RTI 20-21-46 - Record 2

The following has been released in relation to a request for information relating to the stability of rocks above the Tasman Highway at Paradise Gorge.

From:

Sent:

Tuesday, 25 May 2021 12:04 PM

To:

Subject:

Geotechnical practitioners to review Paradise Gorge rockfall study



I have three contacts below from companies I believe may be able to provide good advice on the Paradise Gorge matter

Regards

Rockfall experts

Golders (Now part of WSP)

Contact:

GHD

Contact

in the Hobart office: they have several specialists in the country.

PSM

Contac

Sydney https://www.psm.com.au,

Mineral Resources Tasmania | Department of State Growth

30 Gordons Hill Road, Rosny Park, Tasmania / PO Box 56, Rosny Park, TAS 7018, Australia

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Sent:

Tuesday, 25 May 2021 12:20 PM

To:

Subject:

Indicative map showing extent of potential rockfall sources along lower part of

Paradise Gorge

Tasman Highway - Improvements at Paradise Gorge - Geotechnical Report - Phase **Attachments:**

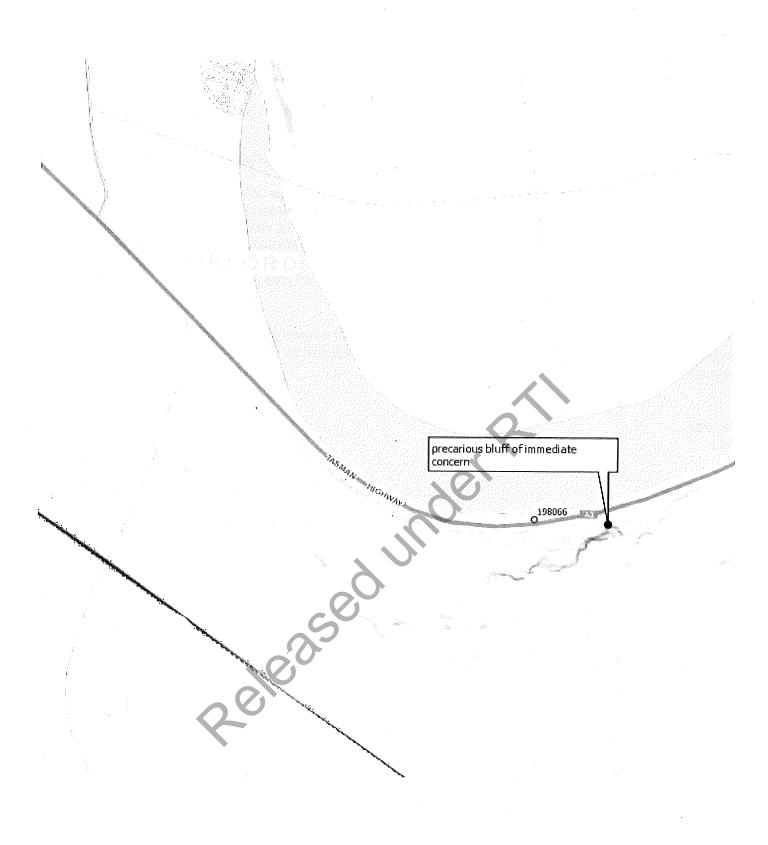
1 - R-IFO-99-0030 - August 2000.pdf; TASMAN HIGHWAY (A0113) - CONTRACT NO 880 - PARADISE GORGE - ROADWORKS - ASSESSMENT OF GEOTECHNICAL ISSUES AT SECTION 4 - JULY 2001.pdf; TASMAN HIGHWAY (A0113) - PARADISE GORGE - ROADWORKS - CONTRACT NO 880 - DESIGN REPORT INCLUDING

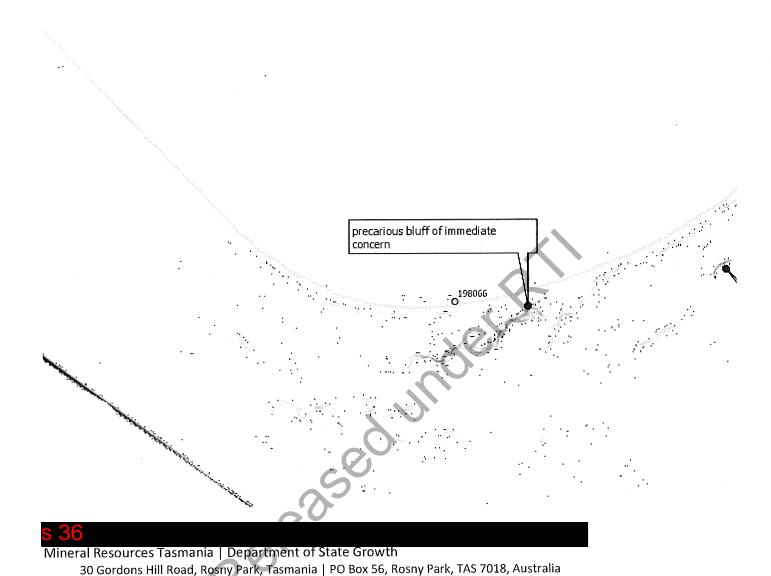
ENVIRONMENTAL EFFECTS ~ FEBRUARY 2001.pdf

I have quickly mashed up a map that I hope provides a context for the bigger picture rockfall issues for part of the gorge. I have attached a few reports I found in Records today that should be passed on to Pitt & Sherry in the first instance. There may be more lurking!

2eleased under

<u>Regar</u>ds





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s 3

Sent:

Thursday, 27 May 2021 11:57 AM

To:

s 36

Cc: Subject:

Possible rockfall areas and proposed extended drone area

Attachments:

Paradise View.jgw; Paradise View.jpeg



Please find attached a map for your consideration. If you agree then lets have a discussion on further survey work and investigation in the general vicinity. Sorry to be brief- talk later. Will send GIS layers later today. Just got the point cloud from Veris but yet to inspect.

Cheers

s 36

s 36

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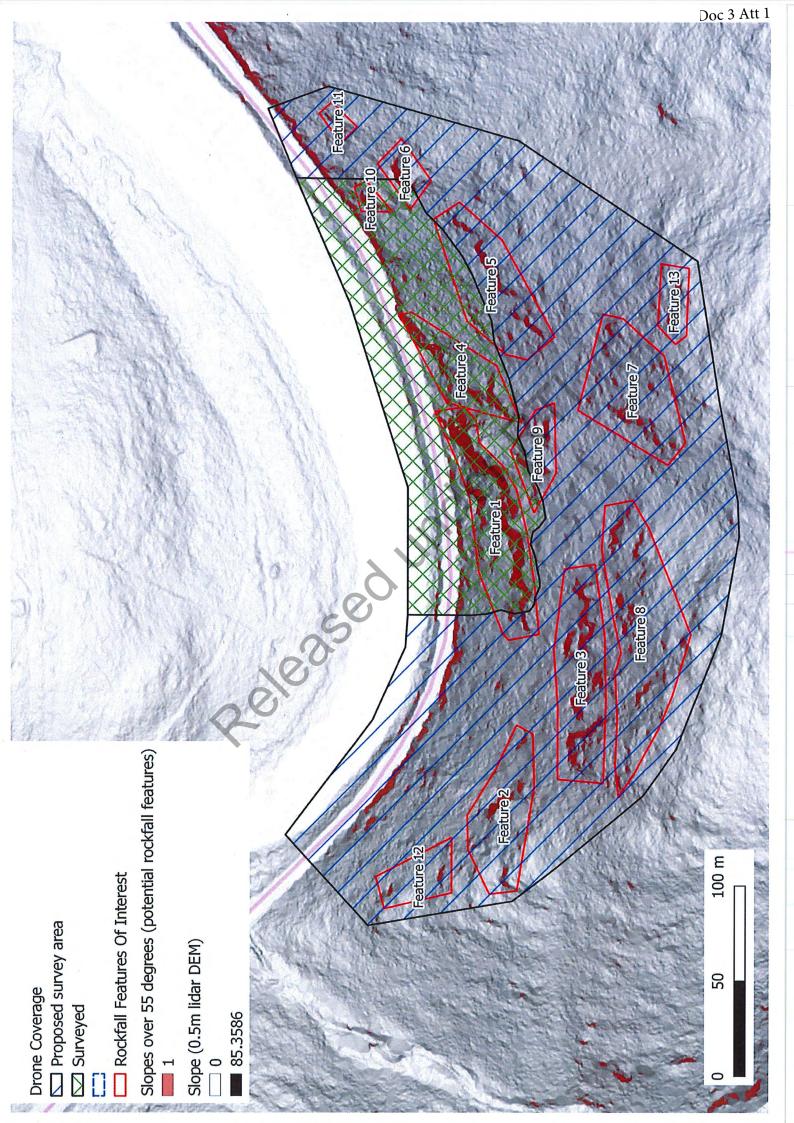


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s 36

Sent:

Tuesday, 25 May 2021 12:32 PM

To:

s 36

Subject:

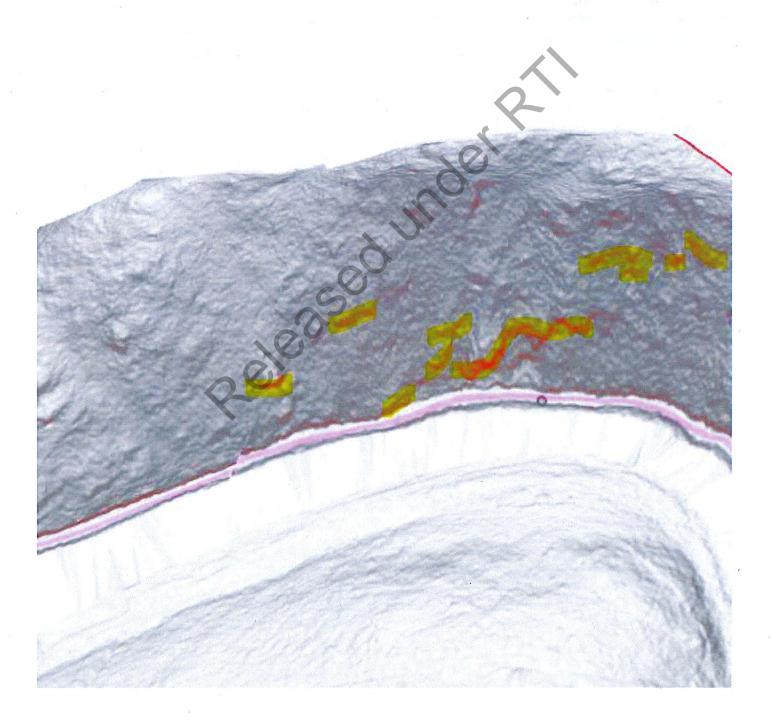
RE: Indicative map showing extent of potential rockfall sources along lower part of

Paradise Gorge - 3D view

One more view of the areas of concern in 3D if this helps.

Cheers

s 36



From: \$ 36

Sent: Tuesday, May 25, 2021 12:25 PM

To:S 36

s 36

Subject: RE: Indicative map showing extent of potential rockfall sources along lower part of Paradise Gorge

Thanks S 36

That's useful, will pass onto P & S

Cheers



From: \$36

Sent: Tuesday, 25 May 2021 12:20 PM

To: **S** 36

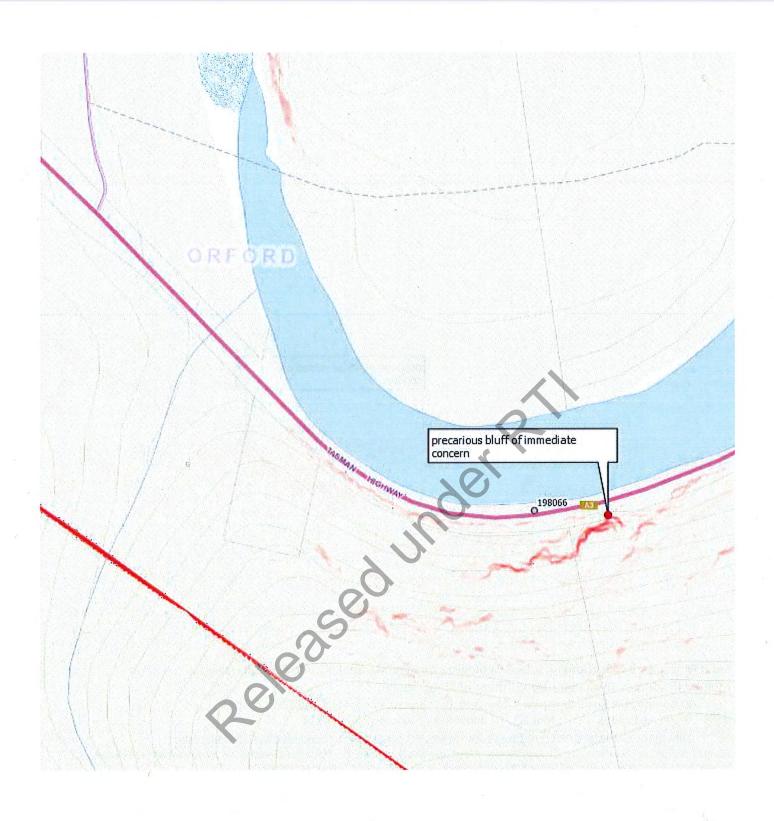
s.36

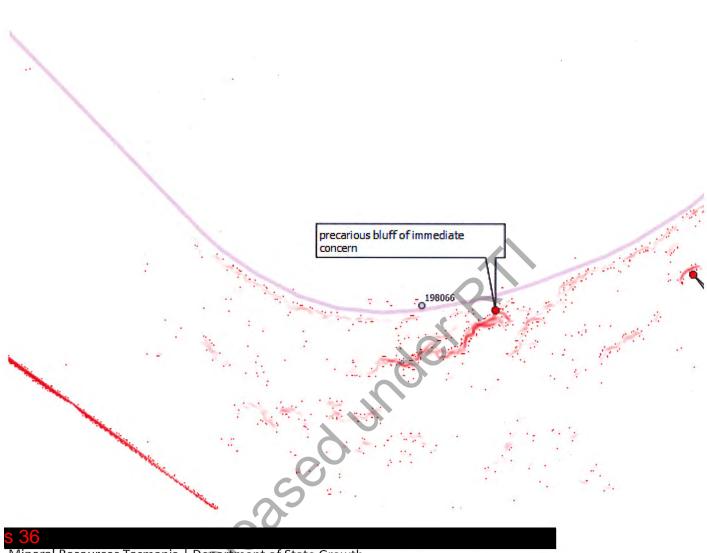
Subject: Indicative map showing extent of potential rockfall sources along lower part of Paradise Gorge

I have quickly mashed up a map that I hope provides a context for the bigger picture rockfall issues for part of the gorge. I have attached a few reports I found in Records today that should be passed on to Pitt & Sherry in the first instance. There may be more lurking!

Regards

s 36





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s 36 s 36

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s36

Sent:

Wednesday, 26 May 2021 9:52 AM

To:

c36

Subject:

RE: MRT activities regarding Paradise Gorge



A few quick notes that may be helpful for today's meeting.

- MRT has located some relevant past geotechnical investigations (for State Roads) that have been forwarded to DSG and to pass onto P&S. Will continue looking for more.
- MRT is undertaking a quick review of available LiDAR imagery to assess whether the bluff of immediate
 concern is alone. The "bluff" appears to be the priority but other potential rockfall source areas have been
 identified.
- A new LiDAR dataset covering the upper part of the gorge is about to be delivered to MRT today. This will be analysed asap.
- MRT could undertake potential rockfall runout modelling to provide indication of what parts of the entire gorge road may be impacted to assist further investigations. Details subject to further discussion.

Regards



s 36

Sent:

Thursday, 27 May 2021 2:45 PM

To:

s 36

Subject:

RE: Paradise Gorge MRT workplan

Hi **s 36**

Apologies for confusion. Please put this on agenda for tomorrow.

Cheers

s 36

From S 36

Sent: Thursday, May 27, 2021 2:39 PM

To: **S** 36

s 36

Subject: RE: Paradise Gorge MRT workplan

Hi

Can you please attend/dial in for our scheduled catchups rather than sending me a separate email?

I'm not clear what these works are or how urgent and it's important that all the information is discussed at the mtg so there is the opportunity to ask questions and understand.

Cheers



From: 5 3

Sent: Thursday, 27 May 2021 9:55 AM

To: \$ 36

s 36

Subject: Paradise Gorge MRT workplan

ні <mark>s 36</mark>

A quick progress update:

- MRT identifying areas beyond immediate issue in order to inform further drone inspections while the road is closed.
- Once data is collected MRT will analyse and with Pitt and Sherry assess whether any field inspection is required
- MRT will undertake preliminary rock fall modelling to determine which parts of the road are vulnerable

All for now

s 36

s 36

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Released under R

s 36

Sent:

Thursday, 27 May 2021 4:08 PM

To: Cc: s 36

Subject:

Further imagery requirements

s 36 as discussed:

I have examined the point cloud imagery obtained by Veris and discussed with 3 36. While it is very good there are a few things that can be done to improve its utility for the tasks in hand.

I recommend:

- ask Veris to fly a lidar drone over the whole area identified in the map I gave you (along with a standard camera drone). Side has just informed me that the drone and a pilot are arriving on Monday for other reasons and could be on site by midday.
 - provide a classified lidar point cloud distinguishing bare earth from vegetation (merging both UAV and TLS sensors to ensure full coverage, removing occlusions, etc)
 - o provide a high resolution orthophoto
- MRT will assist analysing the imagery and make recommendations on sites to visit where it is deemed there
 may be rockfall potential
- If this can be done while the road is closed then:
 - MRT can assist with a walkover to inspect sites (under the control of the nominated safety person at the site)
- MRT will undertake indicative modelling from likely sources in a similar manner to St Marys Pass as a means of preparing a plan for further works (i.e. later in the year or beyond) if needed

I hope this makes sense. Happy to clarify.

Regards

s 36

s 3b

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s 36

Sent:

Thursday, 27 May 2021 9:55 AM

To: Subject:

Paradise Gorge MRT workplan

....

A quick progress update:

- MRT identifying areas beyond immediate issue in order to inform further drone inspections while the road is
- Once data is collected MRT will analyse and with Pitt and Sherry assess whether any field inspection is required
- MRT will undertake preliminary rock fall modelling to determine which parts of the road are vulnerable

All for now

s 36

s 36

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Out of scope

Out of scope

Out of scope Out of scope

Out of scope

Out of scope

From: **§ 36**

Sent: Friday, 21 May 2021 3:04 PM

To: Robinson, Kevin **§ 36**

Subject: RE: Tasman Highway Paradise Gorge

Hi Kevin

Further to this, we'd be very interested in your advice on P & S proposed methodology for taking the boulders down. They have suggested that blasting in situ is not an option. Do you have any idea of other options or any other information that might help us to demonstrate that this is the best option under the circumstances?

Many thanks

s 36



From S 36

Sent: Friday, 21 May 2021 10:39 AM

To: Robinson, Kevin 8 36

Subject: Tasman Highway Paradise Gorge

Importance: High

Hi Kevin

Left a msg for you this morning, but would be good to discuss an issue that we have just become aware of at Paradise Gorge.

We are likely to need to take action urgently.

Please give me a call

Cheers



s 36

Asset Management | State Roads | Department of State Growth Salamanca Building, Parliament Square

4 Salamanca Place, Hobart, TAS 7000 | GPO Box 536, Hobart TAS 7001

s 36

www.stategrowth.tas.gov.au



My current work pattern is as follows:

s 36

Robinson, Kevin

Sent:

Monday, 24 May 2021 8:55 AM

To:

Subject:

FW: Paradise Gorge Memo prior to tomorrow's meeting

Attachments:

T-P.20.1839-GEO-MEM-002_PBH_RM.pdf

For discussion.

Kevin

Kevin Robinson | Director of Mines

Mineral Resources Tasmania | Department of State Growth

30 Gordons Hill Road, Rosny Park TAS 7018 | PO Box 56, Rosny Park TAS 7018

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EXCELLENCE



INTEGRITY



RESPECT

From: **S** 36

Sent: Friday, 21 May 2021 12:58 PM

To: Robinson, Kevin

Cc: Walker, Andrew

Subject: FW: Paradise Gorge Memo prior to tomorrow's meeting

Kevin

As per our conversation.

We got a bit more info from P & S and Spidertech this morning. I can add you to our EM planning mtg list if you'd like - for mtgs and notes so that you are kept up to date

, We are expecting an update from them again this afternoon regarding more detailed timeframes. They estimated a week to do the initial stage - get a safe line in, remove loose rocks and determine access and priority for removal, then stage 2 start the removal of large rocks 4 weeks plus. Partial and intermittent road closure for the first week, then full road closure after that until all works are complete

I can get \$ 36 to provide you with the additional files from P & S.

Cheers

Asset Management | State Roads | Department of State Growth Salamanca Building, Parliament Square

4 Salamanca Place, Hobart, TAS 7000 | GPO Box 536, Hobart TAS 7001

www.stategrowth.tas.gov.au



My current work pattern is as follows:

s 36

From: 36

Sent: Wednesday, 19 May 2021 5:25 PM

To: S 36

10.0

Subject: Paradise Gorge Memo prior to tomorrow's meeting

Hi**s 36**

Please find attached a memo outlining the current situation at Paradise Gorge and our recommendation for discussion items tomorrow.

Cheers, S 36

pitt&sherry



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Robinson, Kevin

Sent:

Tuesday, 25 May 2021 10:18 PM

To:

Subject:

FW: Proposed Paradise George Monitoring System

Attachments:

25052021161516-0001.pdf



I had a good discussion with \$36 this afternoon.

We discussed the St Mary's Pass issue and she was pleased with your work in conjunction with P&S plus Jacobs on this. She is keen to do more monitoring on this current problem before a final decision I made.

I suggested that we believe that an assessment (probably manual initially) of the 42° slopes and area surrounding as per your picture, needs to be undertaken to ensure that there is not a potential repeat of the current situation to the best of our abilities.

This could be undertaken early in the reparation stage to ensure that if there are anomalies that crop up then State Roads can determine the best course of action whilst the road remains closed.

I also indicated that the whole gorge needs monitoring but we agreed on this but not initially ie now, because the current problems need to be addressed.

She did request a copy of the 2001 report which they were not aware of and also that they were not aware that there was a recommendation to set up monitoring of the gorge over that period. This is something that they intend to do from now on.

Hopefully the meeting attended by \$36 went well?

Can call tomorrow if you need. I said that you would attend the 10am or whatever time meeting but requested that we only be involved for our part of the time so that we could get on with things.

Kind regards,

Kevin

Kevin Robinson | Director of Mines

Mineral Resources Tasmania | Department of State Growth

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TEAMWORK



EXCELLENCE



INTEGRITY



RESPECT

From: 5 36

Sent: Tuesday, 25 May 2021 5:16 PM

Cc: Robinson, Kevin

Subject: FW: Proposed Paradise George Monitoring System

FYI

From: \$36

Sent: Tuesday, 25 May 2021 5:07 PM

To:<mark>s 36</mark> Cc:<mark>s 36</mark>

Subject: FW: Proposed Paradise George Monitoring System

His 36 further to our discussion today, attached is the proposed Paradise George Monitoring System that will be installed this week.

The pink tilt meters, provide automatic data reporting back to a website

The purple prisms will require manual survey, until the automatic theodolite is installed

Please feel free to give me a call if you would like to discuss

Regards

s 36

pitt&sherry

s 36

pittsh.com.au

----Original Message----

From: s 36

Sent: Tuesday, 25 May 2021 4:20 PM

To: < 36

s 36

Cc: 5 36

Subject: Wishlist for tilt sensor and prism locations

Hi all,

 \mathbf{s} 36 has gone through the model and provided a wishlist for locations for the tilt sensors and the prisms.

I expect that the most sensible way to approach it is to just get there on Thursday and install whatever we can safely, with the priority being the tilt sensors on the block we don't like much.

Note that 3 36 has asked for one tilt sensor on top of the block and another on the back.

Cheers, S 36

s 36

BSc(Hons)Geol

s 36

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----Original Message-----

From: ApeosPort-V C6676 <gfloor.6676@pittsh.com.au>

Sent: Tuesday, 25 May 2021 4:15 PM

To:**s** 36

Subject: Scan from Fuji Xerox MFD #32466

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Number of Images: 1
Attachment File Type: PDF

Device Name: ApeosPort-V C6676

Device Location: Pitt & Sherry #32466 GF



