structural geology (where applicable).

Appendix A provides a sample Table of Contents for the Bendigo-Ophir open pit GCMP.

Substantial additional work is required before an underground GCMP can be developed. Mining methods and extraction sequences need to be devised in some detail and further modelling conducted before the technical management process for the underground operation can be defined.

Document compilation can take place only when detailed designs are developed, although the fundamental framework and descriptions of procedures may be laid down earlier.

➧ In your response, please discuss the recommendations of GeoSolve:

1. A minimum FoS of 1.5 shall be maintained under static loading for all ground outside the site boundary, unless an alternative FoS is agreed in writing by the Consent Authority.

➧ 2. Prior to excavation, the consent holder shall provide a geotechnical stability assessment prepared by a suitably qualified and experienced practitioner. The assessment must:
   - Model potential failure surfaces and assess FoS for areas outside the site boundary.
   - Identify any mitigation measures or monitoring required to maintain compliance.

➧ 3. All stability assessments and monitoring reports shall be prepared by a suitably qualified chartered geotechnical or mining engineer.

Two dimensional (2D) limit equilibrium analysis (LE analysis, LEA) has limited applicability in the RAS pit due to the significant influence and variation of pit wall-fault intersection geometry around the pit. Meaningful analyses can be performed only for the south-west and north-east sectors (discussed later).

Three dimensional (3D) finite difference stability analyses for the sequentially mined RAS pit were performed in September 2025. Results show that disturbance adjacent to the NZ Department of Conservation (DOC) exclusion zone is negligible/ minimal, even for lower bound material strength under inferred worst case loading conditions. The equivalent FOS for the south-western sector of the pit (the only sector adjacent to the DOC zone) is > 1.5.

Further 3D modelling is recommended, particularly to follow the planned sequential excavation of the finalised/ detail RAS pit configuration.

Assessments to date have been performed by appropriately qualified and chartered personnel:

- Peter O'Bryan — BE (Mining UNSW) MEngSc (Rock Engineering JCUNQ) MAusIMM (CP)
- David Sainsbury — BEng (Geol. Eng. RMIT) MScTech (Eng. Geology & Hydrogeology UNSW) PhD (Mining Geomechanics UNSW)

3.2 Underground Mining

> Report B.28 does not appear to contain an assessment of the potential external effects of the proposed RAS underground mining operation. The primary potential external effect is mining induced subsidence. Please indicate whether (and when) a full subsidence assessment report will be undertaken, and how it is proposed to secure any recommendations of this assessment in consent conditions and/or management plans.

Assessment of possible underground mining-induced subsidence is to be performed when further/ sufficient information is available regarding mining method, stoping extents, pillar dimensions and positioning and extraction sequence and type and planned extent of placement of stope backfill, as well as additional information on major structures and rock mass characteristics in the area overlying proposed stoping panels. The consequences of subsidence need also to be considered.

While observational methods provide valuable data, numerical analysis is anticipated necessary at RAS (given areal extent and relatively shallow depth below surface). A hybrid approach based on continuum modelling (for example, FLAC3D), discrete element modelling (for example, 3DEC) coupled with monitoring data is the preferred approach.

The assessment will be risk based, aiming to identify potential subsidence mechanisms, making conservative assumptions where uncertainty exists; establishment of a monitoring system capable of detecting early displacement; development of TARPs linked to subsidence indicators; and identifying contingency controls (including exclusion zones, sterilisation, backfilling). No single method is sufficient.

3.3 Satellite Open pits

The stability of the other pits does not appear to have been assessed at this stage.

Preliminary analysis of slope stability at the Come in Time (CIT), Srex (SRX) and Srex East (SRE) pit have been performed using current geological interpretations and material properties derived for the RAS pit. While site-specific investigations are yet to be performed for these pits, extrapolation of properties for initial analysis is reasonable given the consistency of conditions observed at RAS.

Pit wall stability in these satellite pits will be influenced by the geological structure and rock mass (material) shear strength of the same lithologies that will be encountered at RAS. Analyses for the planned RAS pit indicate that the Thomson Gorge Fault (TGF) and conditions in the hangingwall and immediate footwall of that zone has a significant influence on wall stability, dependent of course on the spatially varying geometry of pit walls. The influence of the TGF on the satellite pits is anticipated to be significantly less than that predicted for the RAS pit.

On completion the CIT pit is to be fully backfilled. There is no possibility of disturbance to the DOC protected area from deterioration of CIT pit slopes. The pit is adjacent to the DOC protected area but at a stand-off great enough to prevent crest retreat in response to long-term deterioration the western pit slope reaching the DOC boundary.

The SRX pit is not expected to be adversely affected by the TGF. Intersections between the pit walls and the fault zone occur only in the floor, the lowermost north-east wall batters (where the TGF dips into the wall) and in the endwalls which are oriented to cut across the strike of the fault.

The shallow SRE pit undercuts the fault in some way in most sectors; however, the potential for instability is inferred to be limited. The small size of the pit limits the size of areas affected by conceivably feasible (but unexpected) wall instability and enables preventive or remedial action to be managed with only minor impairment to operations.

CIT PIT

The planned CIT open pit trends north north-west, sub-parallel to the strike of the TGF (Figure 1). The minimum floor elevation and highest walls are achieved in the northern sector of the proposed pit. Mining at CIT (Figure 2) largely excavates the TGF. The eastern wall will be formed dominantly in the TZ3 (hangingwall unit), with only localised exposure of TZ4 in the lowermost batters in the northern sector. The western wall will largely be within the TZ4, beneath the TGF, with only minor localised zones of the uppermost batters in the northern sector in TZ3. The TGF will be exposed only in the endwalls of the pit (which cut across the strike of the fault).

SRX & SRE PITS

The south-western wall of SRX will expose only TZ4 (Figures 3 & 4). The north-eastern SRX wall will be dominantly in TZ3, with only localised TZ4 exposure in lowermost batters at a few positions along the wall. The influence of the TGF on SRX slopes is thus limited to the immediate area around its exposure in the pit floor or in the lowermost batter of the north-eastern wall. The limited height of the north-eastern wall means that the mass of any destabilised portion of the wall would be insufficient to drive displacement of that mass up the dip of the TGF. The FOS for the highest section of the north-eastern wall is > 2.0, with the associated surface restricted to the lower wall within a zone of inferred poor quality at the base of the TZ3 unit (to ~ 10m into the hangingwall of the TGF)

The western wall of the planned SRE pit undercuts the TGF, mostly restricted to the uppermost one to two batters; however, to the north this means the undercut occurs close to the toe of the wall. Results from limit equilibrium stability analyses suggest that the SRE slopes will be stable against shear failure through the rock mass or along the TGF; however, this disregards the possible adverse influence of structure which theoretically initiate wall destabilisation. The impact of such an event would be restricted to the pit and given the size of the pit would be managed readily without major impact on operations. Backfilling the pit precludes potential for despoilment of the surrounding area.

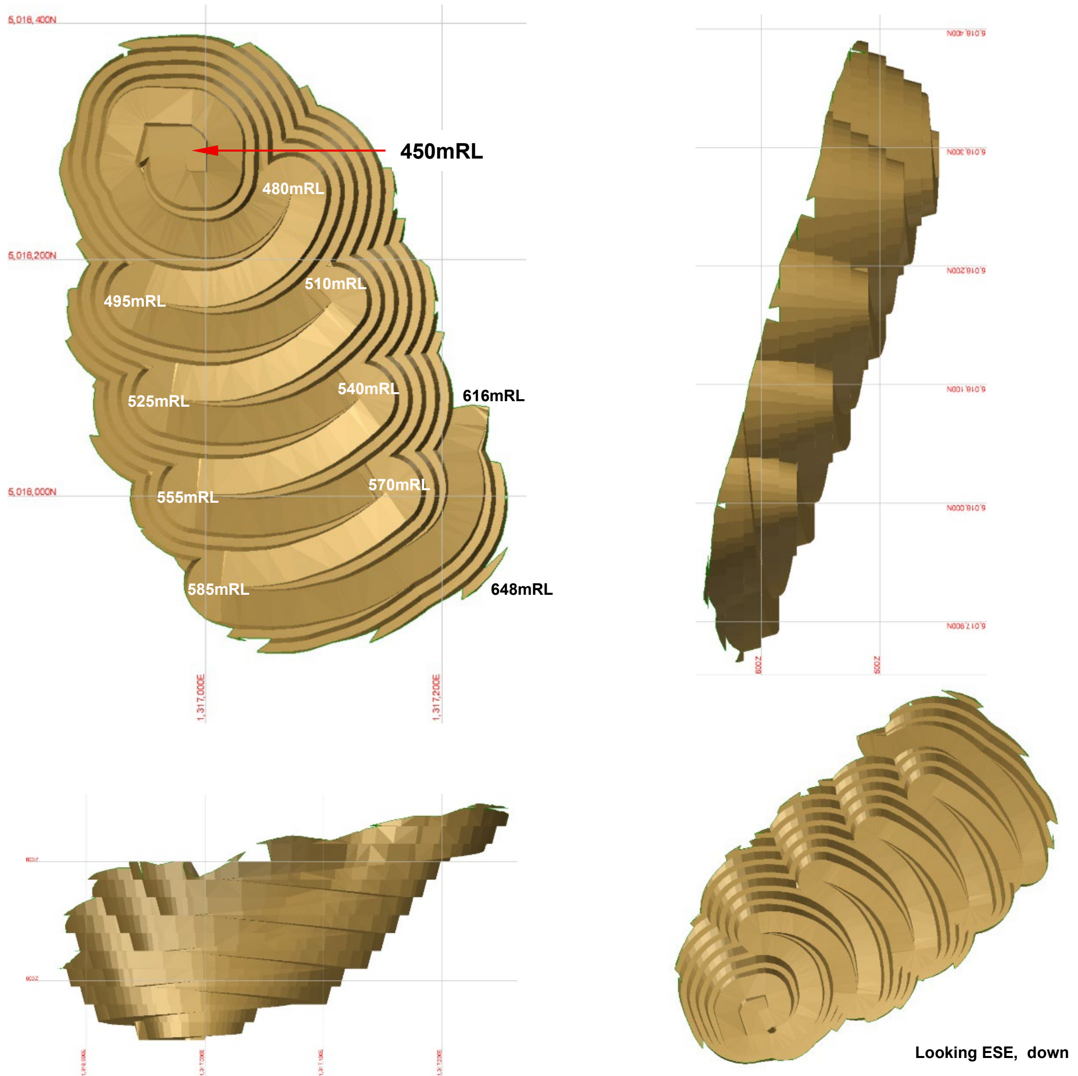


Figure 1 CIT: planned final pit configuration

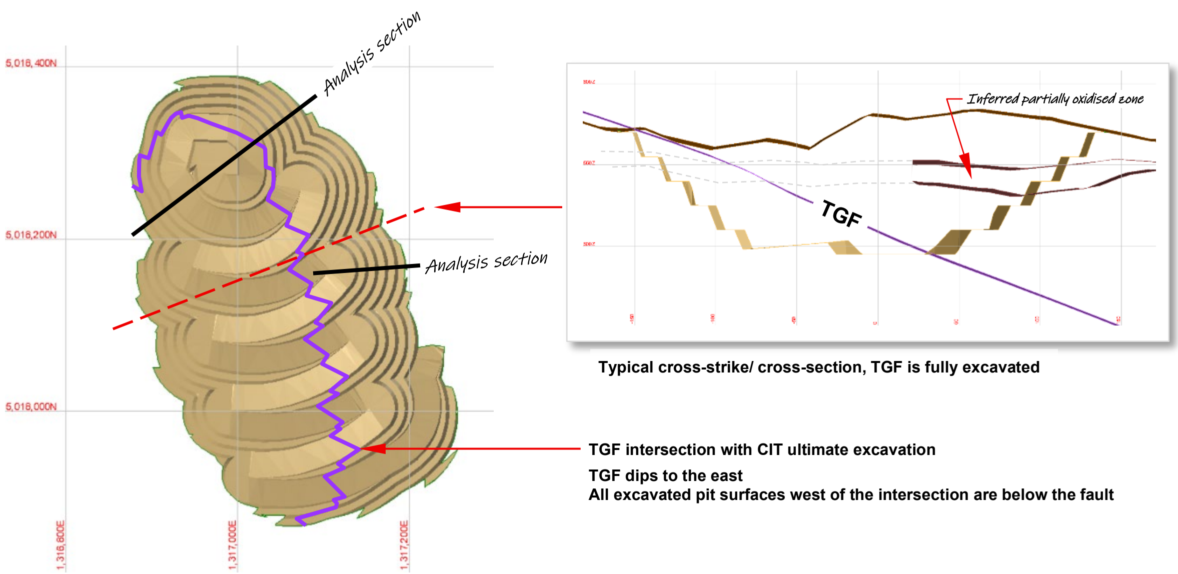


Figure 2 CIT: planned final pit configuration & intersection with TGF

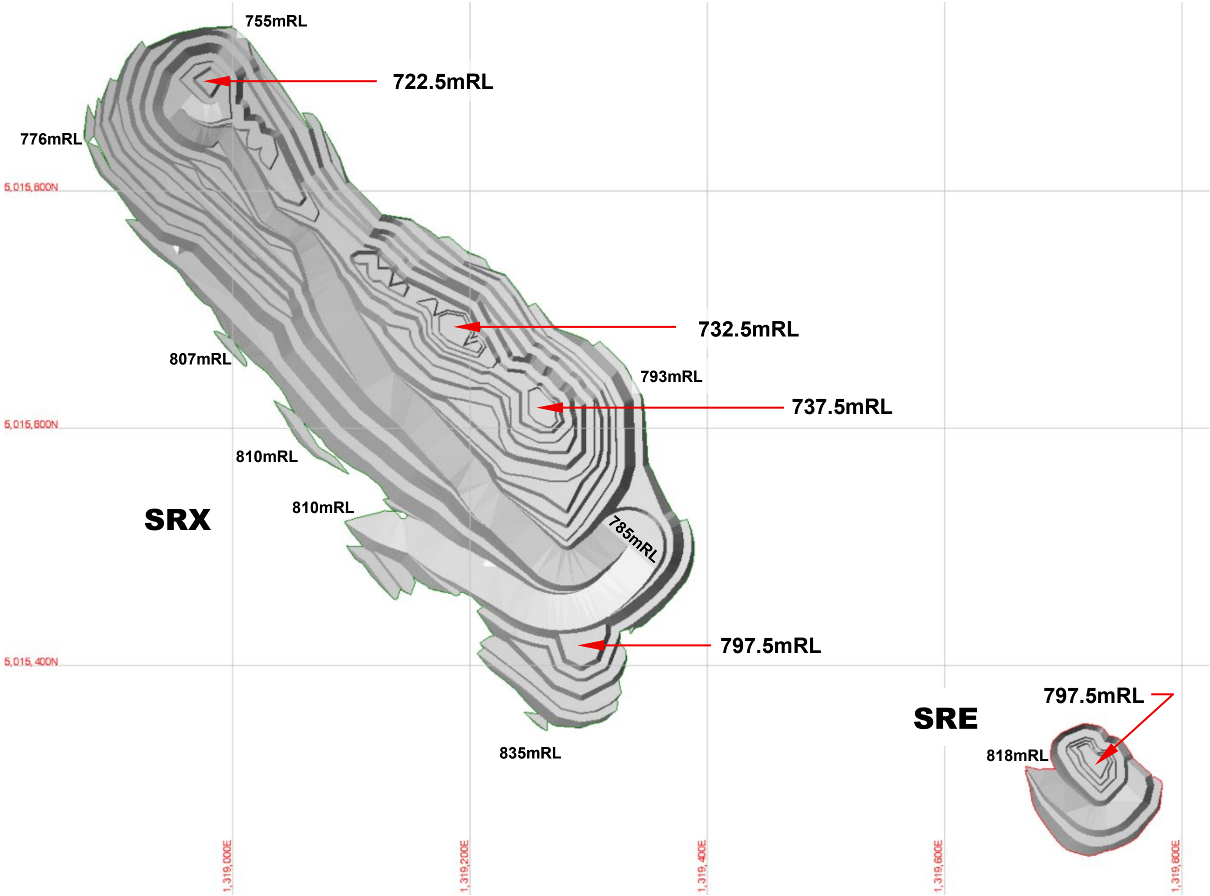


Figure 3 SRX & SRE: planned final pit configurations

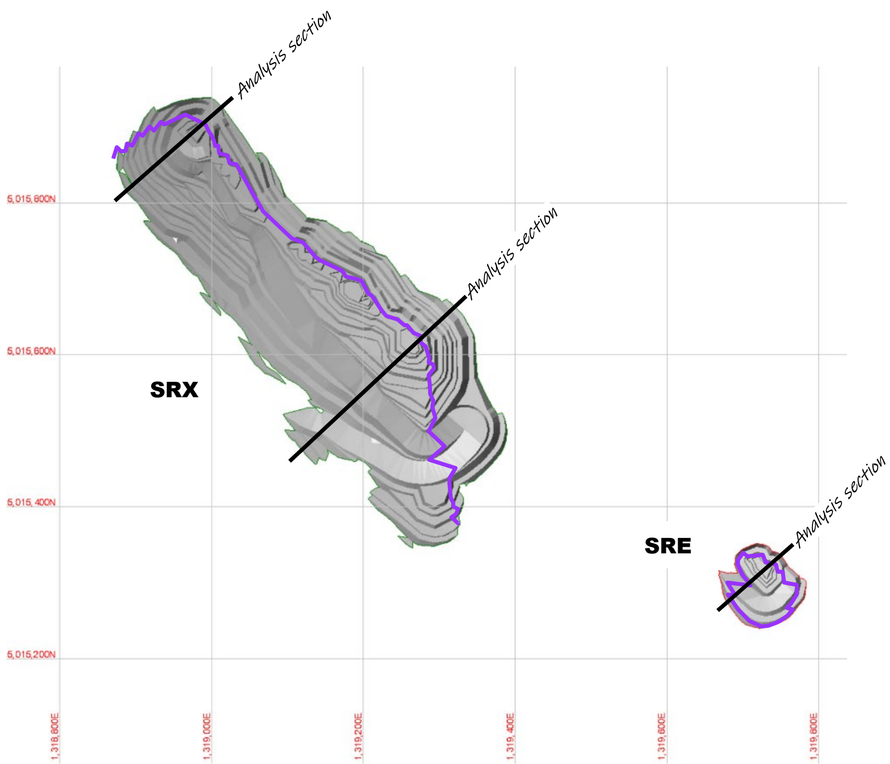


Figure 4 SRX & SRE: planned final pit configurations & intersections with TGF

3.4 Long-term pit wall degradation

Upon abandonment or closure of the mining pit, the consent holder must:

4. Designate an exclusion zone around the pit to prevent public access. The extent of the exclusion zone shall be determined based on residual stability risks and safety considerations and must be approved by the Consent Authority.
5. Construct and maintain physical barriers (e.g. bunds) and install appropriate signage to restrict entry and warn of hazards.
6. Ensure that these measures are designed and implemented to remain effective in perpetuity, including provisions for ongoing maintenance or transfer of responsibility to a suitable entity.
4. Submit an Exclusion Zone and Public Safety Management Plan to the Consent Authority for certification prior to site abandonment. The plan must detail:
   - Location and dimensions of the exclusion zone.
   - Type and specifications of barriers and signage.
   - Long-term maintenance arrangements.

Open pit mine slopes are deliberately designed to be stable for a finite operational life, rather than in perpetuity, in order to minimise waste stripping while maintaining an acceptable level of safety during mining. The removal of confining stresses during mining usually leaves pit slopes in a metastable condition and following completion of mining, and beyond site abandonment, open pit walls continue to relax and progressively degrade.

Wall stability in the long-term is reliant on residual rock mass strength and block interlocking and is also influenced by groundwater conditions. Over time, stress redistribution leads to gradual dilation of joints, opening of existing discontinuities, and reduction in shear strength along structural planes.

In the absence of ongoing monitoring and maintenance, localised failures may progressively coalesce.

As the RAS pit will not be backfilled, an exclusion zone around the pit must be established on abandonment as noted above to permanently restrict the public from approaching the pit edge.

A further potential issue is the proximity of the pits to the DOC site boundary.

A minimum FOS of 1.5 shall be maintained under static loading for all ground outside the site boundary, unless an alternative FOS is agreed in writing by the Consent Authority

Data currently available to assist in preliminary definition of an exclusion zone to prevent public access into the potential zone of influence (ZOI) and to the crest of the abandoned pit comprise the LiDAR based topographic pick-up of the site, the proposed ultimate pit excavation, the interpreted base of complete oxidation (BOCO) and top of fresh rock (TOFR) defined, respectively, by the upper and lower surfaces of the solid defined in the *02 oxidation_ras-partial.dtm* file; and the DOC exclusion zone.

In the absence of local guidelines, the Western Australian guideline for *Safety Bund Walls around Abandoned Open Pit Mines* [#] has been used for preliminary assessment of abandonment barriers for the RAS and SRX pits. The WA guideline is illustrated and described in Figure 5.

The configuration of all currently proposed open pits relative to the NZ Department of Conservation (DOC) protected area to the south and west of the mining area are shown in Figure 6.

The inferred greatest potential for long-term slope deterioration and associated pit crest retreat at RAS is that within the red rectangle shown in Figure 43 along the south-western edge of the ultimate pit.

[#] Western Australian Department of Mines, Petroleum and Exploration guideline *Safety Bund Walls Around Abandoned Open Pit Mines (1997)*

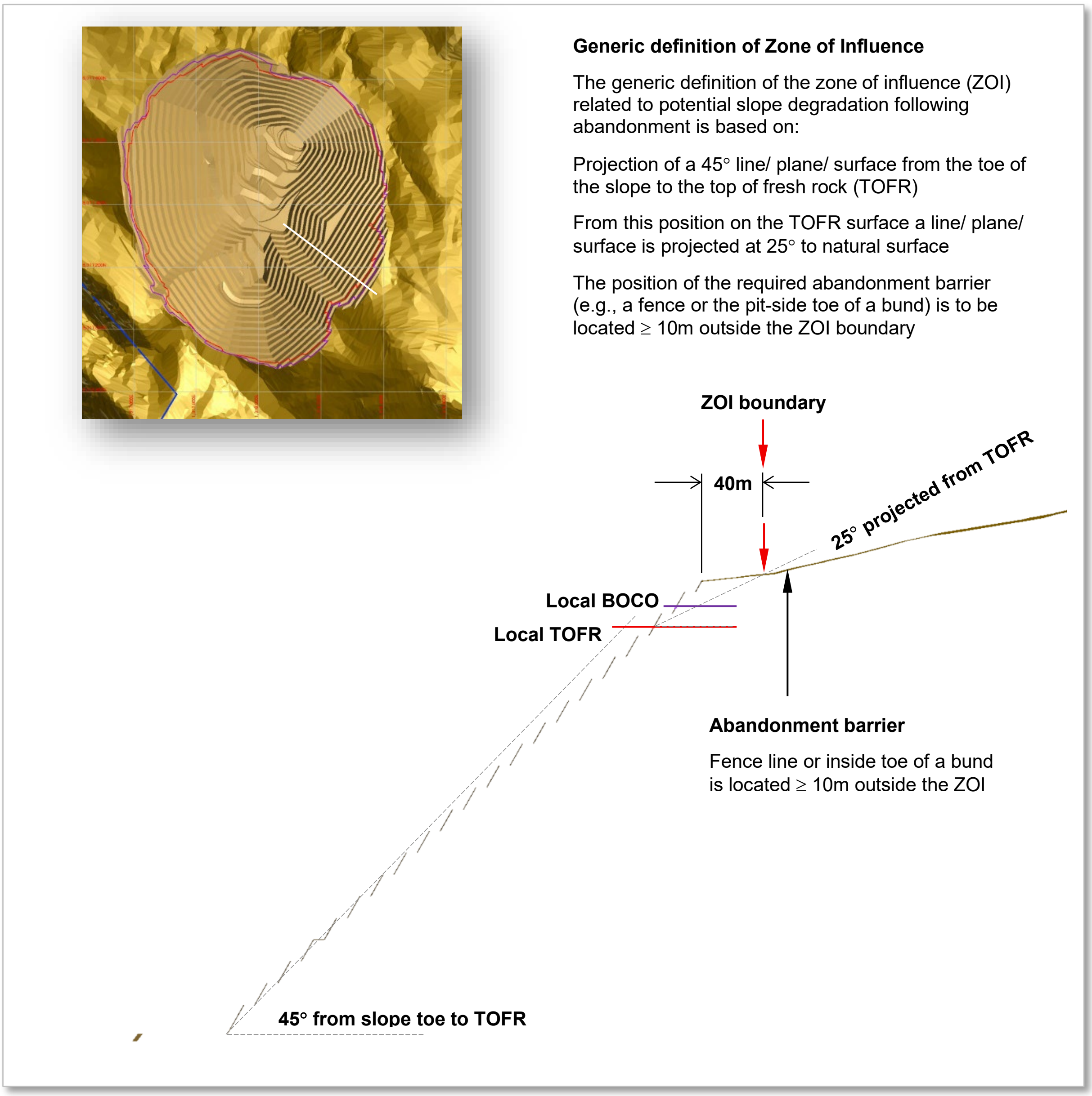


Figure 5 Definition of ZOI & location of abandonment barrier

Thirty-six (36) sections were cut at 10m spacings within the critical area. Each section is normal to the slope forming the south-western sector of the pit. The sections show the planned ultimate wall profile on the section, natural topography, the partial oxidation solid, the TGF footwall, and the location of the north-eastern boundary of the DOC area.

The section at the south-eastern end of the indicated area is shown as Figure 7. All sections are provided in Appendix B.

The offset from the DOC boundary to the generically-defined ZOI is also shown on these sections, noting that the outer toe of an abandonment bund (or an abandonment fence line) must be ≥ 10m further from the pit crest than the ZOI. The ZOI lies outside the DOC area in all cases and leaves a substantial corridor between the DOC boundary and the required abandonment barrier.

The minimum offset from the edge of the ZOI to the DOC north-eastern boundary is ~ 40m. The required 10m offset from the ZOI plus an allowance of ~ 8m (bund base width) leaves a corridor of ≥ 20m width to the DOC boundary, or > 30m if a barrier fence is used. This corridor would run ~ 120m along the wall, with a width ranging from the minimum ≥ 20m to ~ 40m locally.

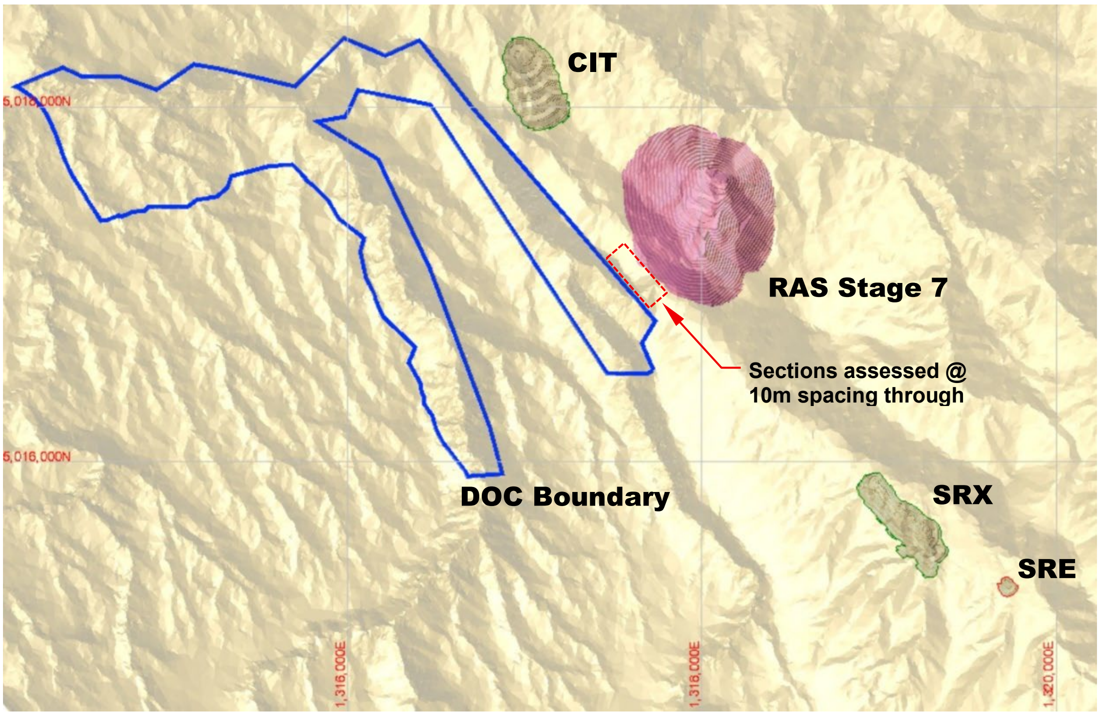


Figure 6 Planned final configuration of open pits relative to the DOC protected area

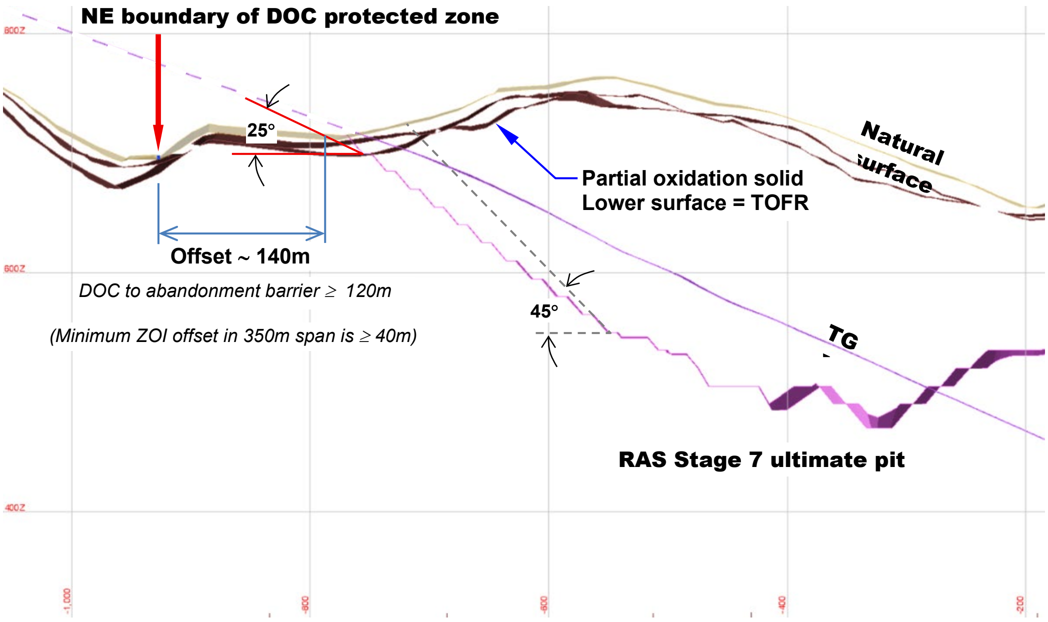


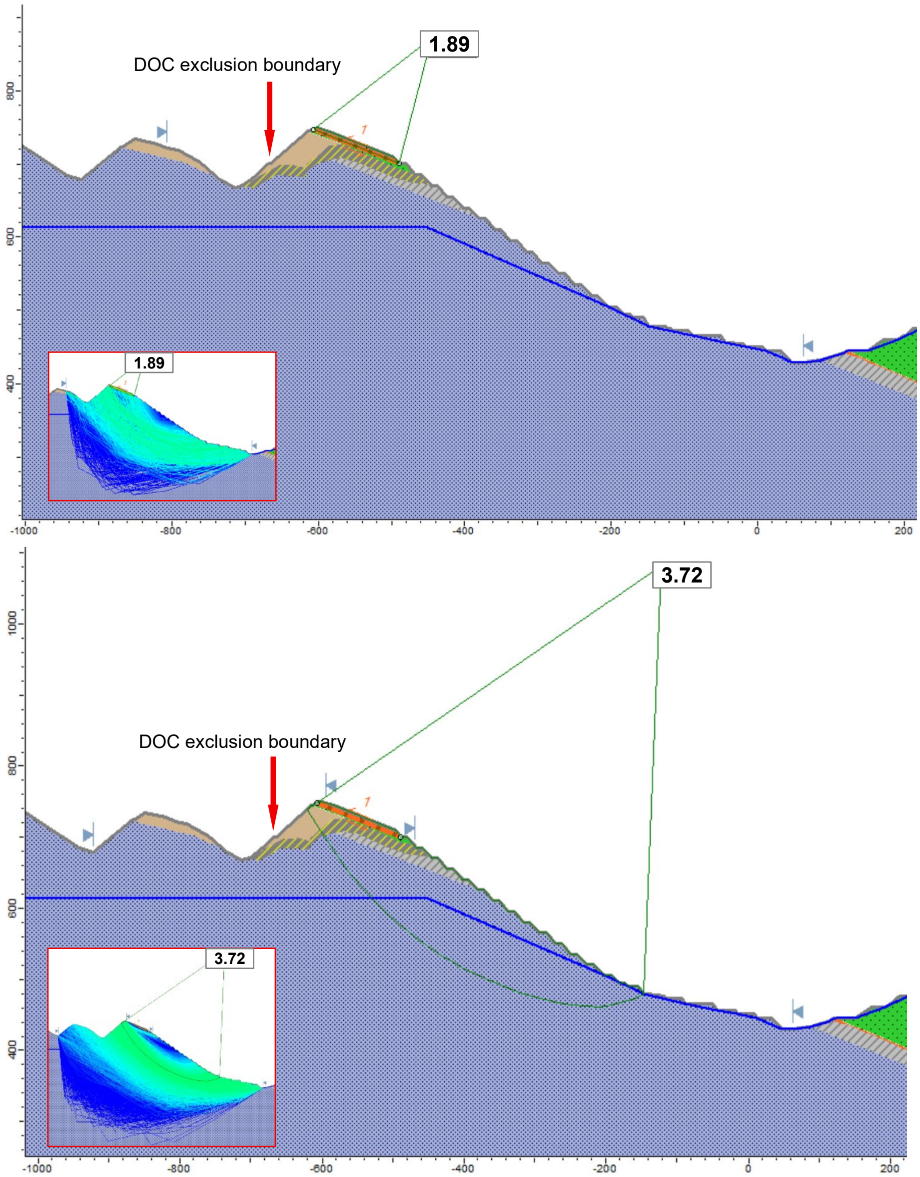
Figure 7 Generically-defined RAS ZOI relative to DOC boundary in SE pit sector

Away from this section in the south-eastern sector of the RAS pit, the required offset to the abandonment barrier will be typically < 40m and locally may be as low as ~ 10m. It is recommended that an allowance be made for a minimum offset of 20m.

Variations in conditions could dictate local adjustment of the ZOI extent and the offset of abandonment barrier positions.

Three-dimensional modelling shows minimal disturbance to the corridor between the RAS pit and DOC exclusion zone. Analysis under inferred worst case conditions indicates that the south-western sector remains essentially intact with equivalent minimum FOS > 1.5.

Use of LE analysis is reasonable for this sector and returns acceptable results, illustrated in Figure 8. Minimum FOS values are well above 1.5 and there is no encroachment on or near the DOC boundary.



Morgenstern-Price minimum FOS 1.89

Search made for surfaces between delineators

Minimum FOS along assume weak layer parallel to the TGF

Morgenstern-Price minimum FOS 3.72

Search head & breakout positions forced to lie between the upper & lower pairs of delineators

Material properties adopted for analyses

Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (°)	UCS (intact) (kPa)	Parameters vary with depth	GSI	mi	D	Water Surface	Hu Type	Hu
Weathered		20	Mohr-Coulomb	100	38						Water Table	Custom	1
TZ3		27	Generalized Hoek-Brown			25000	No	45	12	0	Water Table	Custom	1
TGF		20	Mohr-Coulomb	50	20						Water Table	Custom	1
TZ4		27	Generalized Hoek-Brown			75000	No	60	12	0	Water Table	Custom	1
Transitional		25	Generalized Hoek-Brown			30000	No	40	12	0	Water Table	Custom	1
RSSZ TZ4		27	Generalized Hoek-Brown			65000	No	55	12	0	Water Table	Custom	1

Figure 8 SLIDE2D LE analysis models, Stage 7 predicted minimum FOS
LEA on this section is acceptable, since modelled TGF faithfully reflects true geometry

The CIT pit is located adjacent to the DOC boundary; however, the wall/ crest nearest the boundary is that of the shallow south-eastern sector which lies ≥ 150m from the DOC area (Figure 9). No physical barrier to prevent inadvertent access to a pit void is required as the CIT pit (as noted) is to be backfilled following completion of mining.

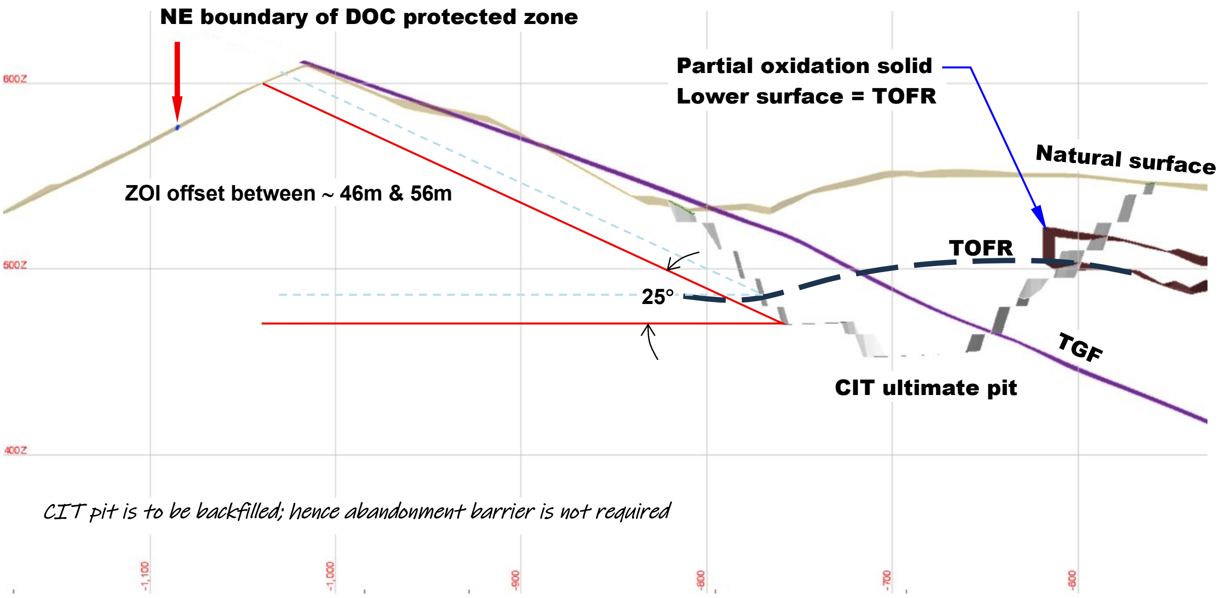


Figure 9 Generically-defined CIT ZOI relative to DOC boundary in SE pit sector
Section is cut normal to the pit wall segment nearest the pit

The foregoing preliminary assessment of the extent of the ZOI is to be refined during mining; actual requirements will be dependent on rock mass conditions in the exposed walls. For example, rock weathering depths are likely to be vary from those currently predicted, and fresh rock mass quality close to the TOFR may be comprised. Local wall instability (during mining) could also influence the potential extent of the long-term ZOI.

The SRX pit is to remain open post-mining; however, there is no possibility of interaction between the pit and the DOC area.

The SRE pit is to be backfilled following completion of mining. As noted, this shallow pit does undercut the TGF hence there is some potential for instability. The impact of such would be restricted to the immediate pit environs and would be managed readily without major impact on operations. Backfilling the pit precludes potential for despoilment of the surrounding area.

4.0 Slope Stability Analyses – General Discussion

The Peter O'Bryan & Associates report 25043 to Matakanui Gold Limited, June 2025 *Geotechnical Assessment Open Pit and Underground Mining - Rise & Shine Deposit*[1] (Document B.28) referred to 2D limit equilibrium analyses.

The analyses were performed using the Rocscience program *SLIDE2* and results (FOS) obtained using the Morgenstern-Price method were reported. The shortcomings/ limitations of the models and analysis methods used were communicated.

Given the observed/ assessed rock mass characteristics it is reasonable to infer that quasi-rotational shear could develop at RAS. The typical poor rock mass quality, pervasive schistosity and high frequency of parting on fabric (in core) and the typically faulted/ sheared nature of TZ3 rocks, rotational shear could be triggered by localised instability (for example, minor structurally controlled block/ wedge sliding).

Once initiated, failure surfaces could develop variously via shear displacement along foliation and across-fabric rupture through 'intact' TZ3 rock and along the significantly weaker core of the TGF.

Undissipated groundwater pressure would exacerbate potential for failure; however, full slope saturation is inferred unlikely in that unloading (by excavation) will relieve near-wall pressures and some drainage will occur from the disturbed/ dilated zones immediately behind pit walls.

While 2D LEA is a helpful screening tool when used in development of designs for large open pits, the method has limitations. Accordingly, and subsequent to the issue of Document B.28, three-dimensional (3D) analysis of staged development of the RAS pit was performed by Geotechnica Pty Ltd, using the Itasca program FLAC3D ✧.

The Geotechnica report and a Technical Memorandum summarising the background to and the findings of the report can be provided.

4.1 Comments on LE analyses

LEA does not readily include the influence of structure. Selective/ localised reduction of material shear strengths or inclusion of weak layers can be included to represent known structures; however, the approach does not always adequately reflect structural influence.

Two-dimensional LEA can be misleading due to other factors, including that it assumes instantaneous mobilisation of strength and disturbing stresses, is ignorant of stress redistribution, unable to identify progressive slope damage development and cannot identify or detect potential for creep.

At RAS, the TGF will have a significant influence on slope stability; however, for most pit sectors the slope loading conditions/ TGF geometry are unable to be modelled faithfully in 2D.

Where slope geometry and the TGF zone align in the south-west and north-east (where the local slope strike and strike of the TGF are essentially parallel) LE analysis is inferred to return meaningful results. Analyses for the south-west sector return low FOS only on sections which include local undercutting of the TGF. Potential for direct down-dip sliding along the undercut fault zone and are restricted to this sector of the planned pit.

Development of instability in the south-western sector is predicted in early mining stages in areas where the TGF is undercut locally. However, the existence of this undercut is inferred to be restricted to a mismatch/ false offset between the interpreted topographic surface, the TGF and the preliminary pit design (Figure 10).

✧ Geotechnica Pty Ltd, Melbourne, Australia
Models developed & analyses run & interpreted by:
David Sainsbury PhD Mining Geomechanics
MScTech Engineering Geology, Environmental Geology & Hydrogeology

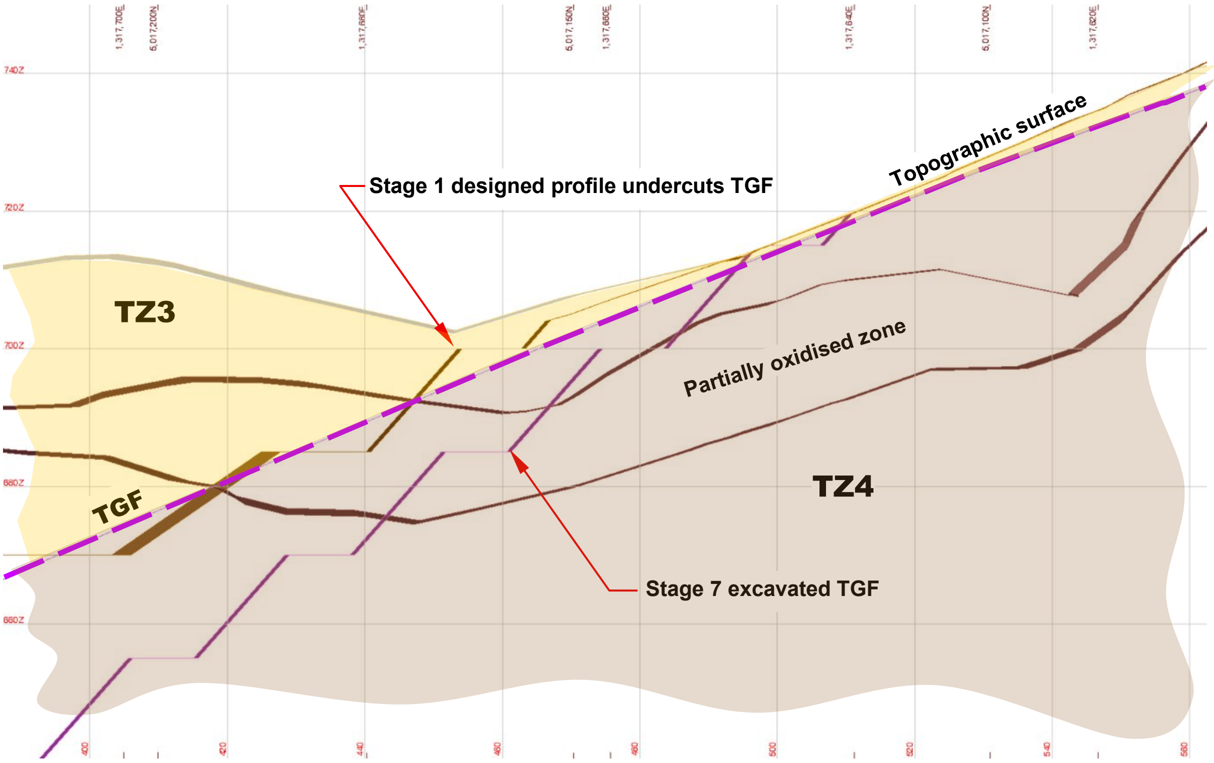


Figure 10 Inadvertent undercut of TGF

It is expected that mining will excavate the TGF, with the uppermost segment of the wall in this sector following the base of or cut beneath the TGF. Adjusting upper pit wall geometry in this manner precludes the theoretically predicted yielding and displacement.

On other sections, where the TGF dip direction is not sub-perpendicular to the local strike of the wall LEA can produce misleading results. While these sections correctly show the position and attitude of the TGF, 2D LE analyses assume these continue infinitely and are unable to consider the significant lateral confinement provided by the wall from the third dimension and must ignore (is unaware of) the changes in relative positioning of the wall and major geological structures.

4.2 Comments on FLAC3D Modelling

In the absence of specific knowledge of the local rock stress regime, models with i) lithostatic loading and ii) an elevated horizontal stress were performed. The RAS pit was analysed in the planned seven (7) mining stages. Analyses were made for the best estimate and inferred lower-bound strengths.

The yielding shown in the south-western sector in initial mining stages is inferred to reflect the abovementioned mismatch in electronic surfaces involving the relative positions of topography, the TGF and planned mining in the sector.

LITHOSTATIC LOADING CASE

Analyses were conducted with lithostatic stresses ($\sigma_{xx} = \sigma_{yy} = \sigma_{zz}$).

While localised yielding is predicted it is inferred that mining to the planned pit configurations would be manageable. Model velocities are adequately dissipated in all Stages.

The simulation results suggest that the pit slope will remain largely stable until the completion of mining under lithostatic stress conditions. Some movement and cracking of the eastern wall can be expected, but large-scale instability is not predicted (Geotechnica, 2025).

Localised batter to bench scale instabilities are evident in in the west wall of Stage 1; however, these do not evolve into large-scale instability in the ensuing mining stages.

Highest displacements develop initially on the eastern highwall wall and progressively spread to the northern and then western wall. Maximum displacements occur above the TGF. Elevated strains develop beneath the TGF in Stage 5 for lower bound strength & in Stage 6 for best estimate strength

Highest strains occur immediately above the TGF and propagate upslope progressively as mining progresses; however, there is no disturbance beyond the boundary of the pit.

HIGH MAGNITUDE HORIZONTAL STRESS CASE

A stress regime based on the results of in situ stress measurement at the Macraes Gold Mine, ~ 90 km west of RAS, was used as an illustration (only) of the potential influence of an elevated initial stress on the performance of open pit walls at RAS.

Although these results are based on a purely hypothetical loading case, the difference indicated (between the predictions of the lithostatic stress model and the high magnitude (elevated) stress model), indicate that knowledge of in situ stresses will be important to assessment of stability performance of open pit excavations and underground mine openings at RAS.

Improved reliability of results from all numerical methods is dependent on model calibration/ refinement based on observed wall behaviour/ performance during mining and further/ ongoing investigation of ground conditions. As such feedback data are obtained and applied to model calibration the usefulness of the method as a predictive tool is improved.

Displacements noted in the FLAC3D modelling under all loading cases for proposed open pit mining highlighted localised zones of significant strain and displacement on the footwall (southern to south-western wall) of the proposed RAS pit. Potential for upper wall instability was noted from Stage 1 and in all subsequent mining stages.

However, it is important to note that the problematic conditions in the south-western sector result from the same undercut issue identified in 2D modelling. A section, cut normal to the wall in this sector, shows the cause of the stability problem (Figure 10).

The upper wall in the southern to south-western sector undercuts the TGF. The undercut occurs during Stage 1 mining. This inferred oversight in design is due to a mismatch and/ or inaccuracy in interpretation of the local position/ shape of the TGF. Whatever the reason, the potential can be removed readily:

- Reconcile the local interpretation of the TGF (position and shape).
- As necessary, adjust the upper wall profile to excavate the TGF.
- Review local conditions in the upper TZ4 to enable identification of appropriate design parameters for the upper pit wall in the affected and adjacent zones.

Figure 11 shows the intersection of the TGF with local topography.

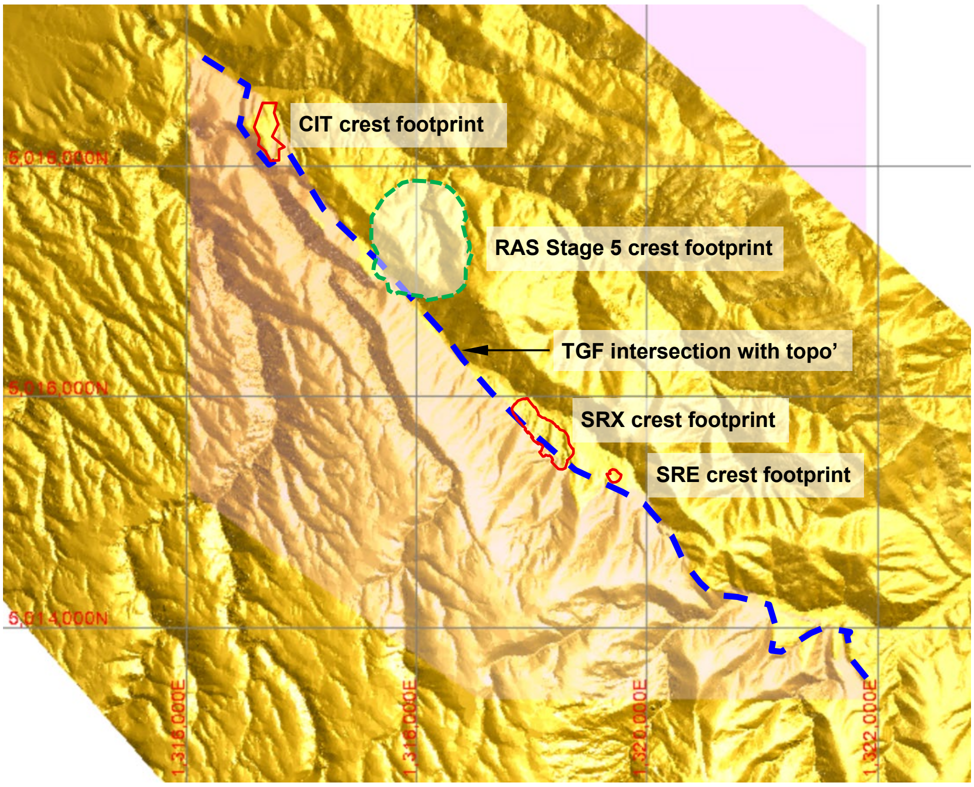


Figure 11 RAS, CIT, SRX & SRE pits relative to topography & TGF surface intersection

5.0 Closure

We trust that the information provided meets your immediate requirements.

The above listed comments are far from exhaustive. Clarification and/ or elaboration of the contents of this memorandum can be provided.

Please contact the undersigned if there is any need for such clarification or comment on other geotechnical issues related to mining.

PETER O'BRYAN *& Associates*
per:

Peter O'Bryan

BE (Mining) MEngSc MAusIMM (CP)
AusIMM Member 203335
Principal

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Damian SPRING

Issued: Draft: 28 January 2026 for review & discussion

Final: 02 February 2026

References

Sainsbury, D, 2025
Numerical assessment of the Rise & Shine open pit slope stability
Geotechnica report 25012_A to Peter O'Bryan & Associates, Santana Minerals Limited (unpublished)

Itasca Inc., 2025
FLAC3D™ (version 9)

APPENDIX A

MATAKANUI GOLD LIMITED

BENDIGO-OPHIR PROJECT

EXAMPLE TABLE OF CONTENTS GROUND CONTROL MANAGEMENT PLAN

GROUND CONTROL MANAGEMENT PLAN

Example / guideline only

Table of Contents

7. DATA COLLECTION & MONITORING

7.1 General

7.1.1 Visual - photography & videos

7.1.2 Mapping

7.1.3 Prisms

7.1.4 *Other options which could be considered*

7.1.7 Laboratory Testing

7.1.8 Piezometers

7.1.9 Rainfall gauges

8. MINING OVERVIEW PLAN

8.1 Open Pit Mine Plans

8.1.1 RAS

8.1.2 CIT

8.1.3 SRX

8.1.4 SRE

8.2 Mine design

8.3 Design parameters

8.4 Mine design & approval

8.5 Mine planning / sequencing

9. IMPLEMENTATION OF THE SLOPE DESIGN

9.1 Pit wall excavation

9.2 Final pit walls

9.3 Wall development blasting practices

9.4 Batter scaling

9.5 Ground support (if relevant for local issues)

9.6 Water / groundwater management e.g. depressurisation drilling

10. REVIEW & RECONCILIATION

10.1 As built reconciliation to design

10.2 Mapping

10.3 Slope performance

10.4 Pit slope failure records

11. GEOTECHNICAL RISK MANAGEMENT

11.1 Document control of design

11.2 Mine design parameters

11.4 Safety protocol

11.5 Trigger Action Response Plans (TARPS)

11.6 Withdrawal of persons in the event of a significant failure

11.7 Protocol after a significant failure event

11.8 Reviews / audits

12. TRAINING

Ground awareness training, hazard identification, job-specific hazards & reporting

Training requirements are job dependent & will vary for various positions

Auditable records are maintained for all employees working (even temporarily) in OPs

Re-training/ refresher training is performed on change of practice/ position &/ or time basis

Standard Work Instructions include reference to geotechnical hazards & awareness required for particular tasks

13. COMMUNICATION & DOCUMENTATION

13.1 Monthly Geotechnical Monitoring Report

13.2 Geotechnical memoranda

13.3 Pit slope failure / rockfall report

13.4 Final wall sign off

13.5 Meetings

13.6 Presentations

All documentation pertaining to the GCMP; geotechnical investigation, assessment & reporting; mine planning; personnel training & work procedures *et cetera* are stored on the Company network.

The GCMP (section by section) lists the locations of relevant documentation & records.

APPENDICES

CRITICAL CONSIDERATIONS

The GCMP is designed such that a third party familiar with standard/ typical mining protocols but not necessarily familiar with the Bendigo-Ophir Project would be able to navigate & interrogate the plan.

Internal audits/ reviews of the GCMP are performed to confirm that the plan exactly reflects site practices. The GCMP must state precisely what the plan contains and how the plan is executed. Procedures/ actions which may have been considered ostensibly beneficial to open pit or underground operations but are not performed are omitted entirely from the GCMP.

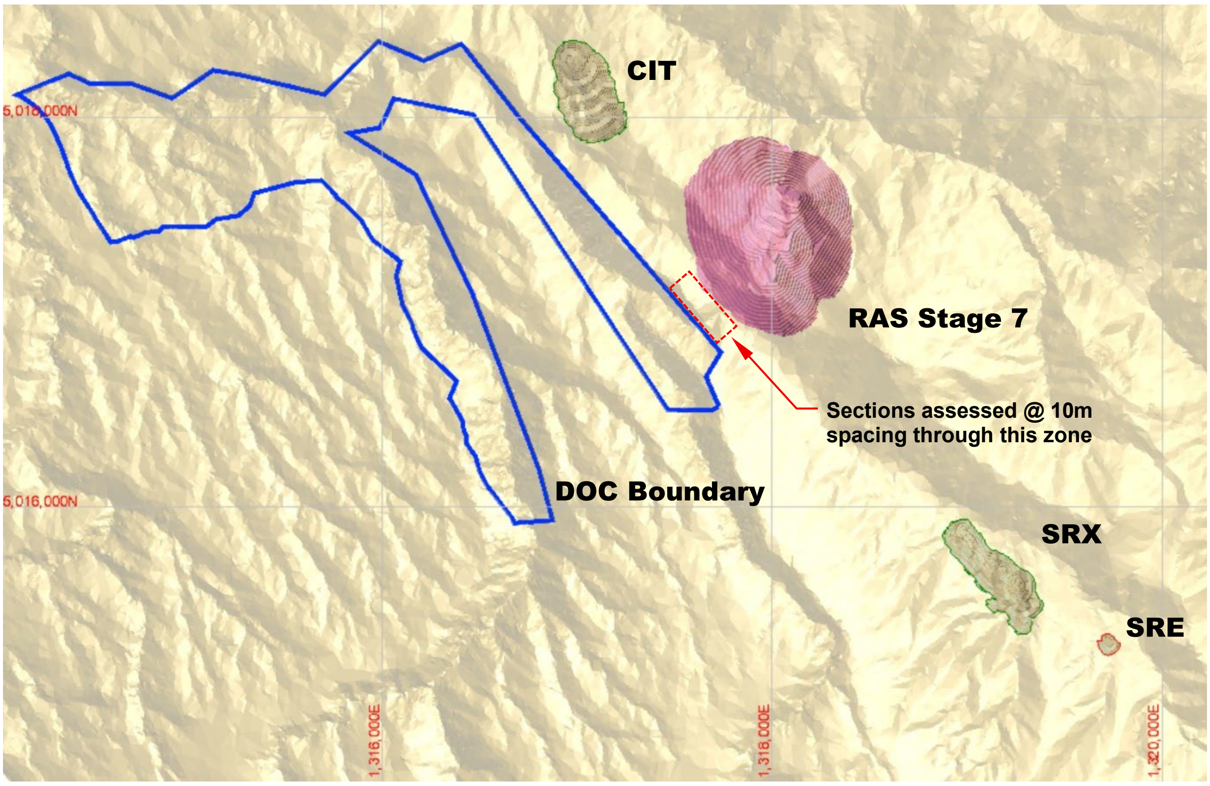
APPENDIX B

MATAKANUI GOLD LIMITED

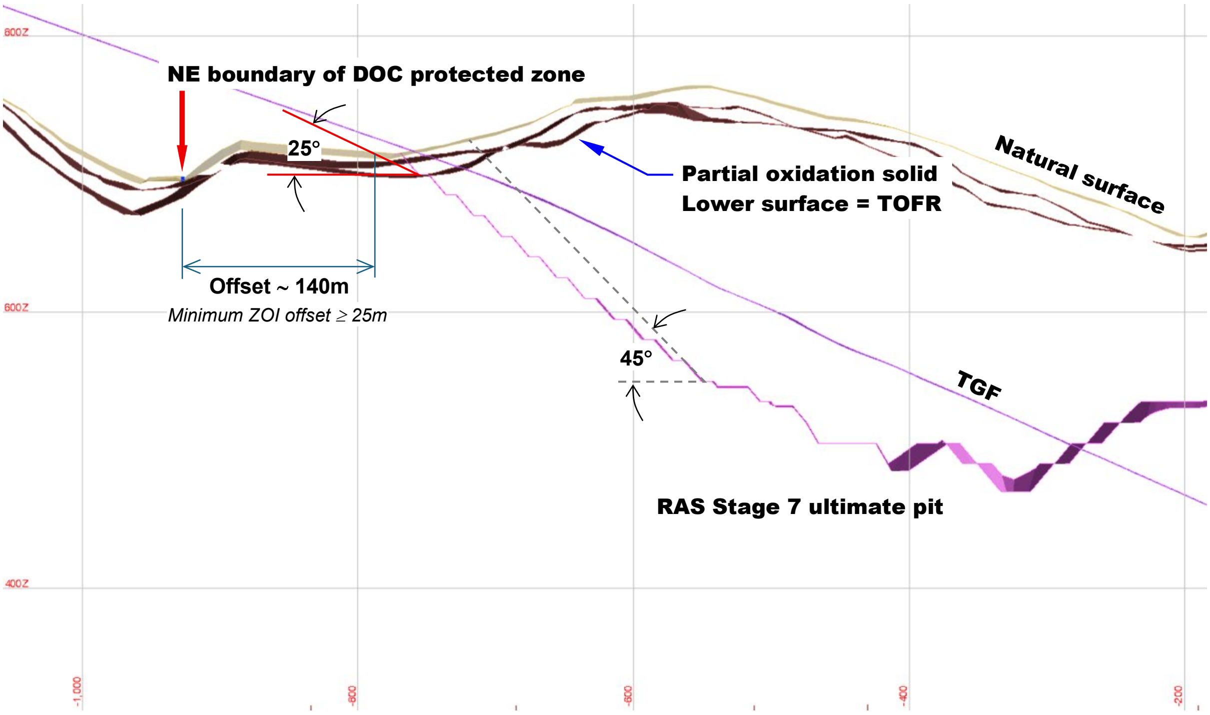
BENDIGO-OPHIR PROJECT

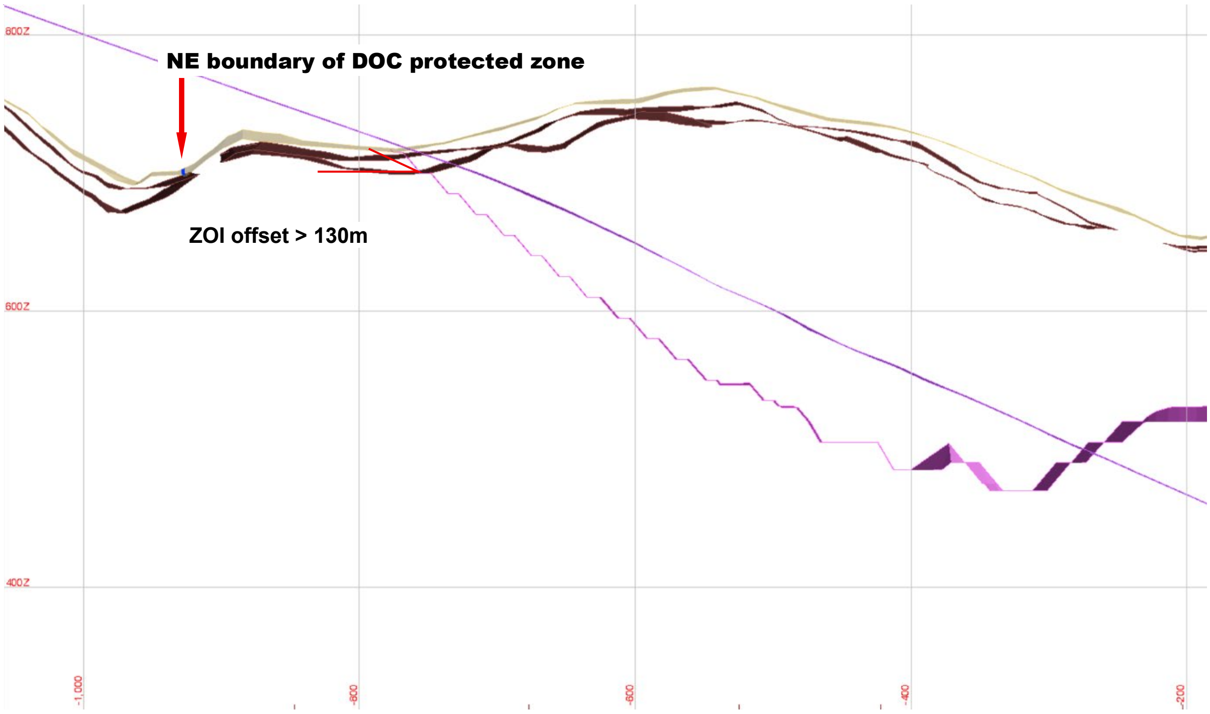
SW SECTIONS ADJACENT TO DOC AREA

OFFSET FROM LONG-TERM ZONE OF INFLUENCE



Proceeding NW along RAS SW wall in 10m steps

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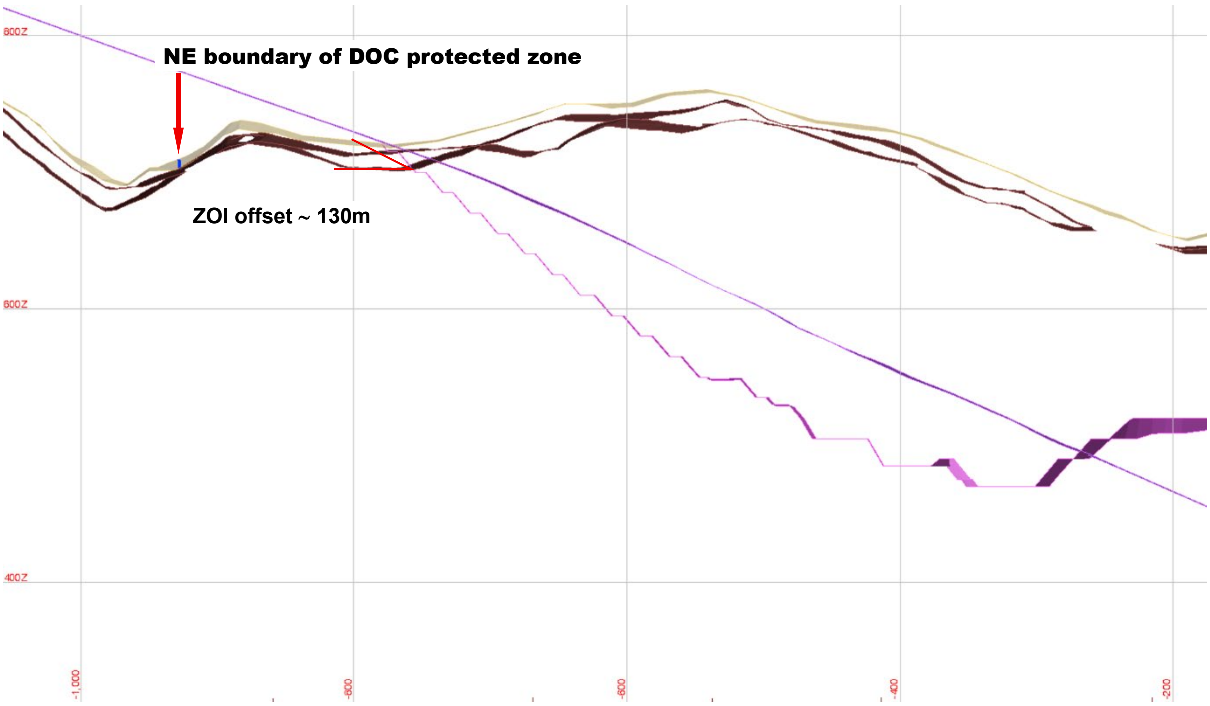
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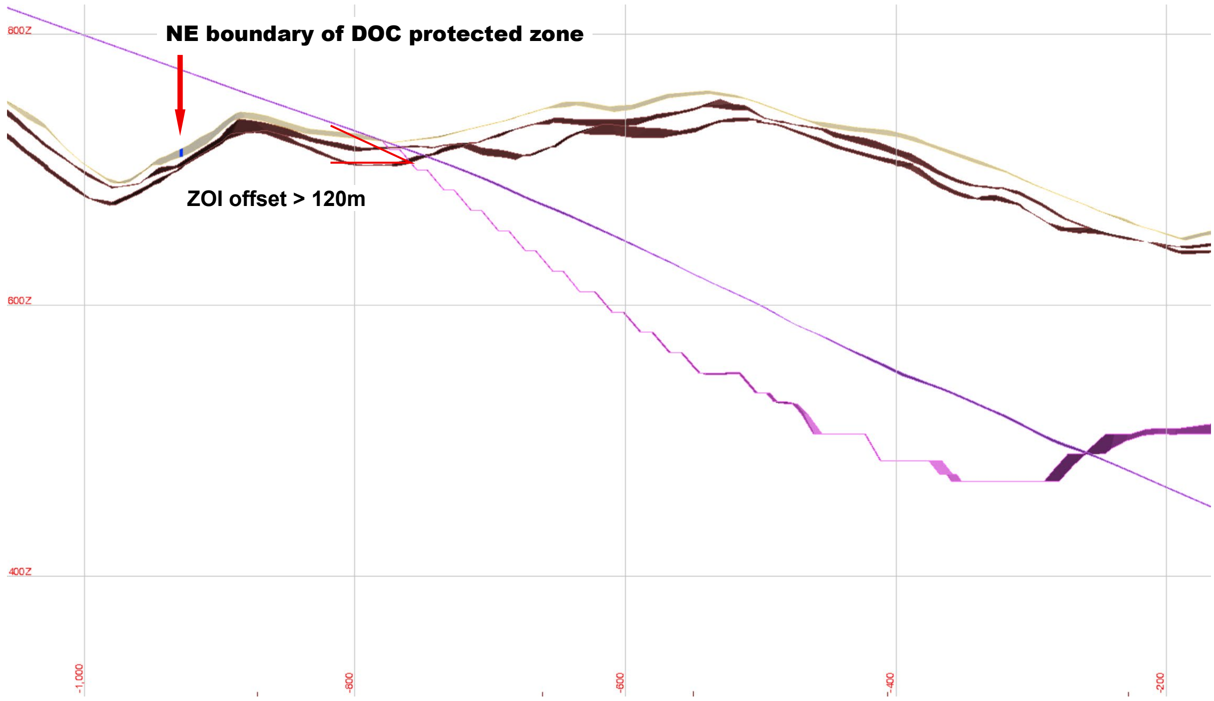

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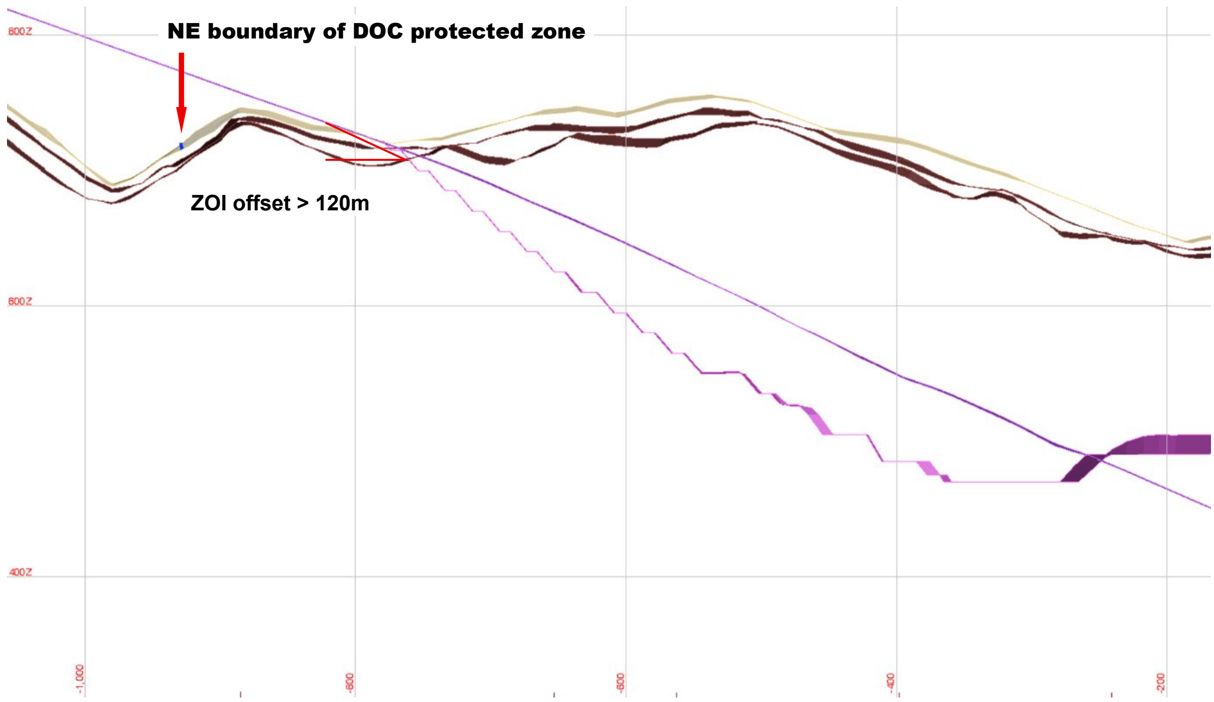

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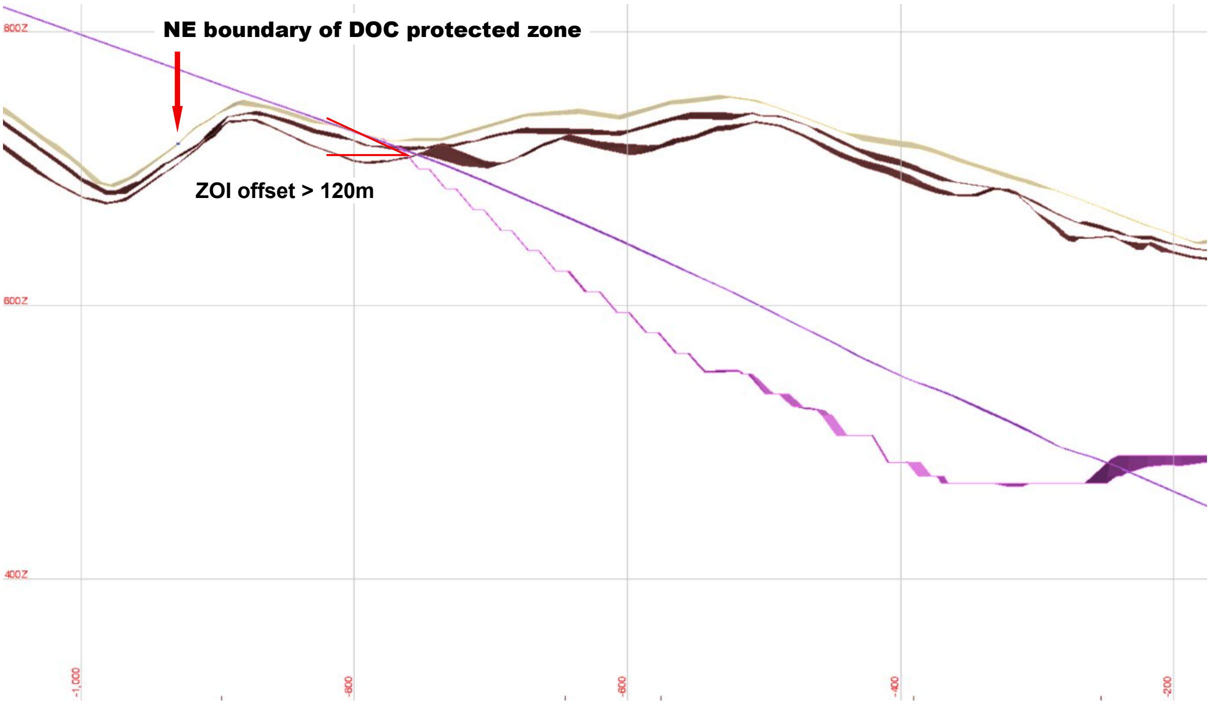
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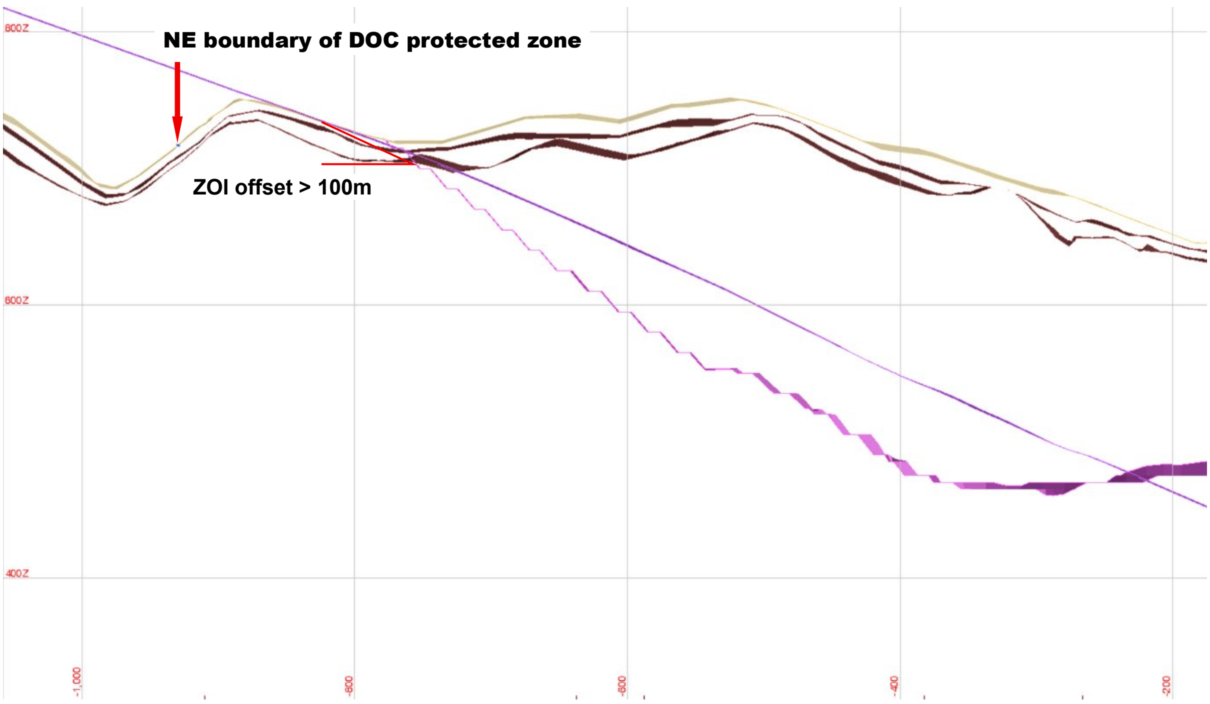
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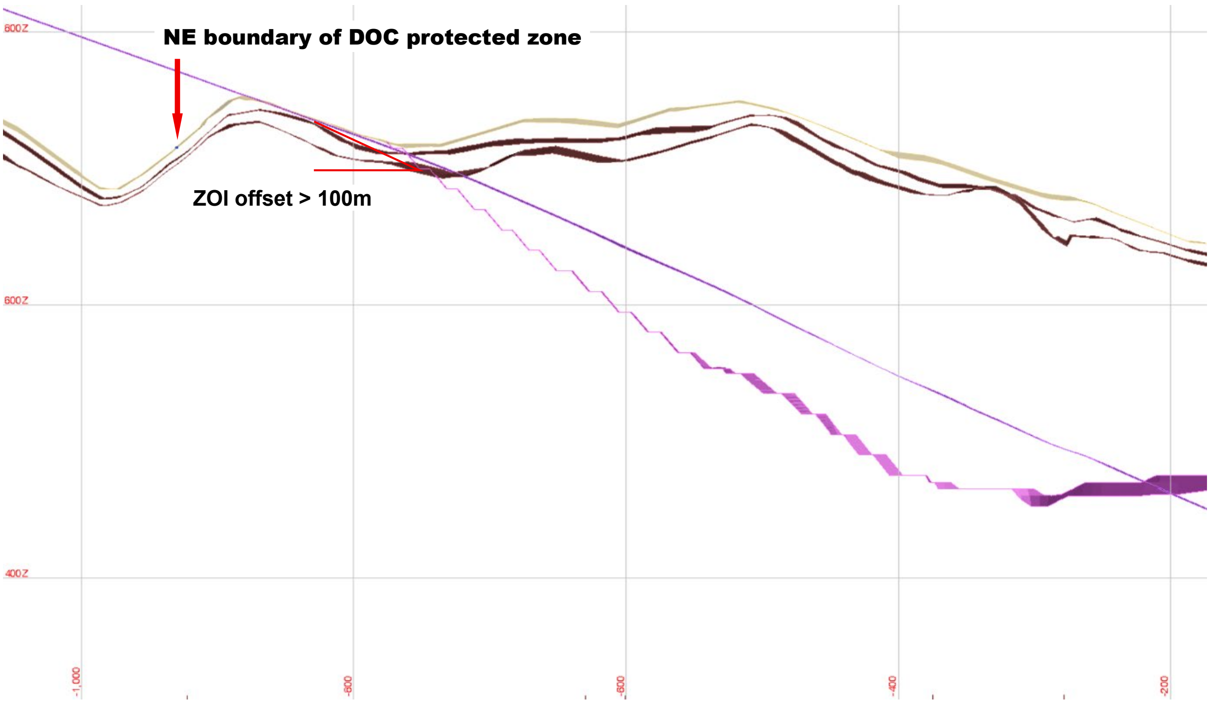
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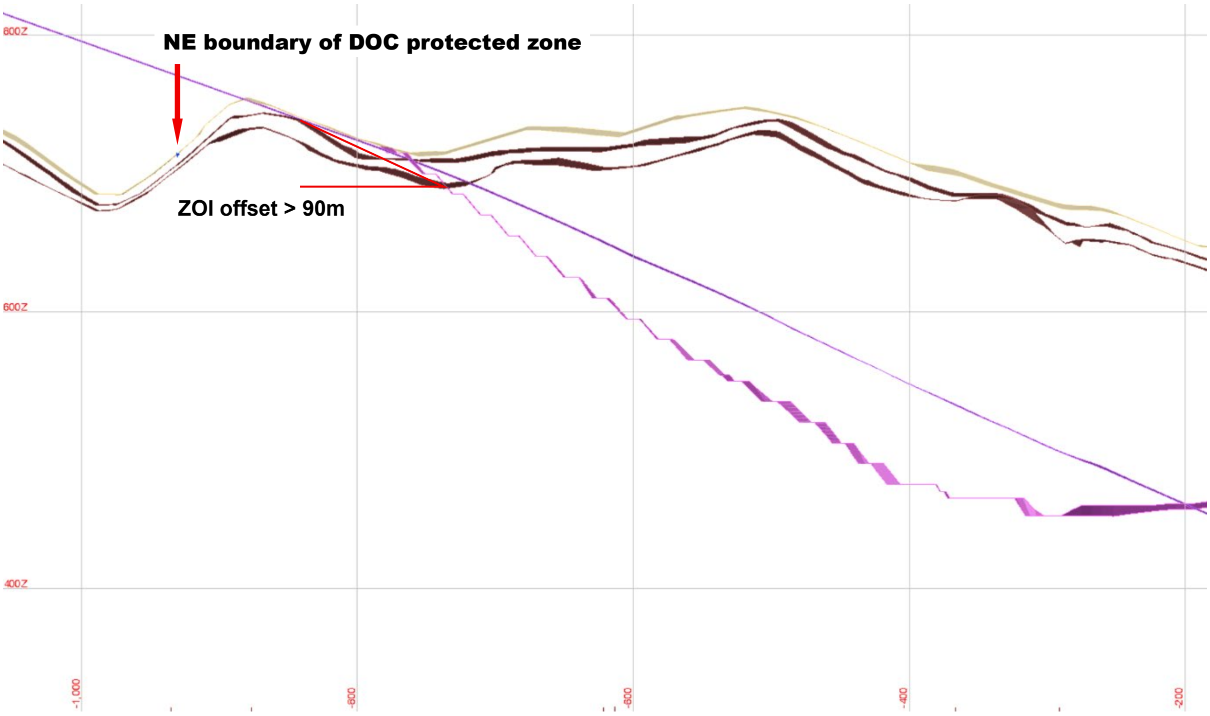
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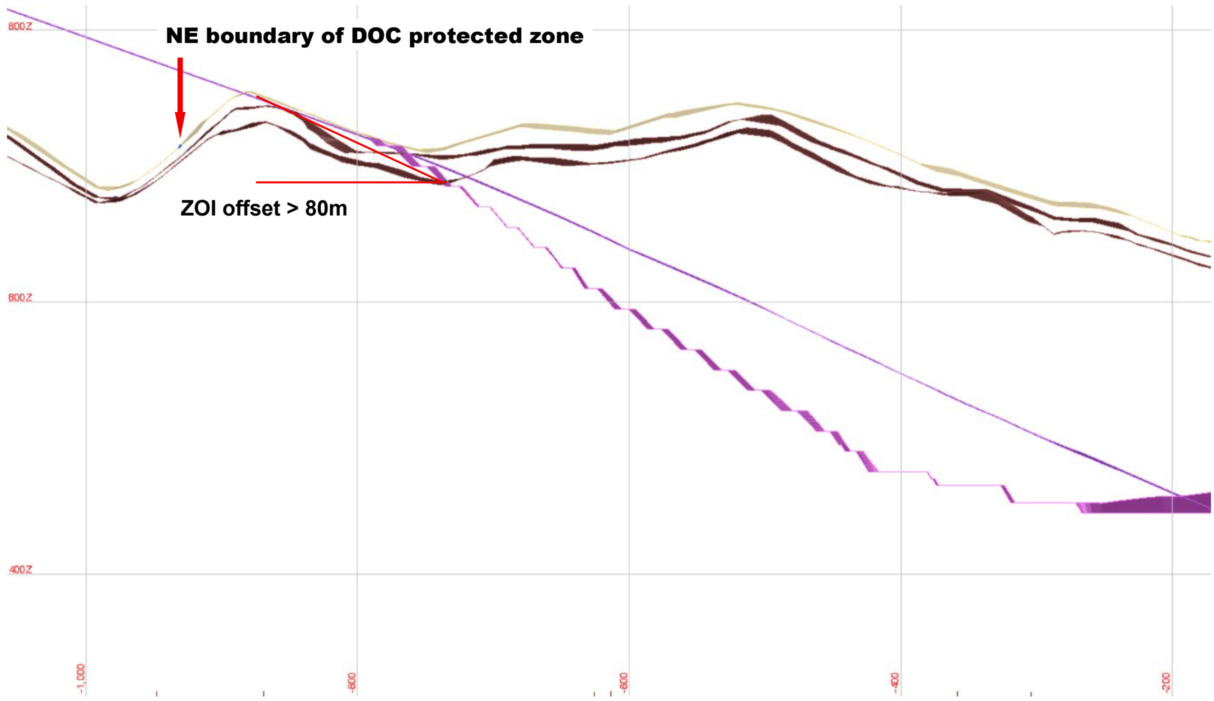
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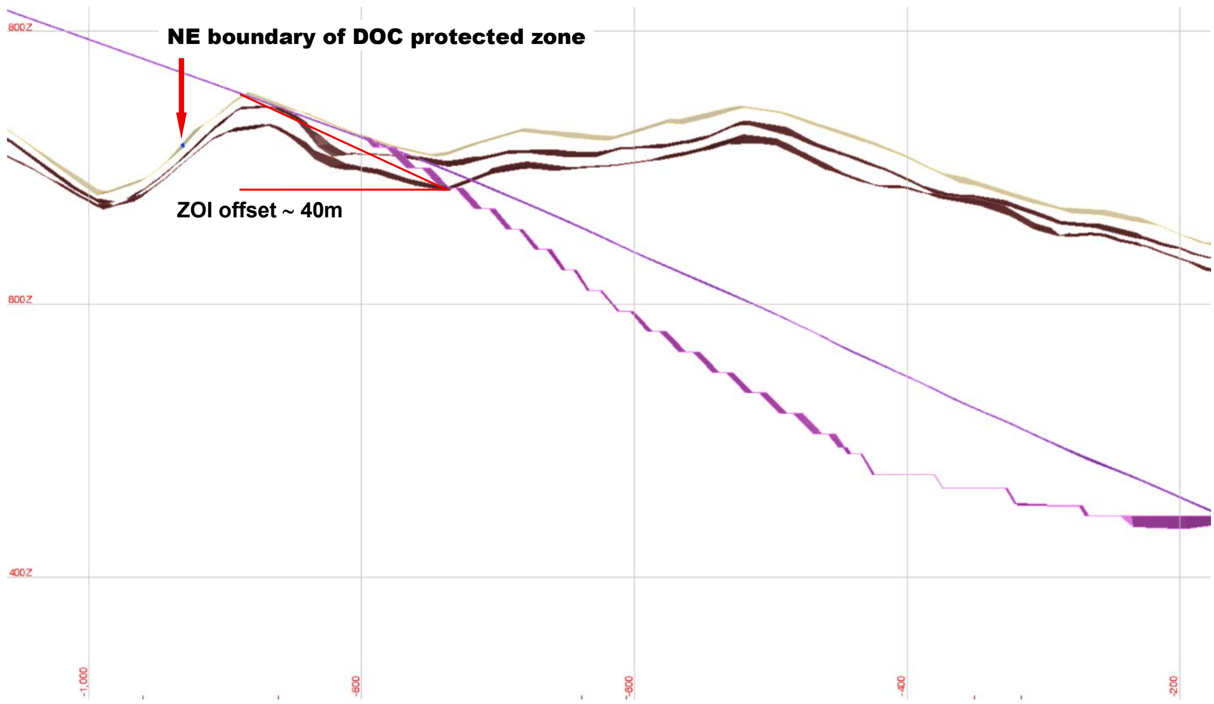
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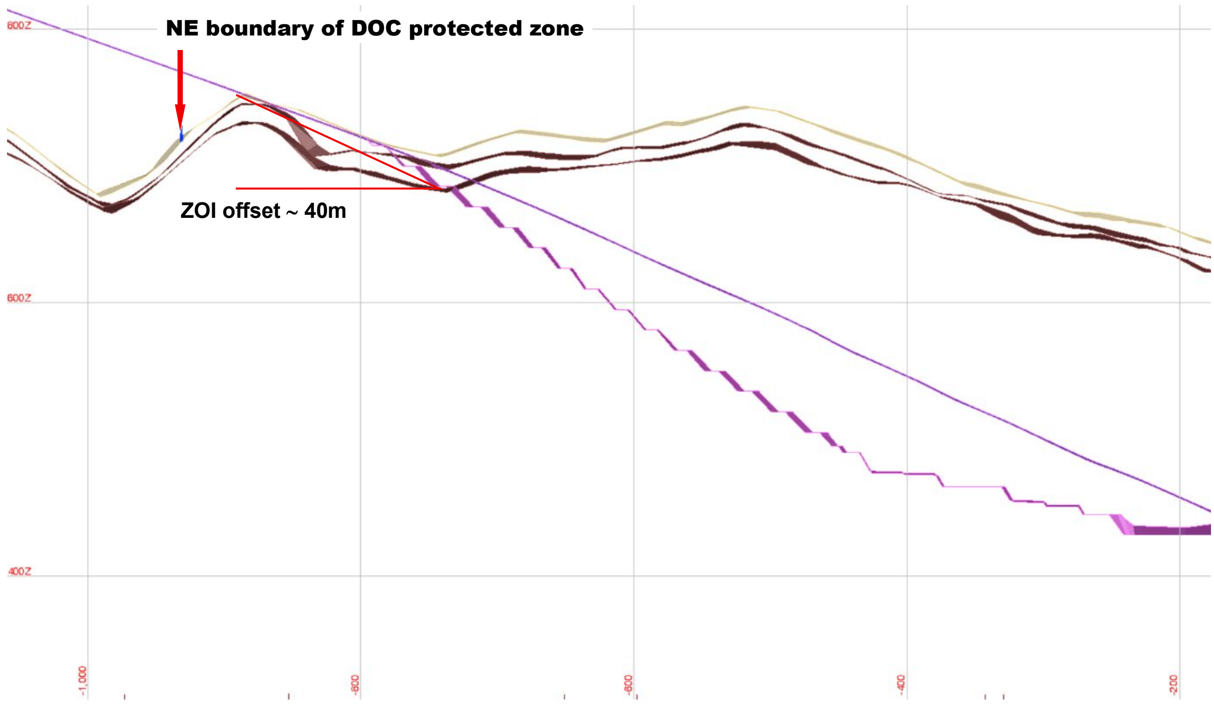

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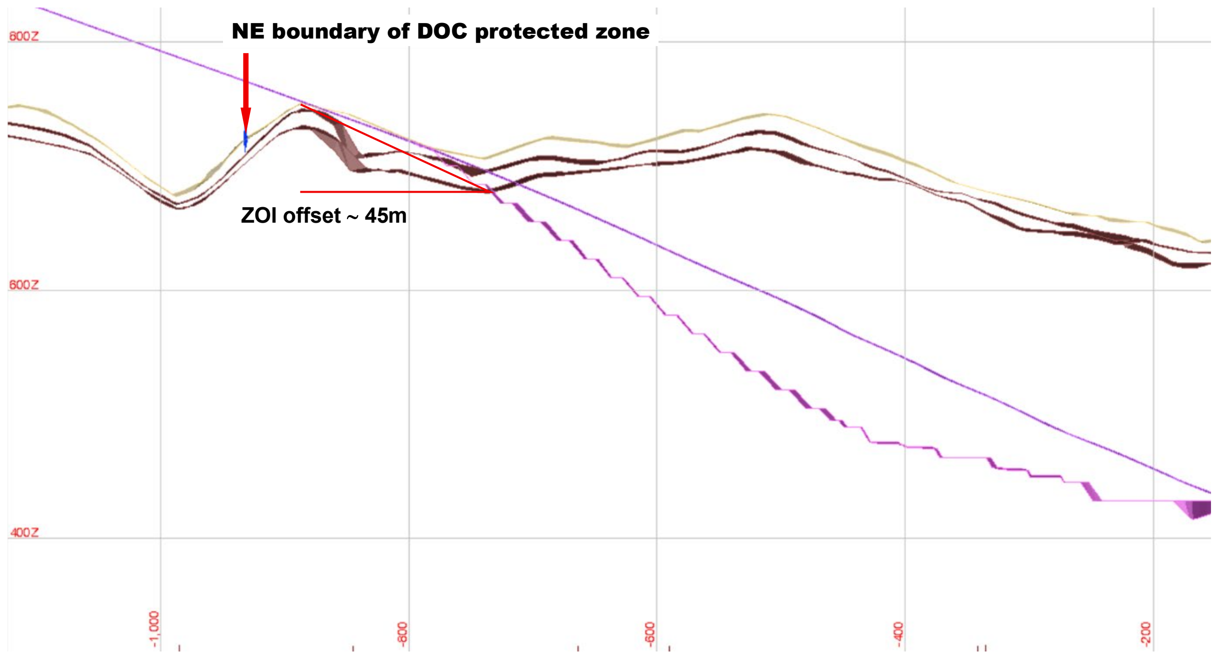

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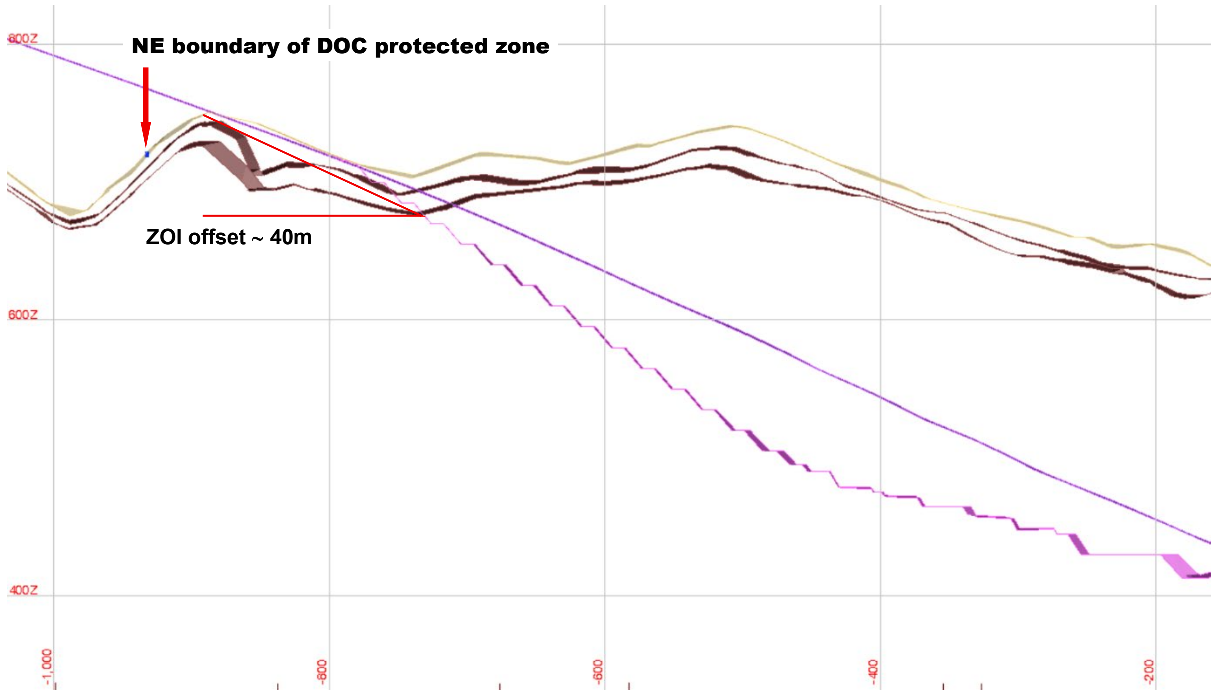
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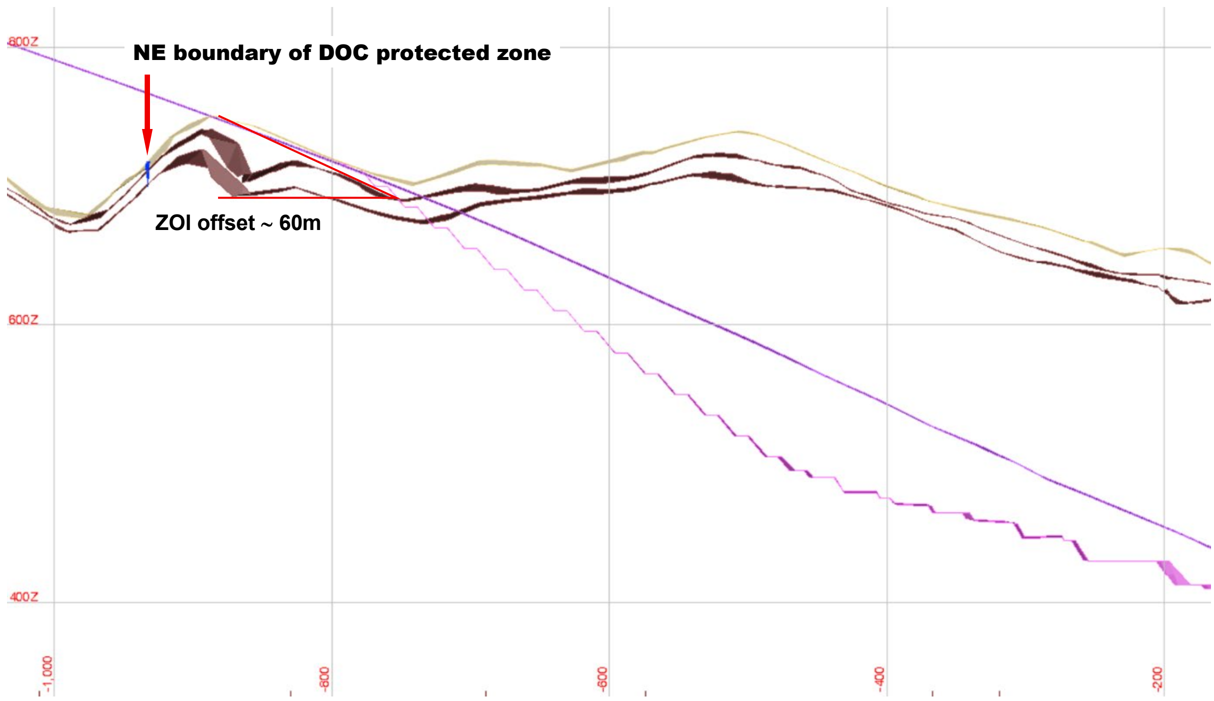
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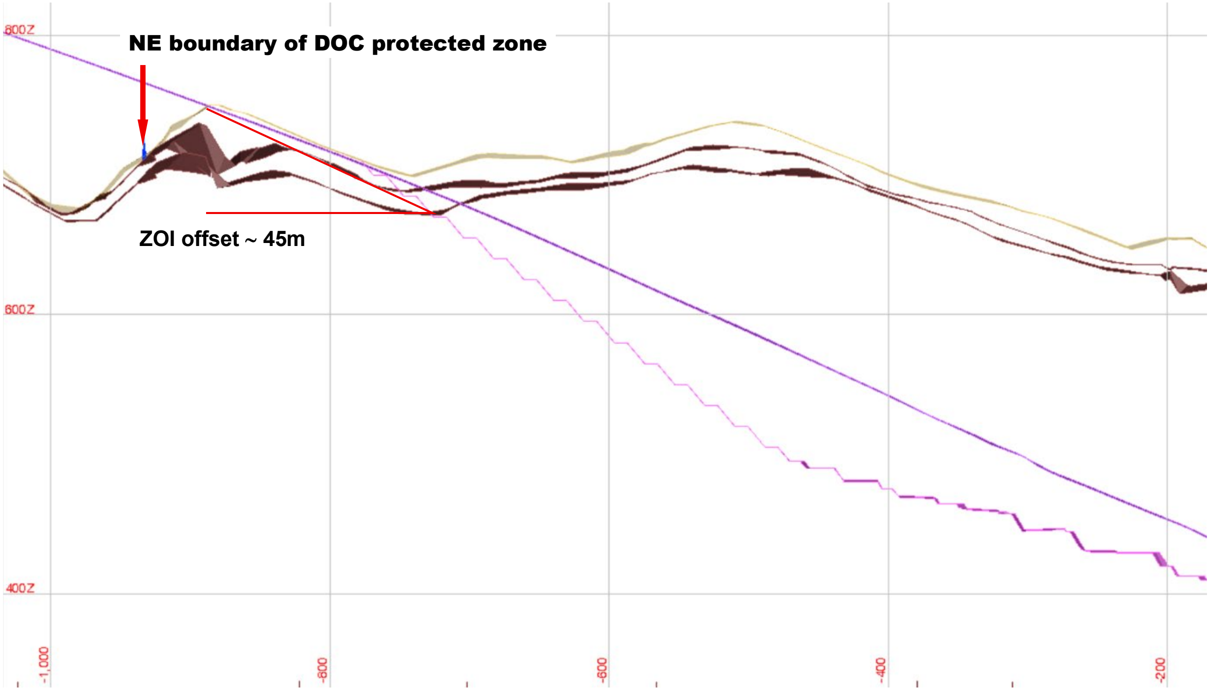
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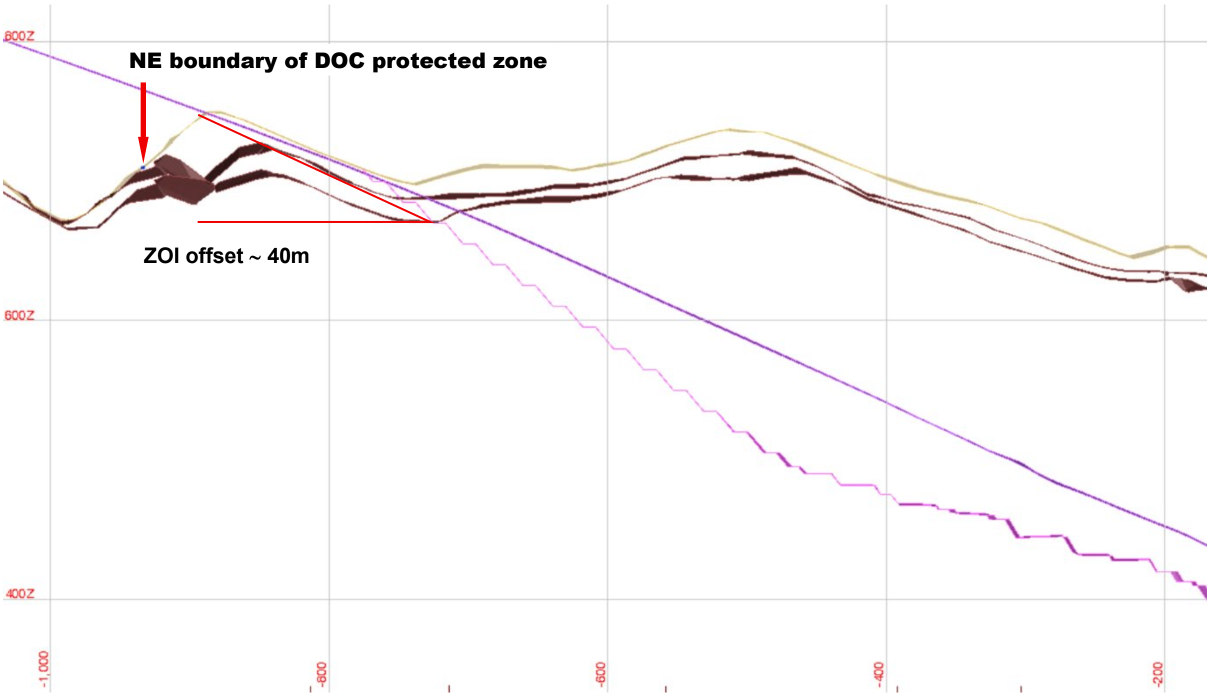
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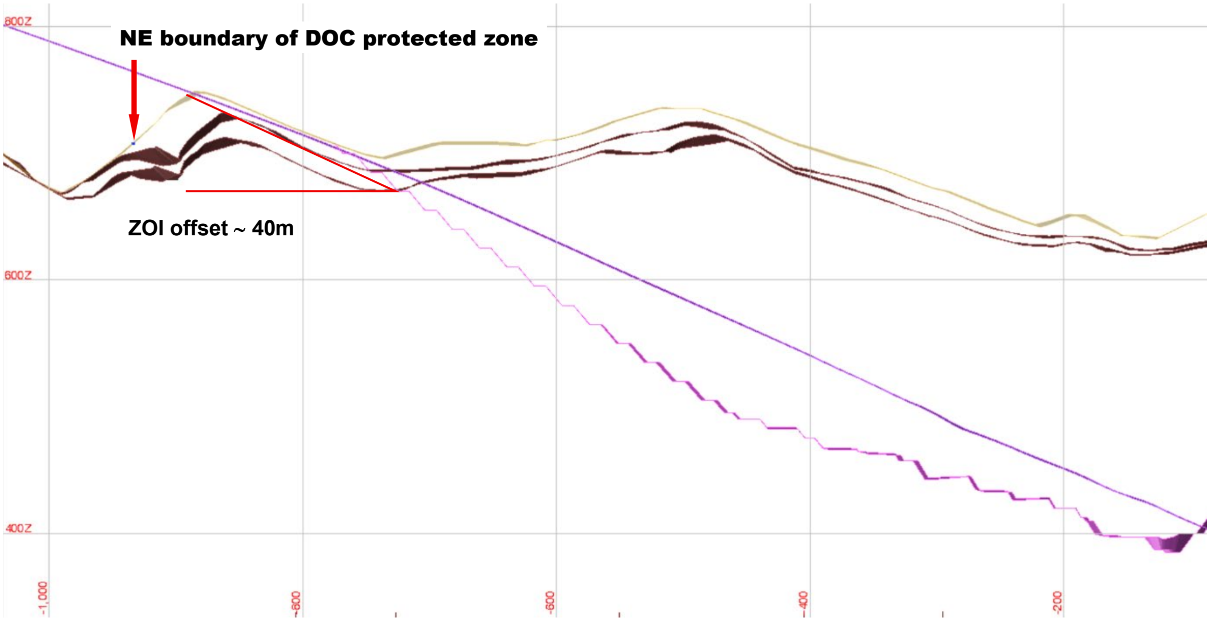

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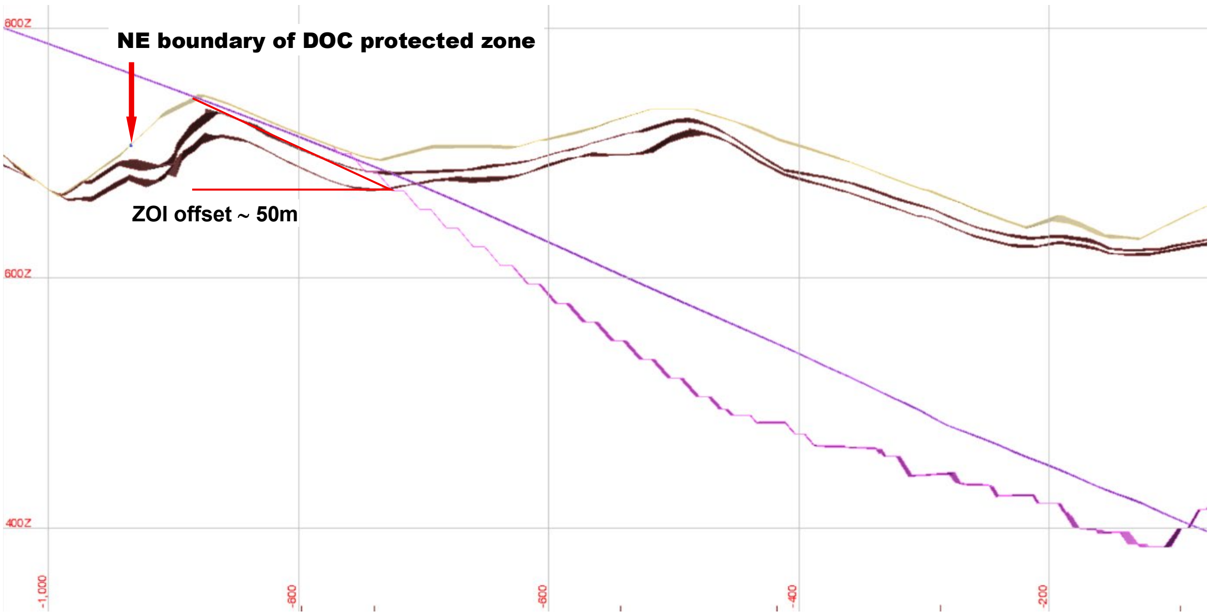

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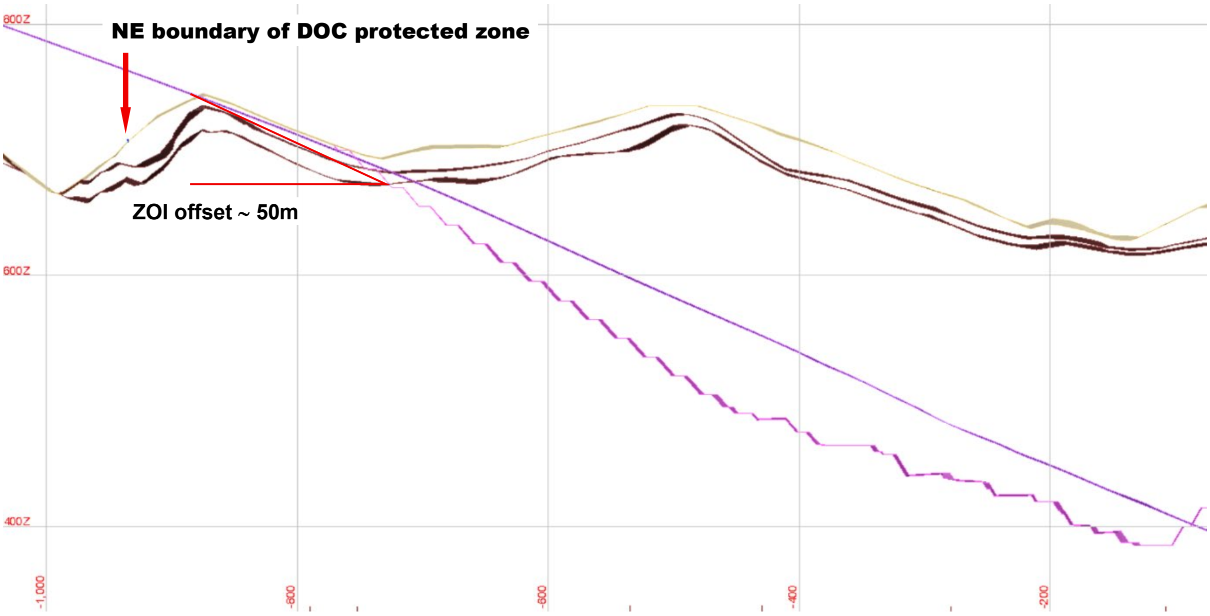
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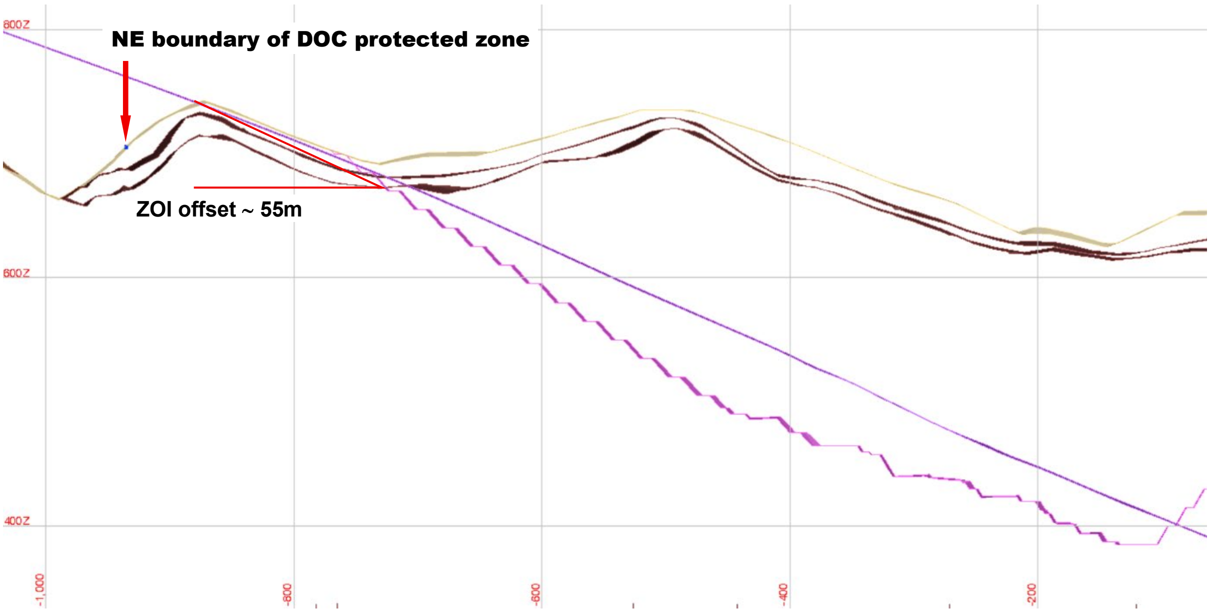
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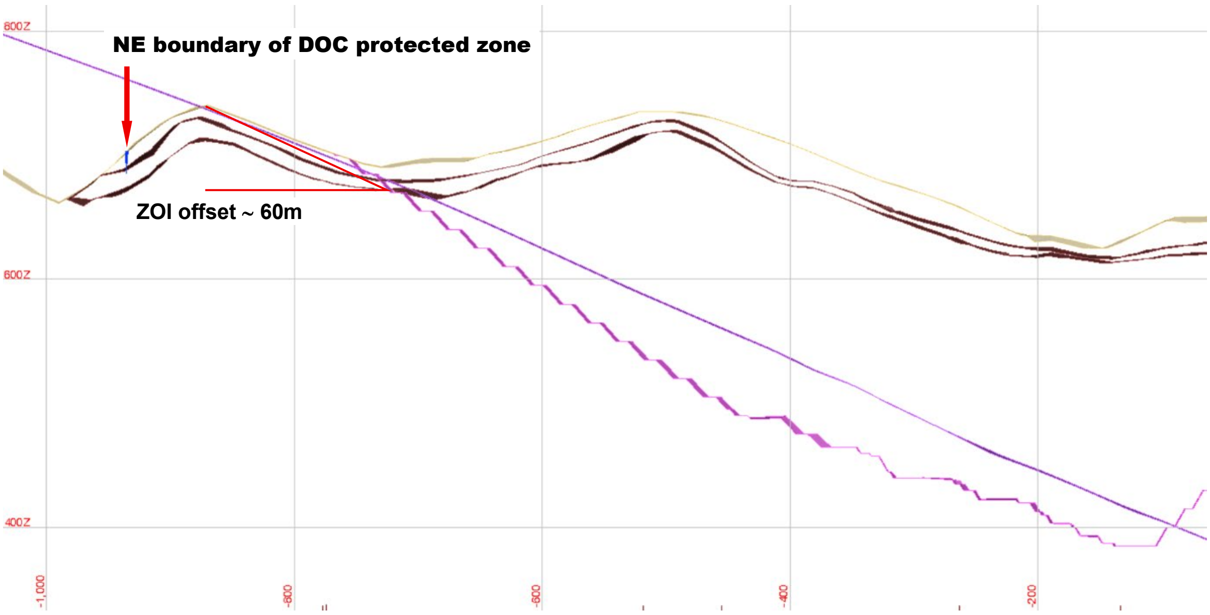
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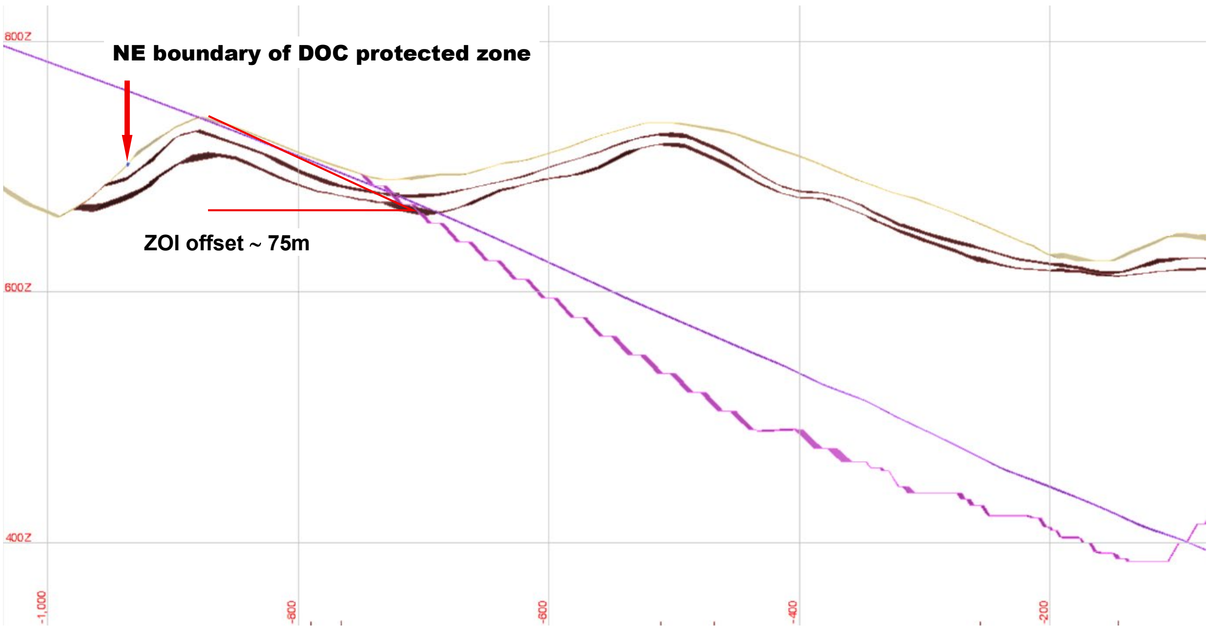
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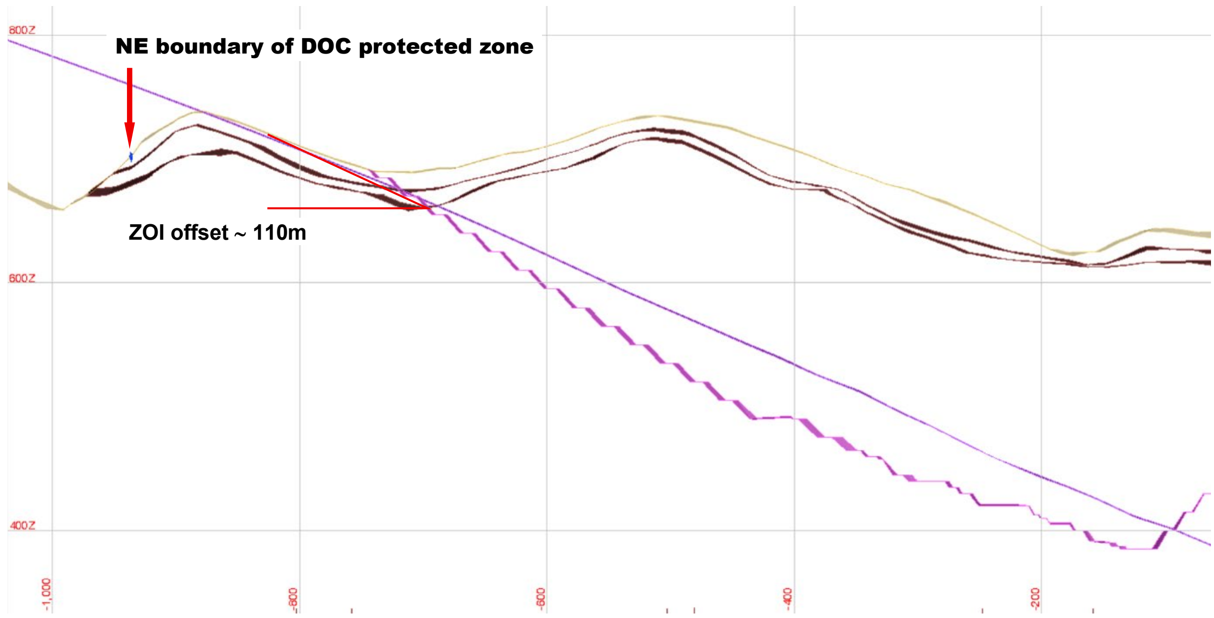

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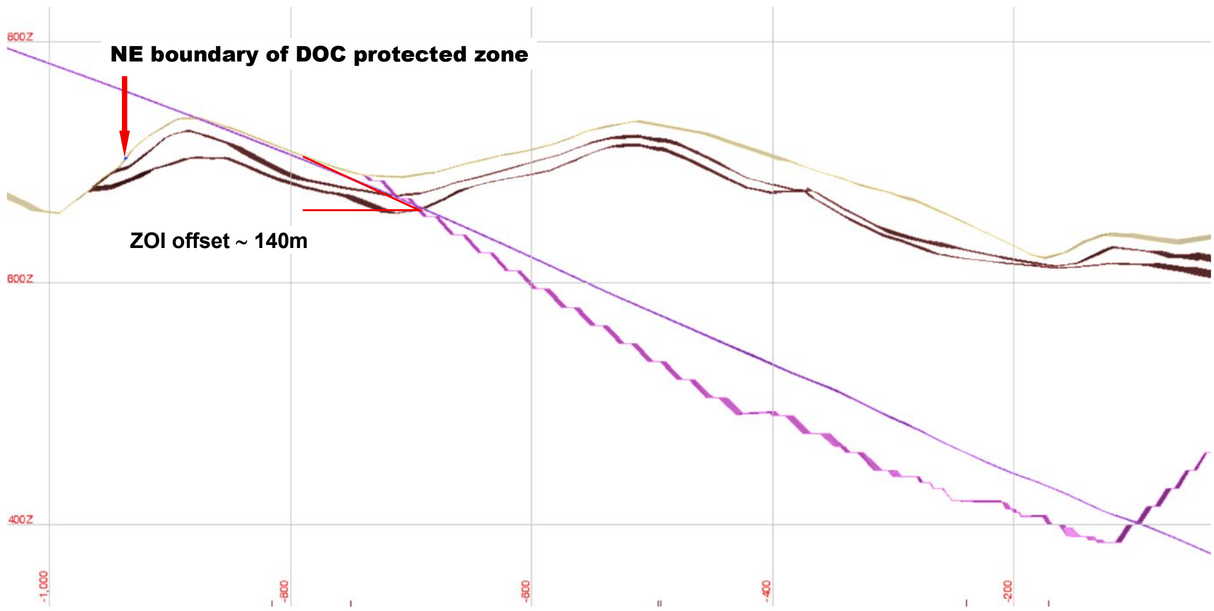

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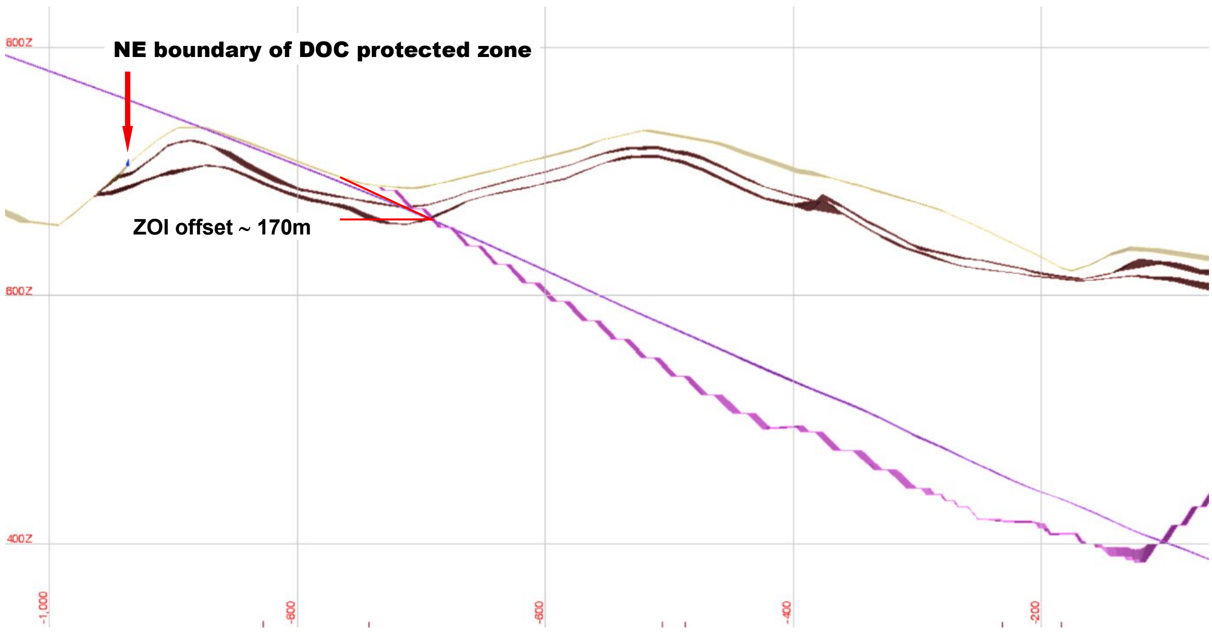
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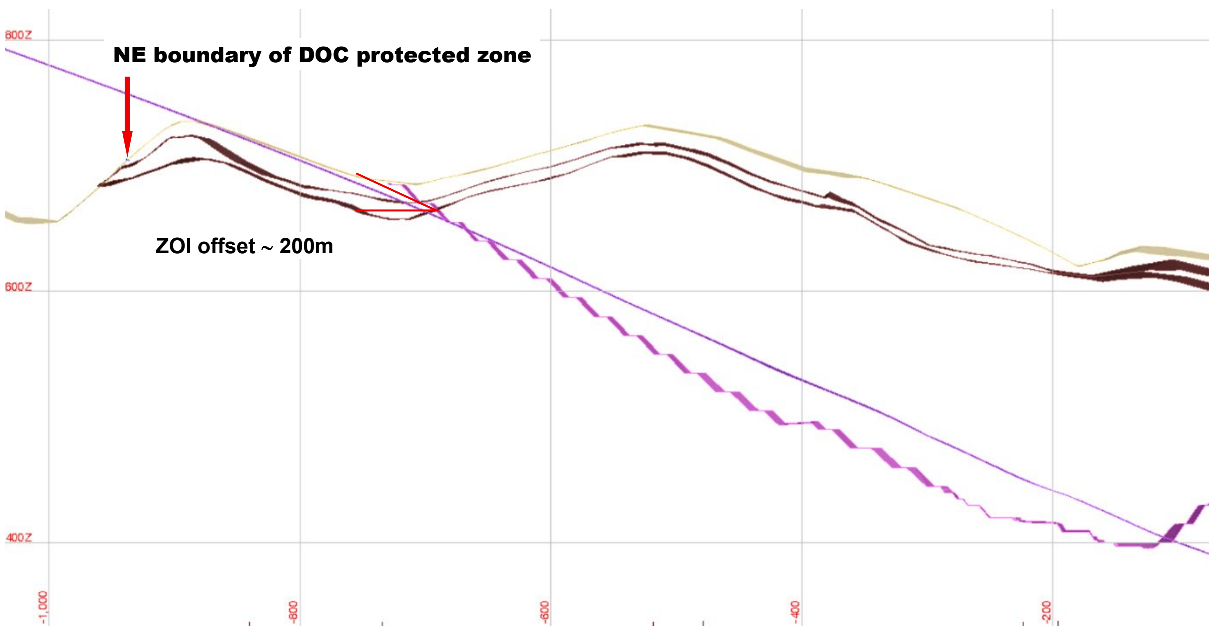
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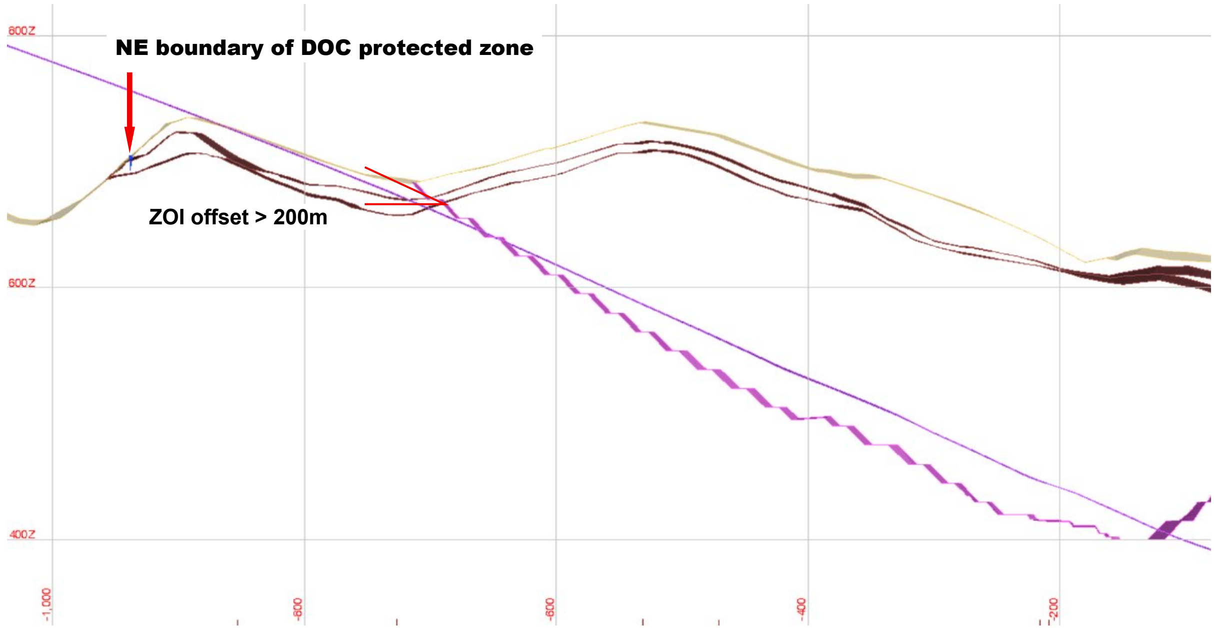
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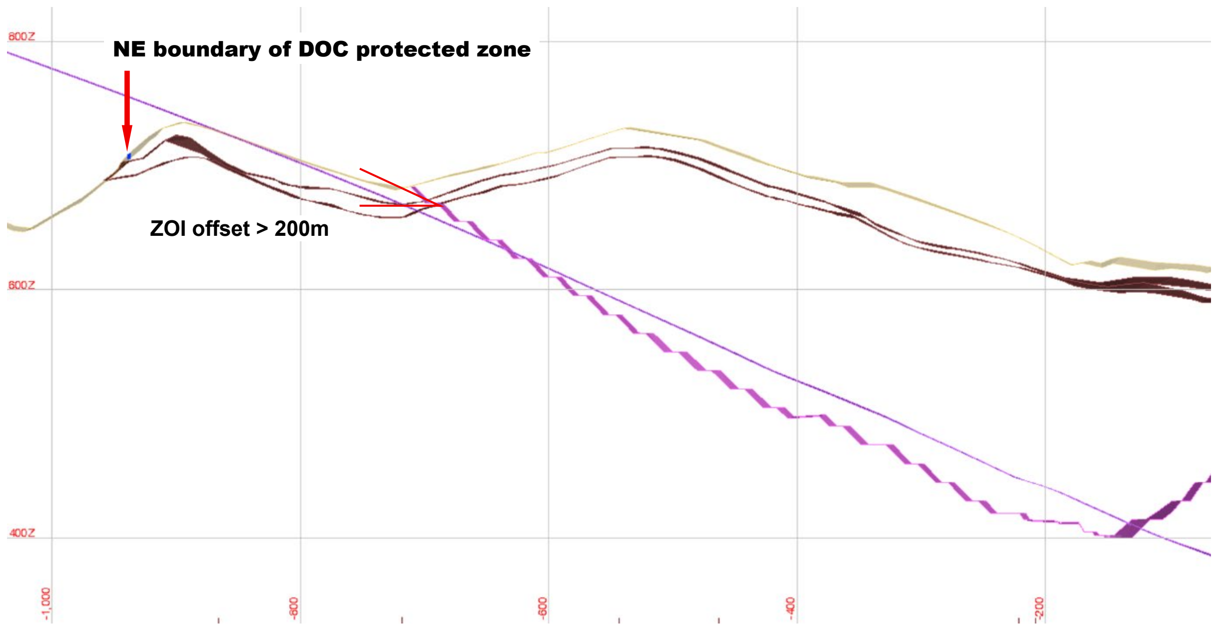
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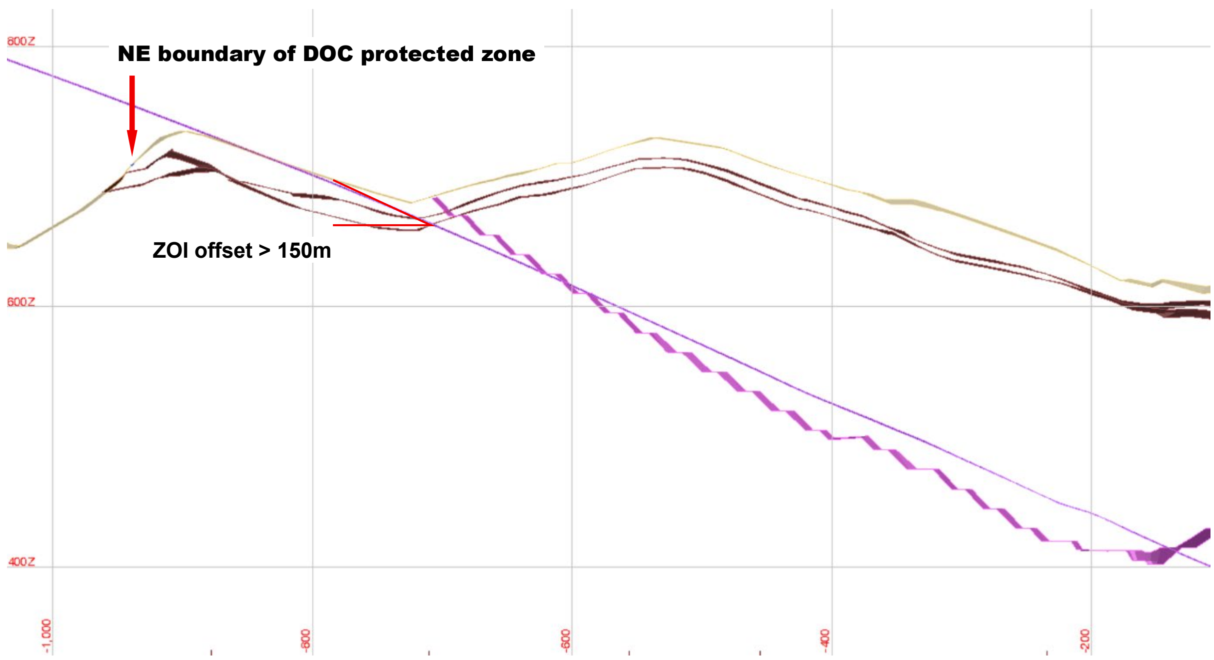

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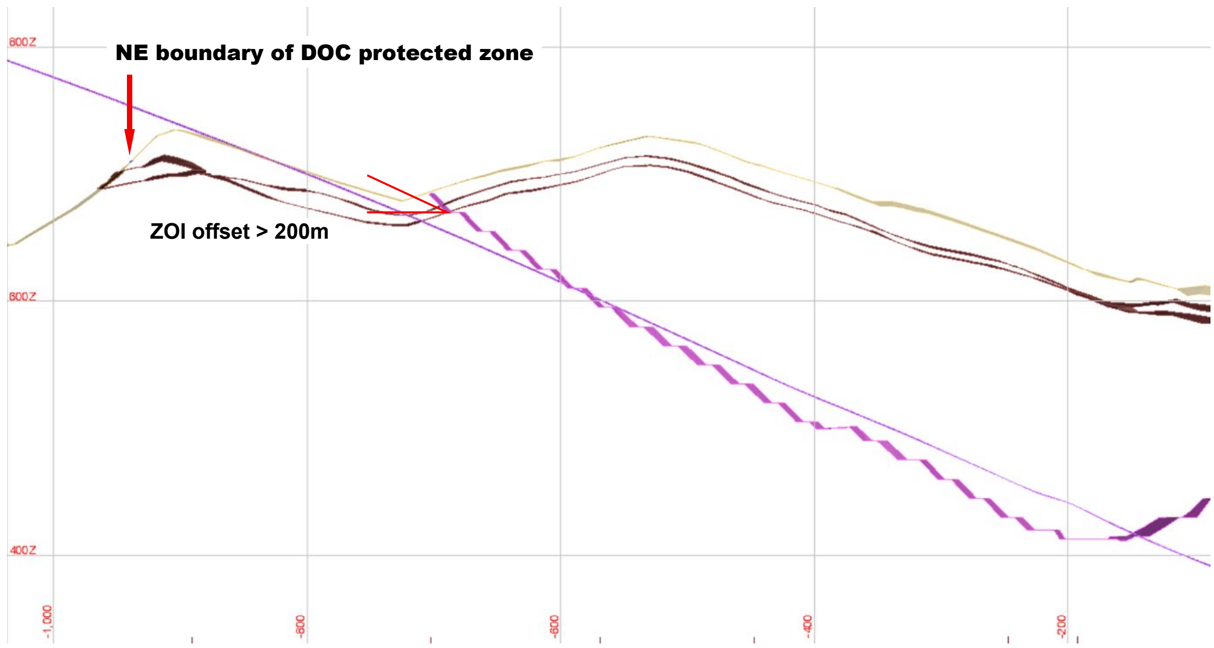

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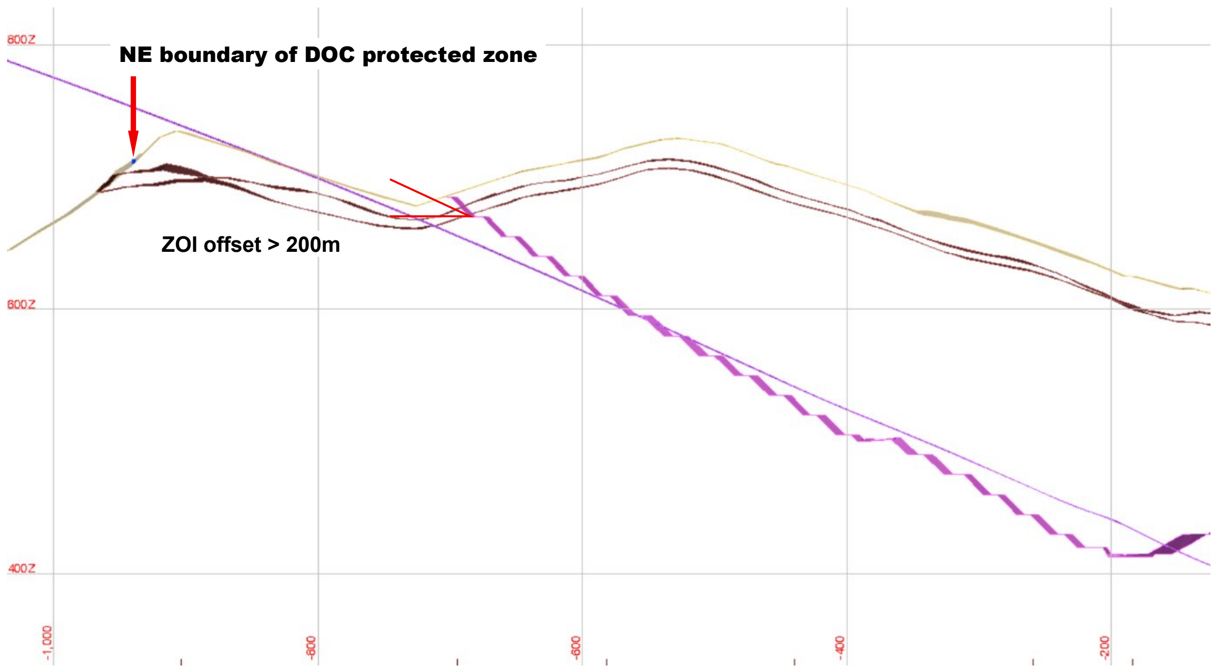
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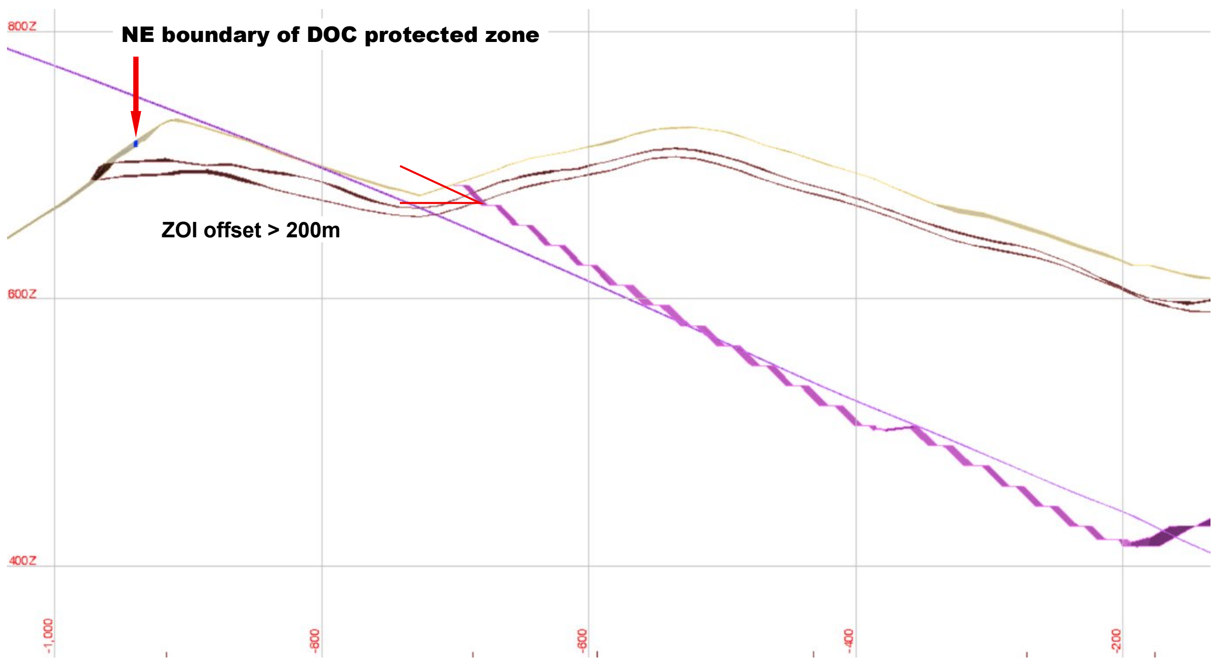
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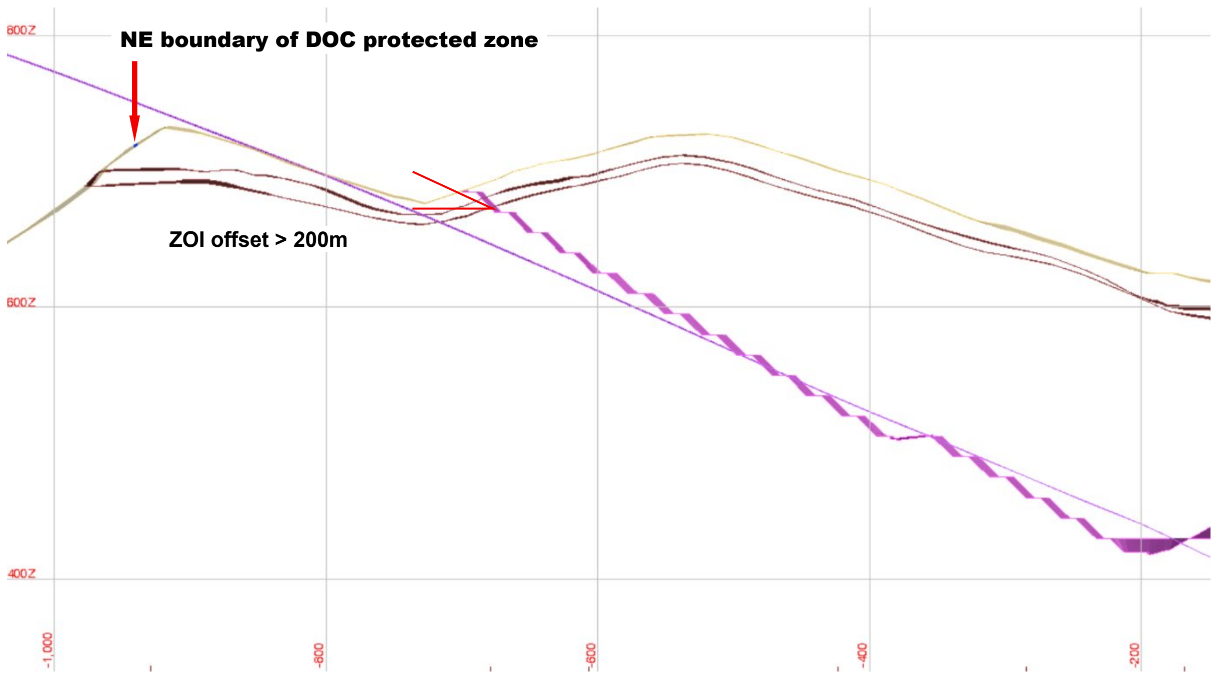
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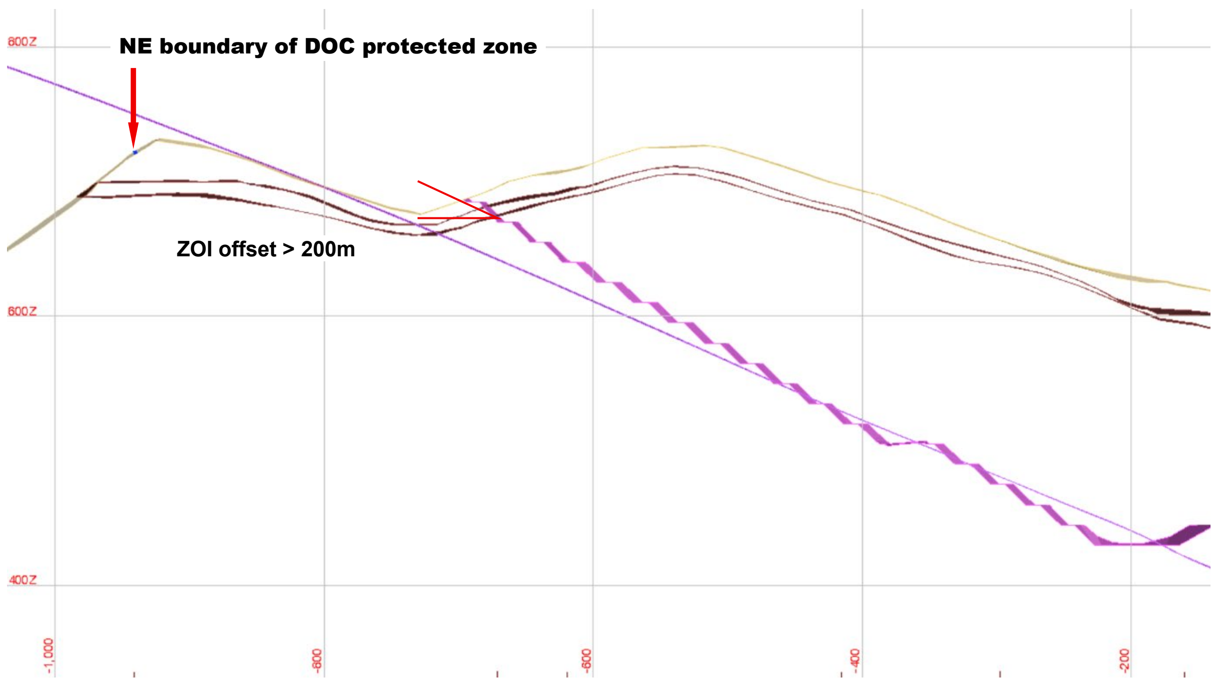
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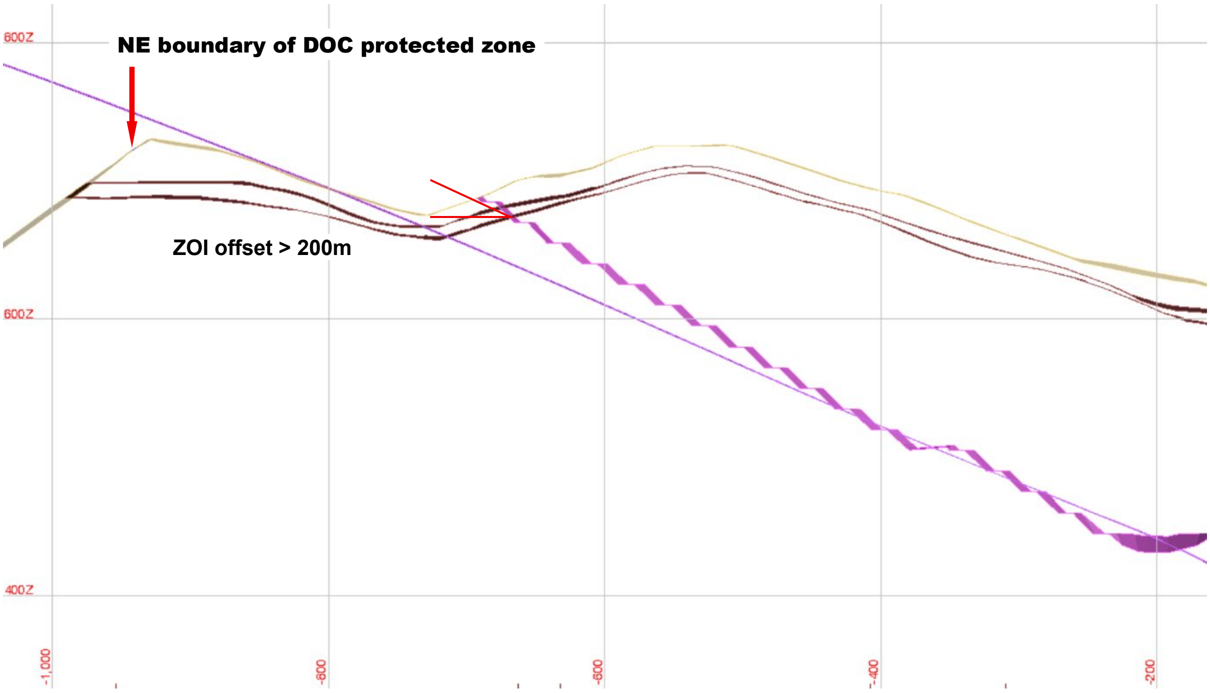

CIT pit critical ZOI offset section

CIT pit is to be backfilled; hence abandonment barrier is not required