

DOLAUCOTHI GOLD MINES LONG ADIT SURVEY 2004

Paratowyd gan Archaeoleg Cambria
Ar gyfer The National Trust
Prepared by Cambria Archaeology
For Yr Ymddiriedolaeth Genedlaethol



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DOLAUCOTHI GOLD MINES LONG ADIT SURVEY 2004

Gan / By

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DOLAUCOTHI GOLD MINES
LONG ADIT
SURVEY 2004

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Introduction

In March 2004, Cambria Archaeology undertook a survey of the Long Adit at Dolaucothi Gold Mines, Carmarthenshire, on behalf of the National Trust, the site owners. The adit is part of the Dolaucothi Gold Mine Scheduled Ancient Monument. The National Trust are considering running mine trains, donated from the recently closed Betws coal mine, Carmarthenshire, in the adit as part of their tourist facilities. As this proposal may involve some alterations to the adit, the National Trust commissioned Cambria Archaeology to record its condition to inform their application for Scheduled Monument Consent.

The fieldwork recording was undertaken by Tom Jamieson and Gwilym Bere under the management of Ken Murphy. A series of maps and profiles provides the main recording vehicle; these are supplemented by the following written descriptions, based mainly on observations by E Plunkett Dillon of the National Trust.

Methodology

A central line was laid out down the centre of the adit, in the centre of the tramline. Profiles at 1:20 scale of the adit were recorded at 5m intervals down the adit's full length, and a plan at 1:50 at floor level made showing relevant detail such as the location of side chambers, timber props etc. The centre line was surveyed, allowing the adit plan to be located in relation to a previously made topographic survey of the mine complex. Notes on various aspects of the adit were made during a walk through with E Plunkett Dillon.

The field profile drawings were digitised using MapInfo GIS, as were the plans. The plan of the adit was located in its correct geographic position on the GIS. MapInfo tables are supplied with this report.

No historical information is reported on here.

Description of the Long Adit.

The following descriptions assume a viewpoint looking into the adit from the entrance. Distances are measured from the entrance of the adit.

The adit dates from the late 19th and early 20th century, but has been modified from the 1970s to the 1990s when used for student training by Cardiff University. These modifications are more pronounced in the first 60m to 70m, less so beyond this. Prior to these works the adit probably had a fairly regular profile. These works also resulted in the creation of several small side chambers and the laying of tramlines on a sleepers and a bed of ballast.

The Long Adit is approximately 178m in length and follows an east northeast course from its entrance in the southeast side of the main Dolaucothi open cast workings. It is straight apart from its final 8m which kinks to the southeast. The adit's profile varies down its length, but on average is between 1.8m and 2m wide and between 1.6m and 1.8m high. However, a tramline laid on sleepers and ballast with drain to the right, which runs the full length of the adit except for the final 10m, has effectively raised the adit's floor by at least 0.30m. The original height of the adit was therefore probably close to 2m. The adit rises 1.06m in the first 80m from the entrance. From this point it levels out, with a fall of just 0.08m from 80m to its terminal. Some of this

gentle final fall may be accounted for by the thinning out of the tramline ballast; the original adit floor is probably level.

There is evidence of modification to the entrance with material having been removed from the upper right-hand side of the tunnel mouth by 'barring down'. The first 5m into the tunnel has been altered on the right hand side with drill marks clearly evident. Similar evidence is visible in the next 10m on both sides. These alterations were probably carried out by Cardiff University in the 1970s. Between 15m and 20m there is a 'chimney' that rises to approximately 5m in height. The base of this feature is sealed by horizontal shoring boards held in place by vertical pit props. These pit props are made from pine roundwood posts, between 0.15m and 0.20m in diameter, and they are placed approximately every metre on both sides between 17m to 29m into the tunnel.

At 24m there is another tunnel opening on the left-hand side; this is the entrance into Blundell's Adit which has not been covered by this survey. Directly opposite on the right hand side is a 3m wide entrance to an irregular shaped side passage. This passage is about 7m in length and is approximately 3m wide for the first 4m of its length before sharply narrowing to 1.5m for the remaining 3m. This short passage was created by Cardiff University training activity from the 1970s to the 1990s and has multiple drill marks plainly visible.

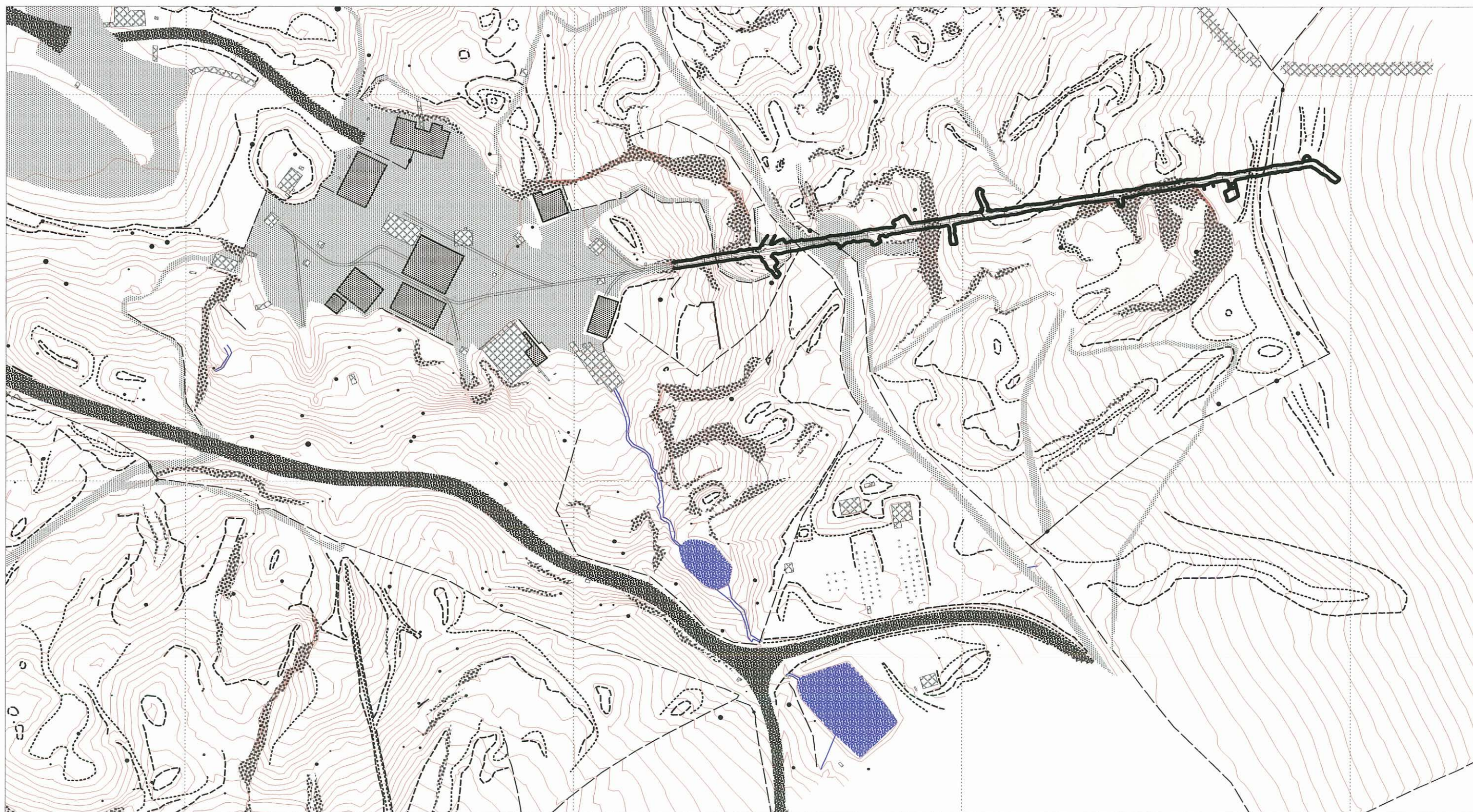
The following 15m again show signs of fairly recent widening. At 45m there is evidence of blasting on the right-hand side. The next ten metres of tunnel (45m to 55m) have been widened considerably (by up to 1m) on the right-hand side with a small side chamber also on the right at 53m. This chamber is irregular in plan and measures 3m long by 1m deep. This widened section of tunnel has regularly spaced props of similar dimensions to those described earlier, although these are spaced slightly further apart, at approximately every 2m.

After this widened section (which ends at 55m) the roof becomes noticeably more arched which may be simply related to a change in the geology but may be due to less 'barring down' by Cardiff University. There is also an irregular shaped side chamber on the left-hand side at 60m. This chamber is 4m long by 2m deep and is supported by six doubled pit props along its east and west side. It is in this section of the tunnel that the right-hand side begins to show less evidence of alteration, however there is fairly fresh damage to the left-hand side between 60m and 65m with props supporting roof beams that have been cut into the roof of the tunnel.

There is very little modern alteration to the tunnel itself between 65m and 75m other than a modern side passage leading from the right-hand side for a distance of 7.2m. This passage is 1.5m wide, has a regular linear shape in plan and is again the work of Cardiff University. At 75m there is a side chamber on the left-hand side 4m long and 2m deep, which has been backfilled with rubble held in place by a dry-stone retaining wall. The date of this feature is unsure but it may well pre-date the 1930s. Although the tunnel roof in this section is higher with noticeable tool marks the date of these alterations is unclear. At 81m there is another linear side passage leading off the left-hand side for approximately 7m. It is again one of Cardiff's training tunnels.

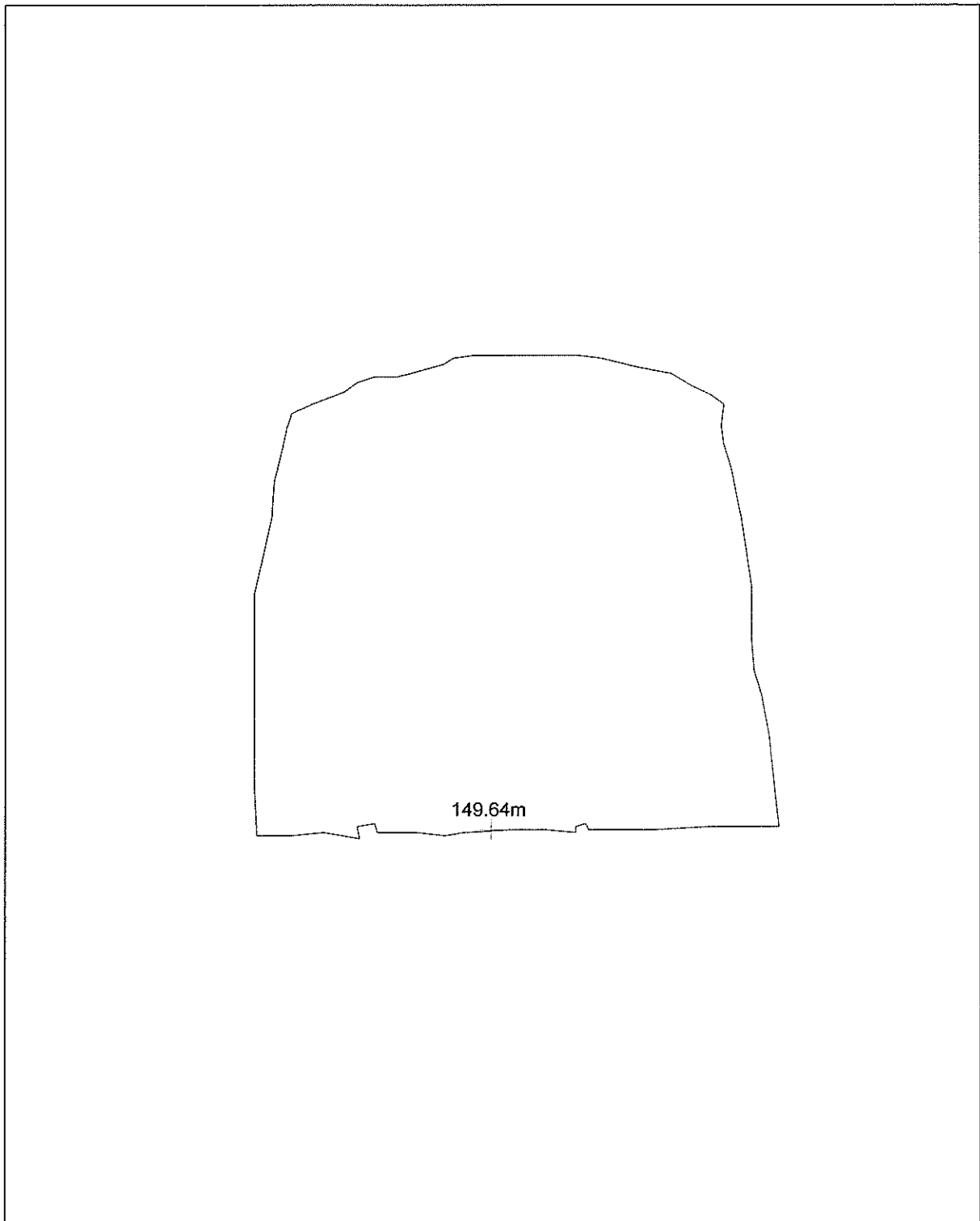
There is very little evidence of any alterations from 85m to 115m making this section much more archaeologically sensitive. There is a small side chamber at 116m on the right-hand side that is only 1.5m wide and 2.30m deep. The date of this chamber is unknown but there is evidence of some modern alteration. The next noticeable feature is at 135m on the right hand side where an ore shaft exits into the tunnel. This shaft dates to about 1905 and descends 25m from the Mitchell Mine levels above. A chamber on the right-hand side has been heavily altered by the construction of a concrete wall to retain a reservoir in the 1970s by Cardiff. The entrance to this chamber appears unaltered.

Apart from slight alterations on the left-hand side at 150m (to fix electrical cables) the rest of the profile is original until the kink at the end of the tunnel. In the last section past the kink there is some evidence of 'barring down' but it is not possible to judge how much of this is modern. The last metre of the tunnel is the result of recent blasting. Apart from these few alterations the final section is relatively unaltered and as there are no rails or ballast on the floor the original rock floor is exposed.

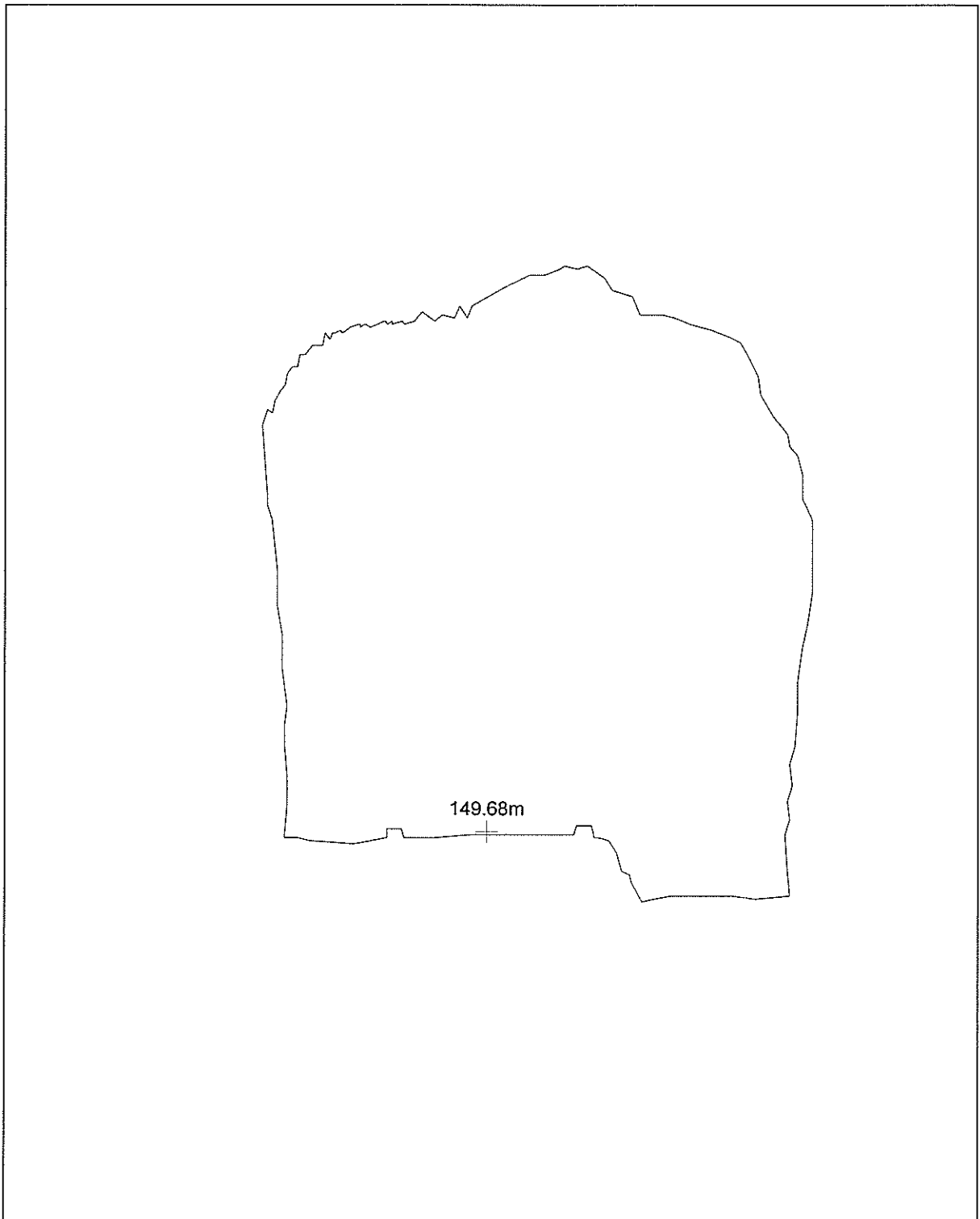


DOLAUCOTHI GOLD MINES - LONG ADIT
LOCATION OF LONG ADIT
SCALE 1:1000

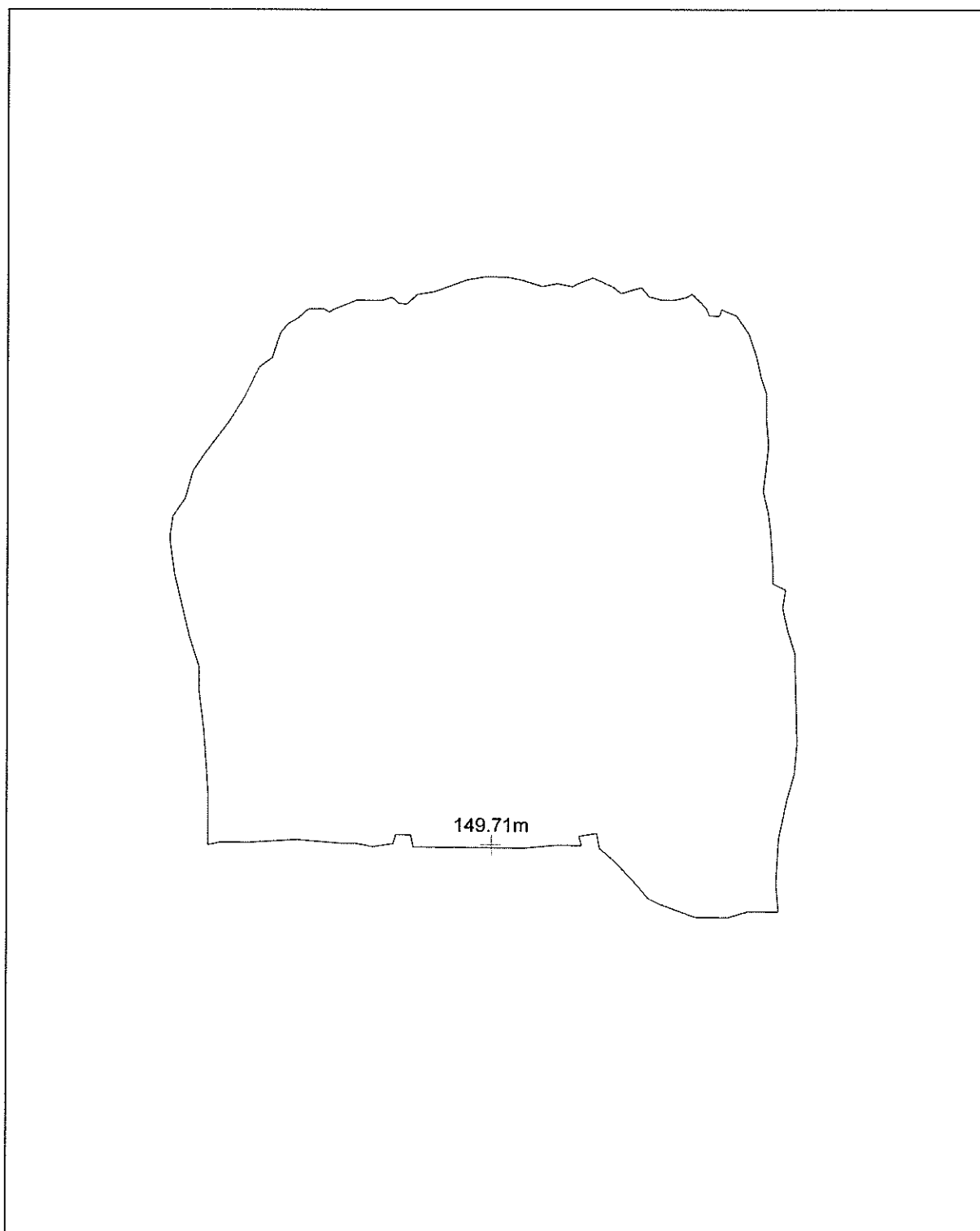
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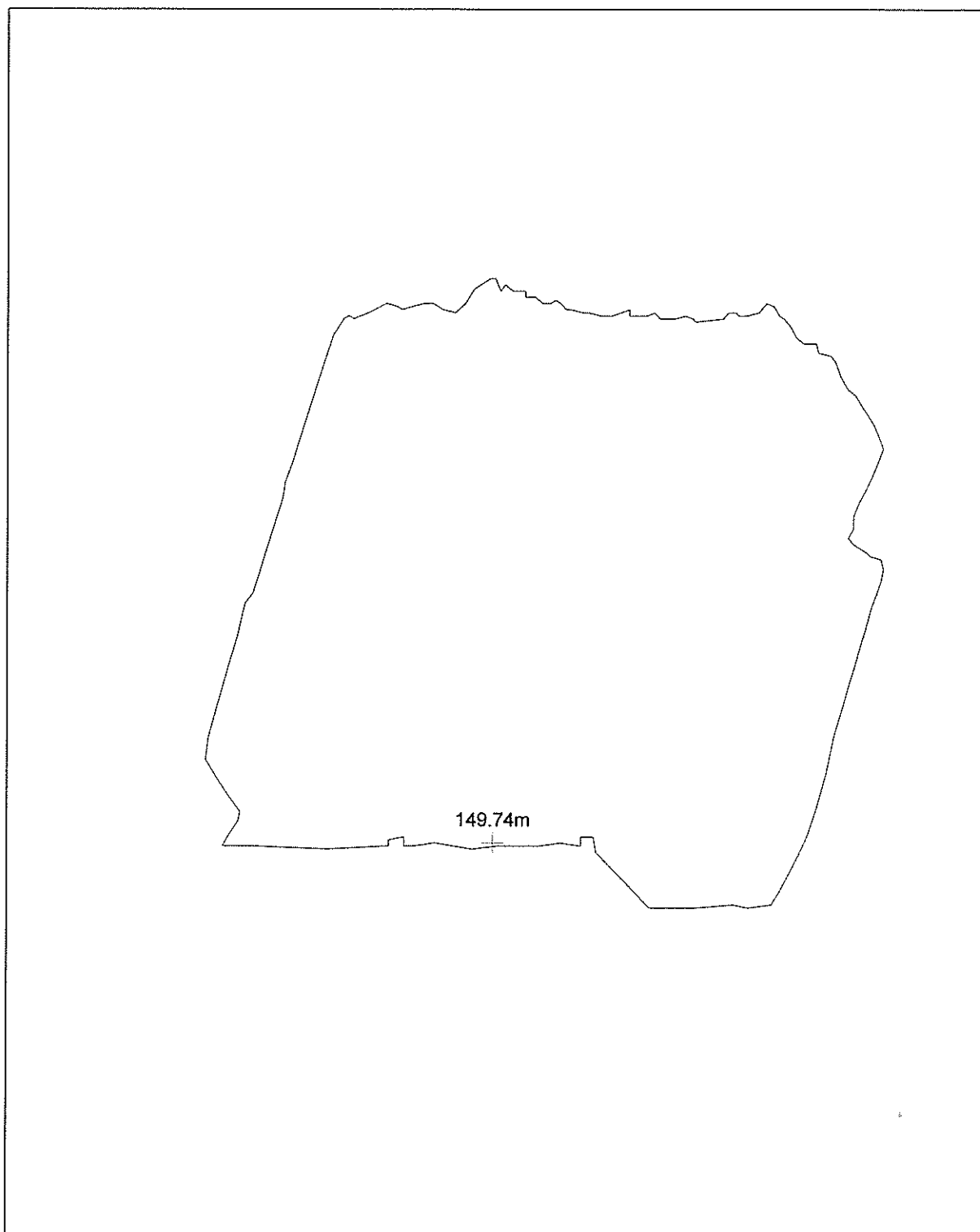
DOLAUCOTHI GOLD MINES - LONG ADIT
PROFILE OF ADIT 0m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
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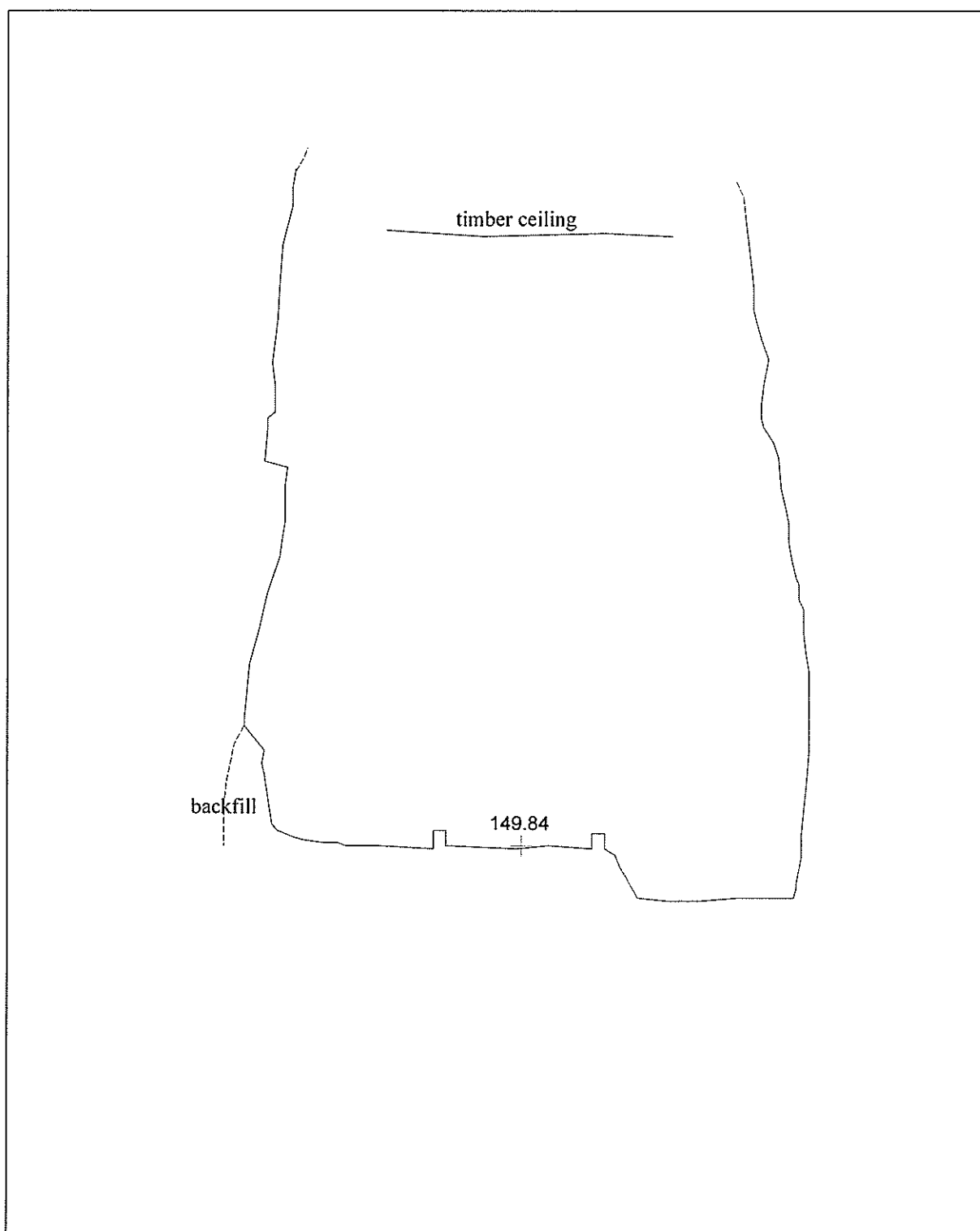
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PROFILE OF ADIT 5m FROM ADIT ENTRANCE
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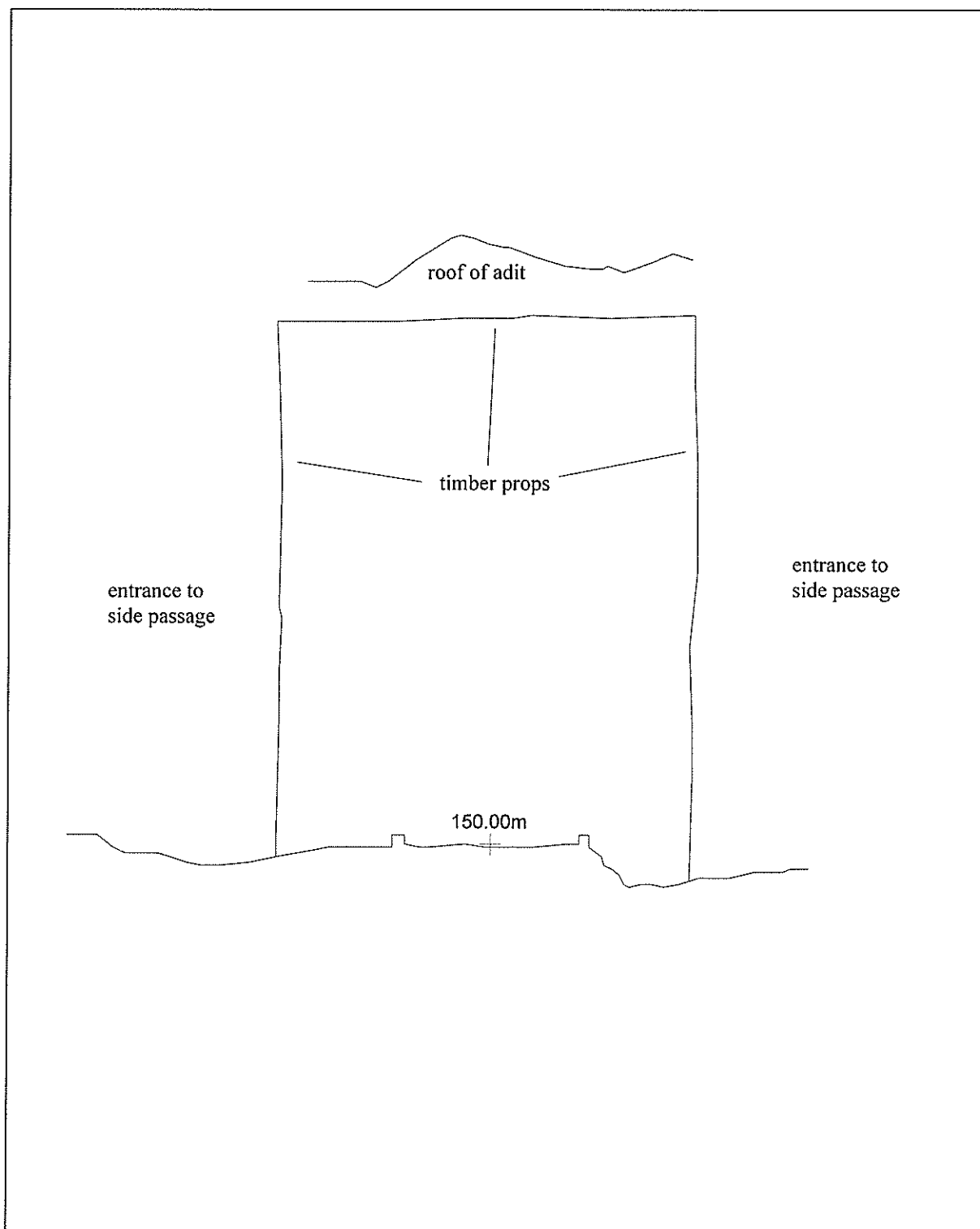
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PROFILE OF ADIT 10m FROM ADIT ENTRANCE
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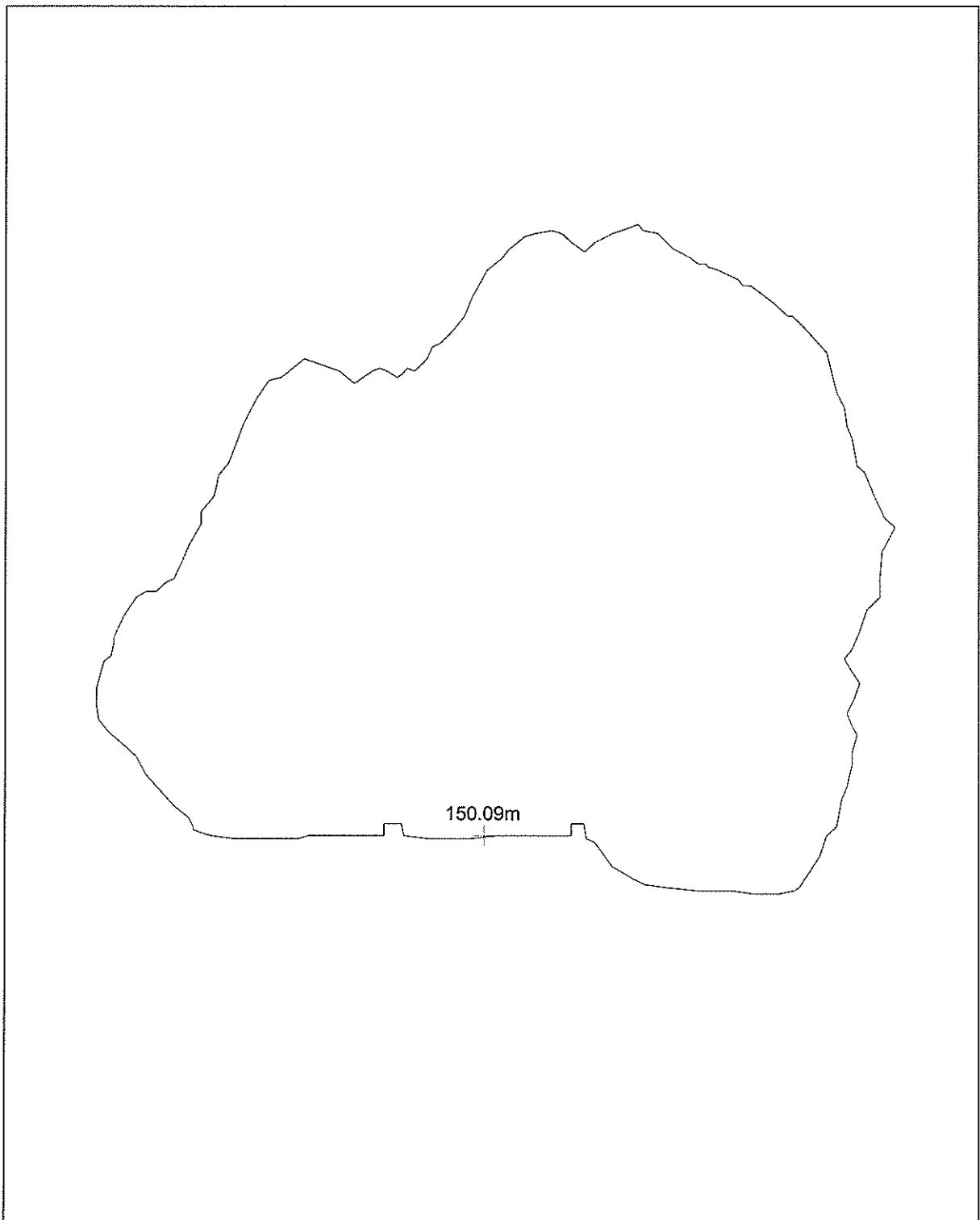
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PROFILE OF ADIT 15m FROM ADIT ENTRANCE
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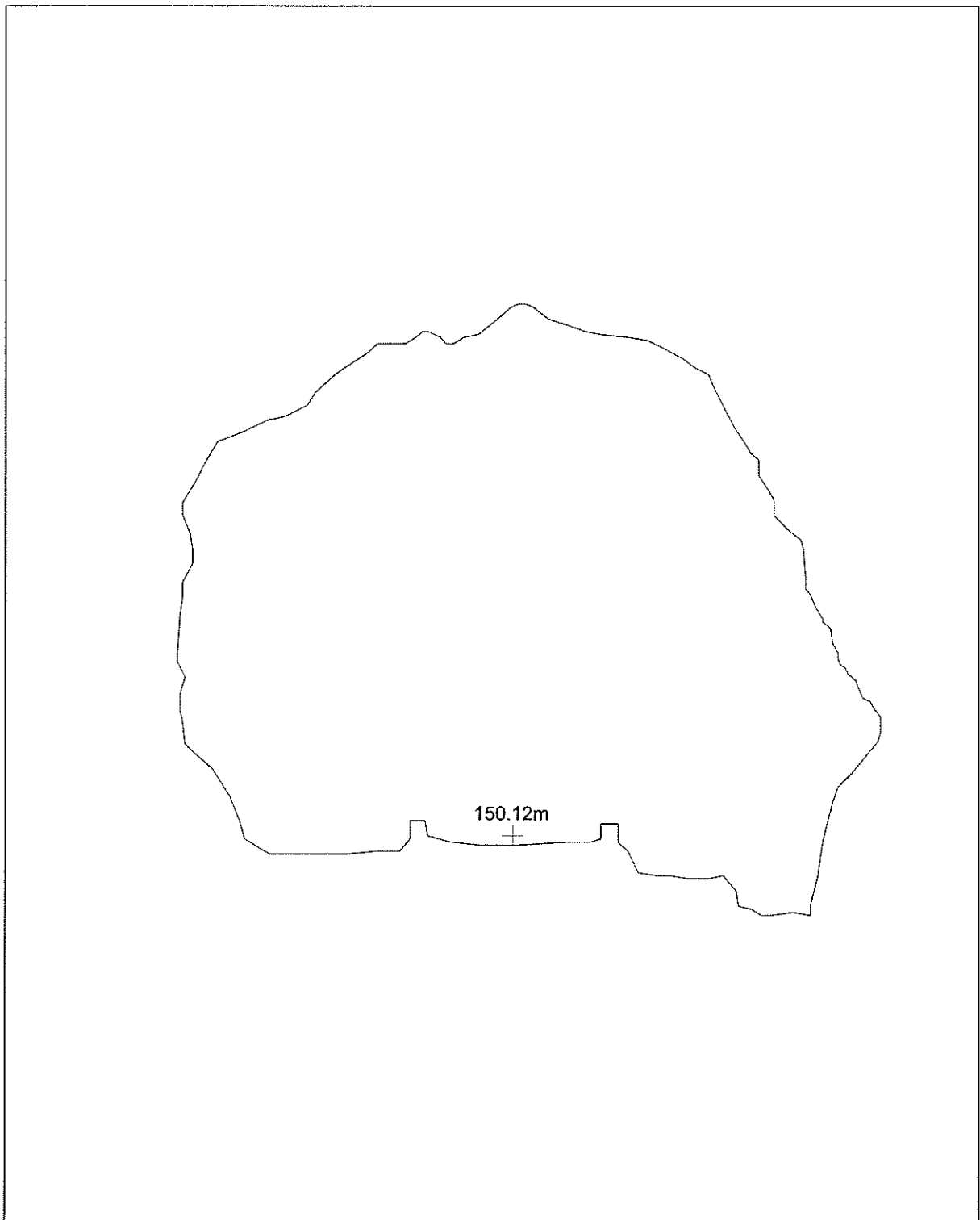
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PROFILE OF ADIT 20m FROM ADIT ENTRANCE
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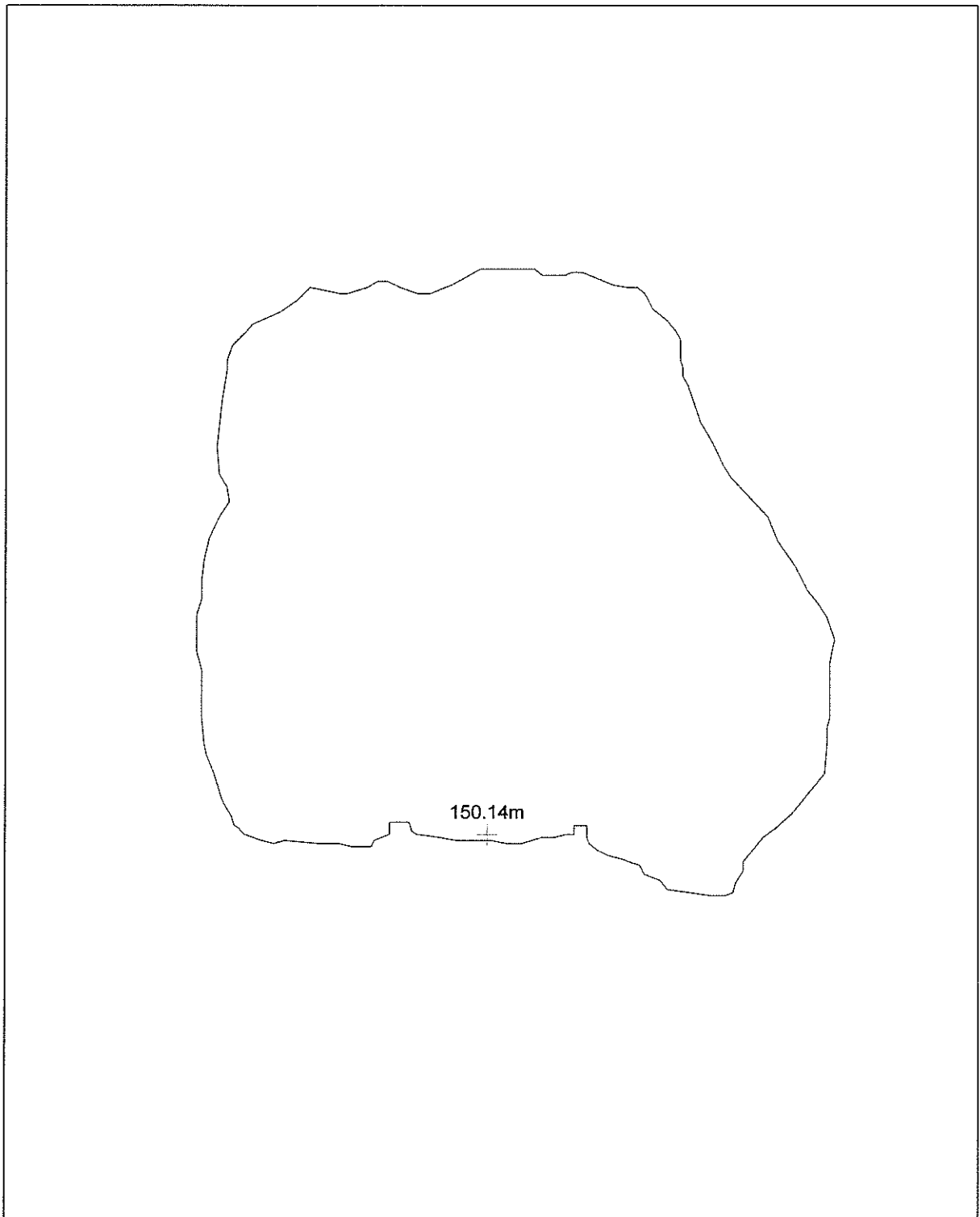
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PROFILE OF ADIT 25m FROM ADIT ENTRANCE
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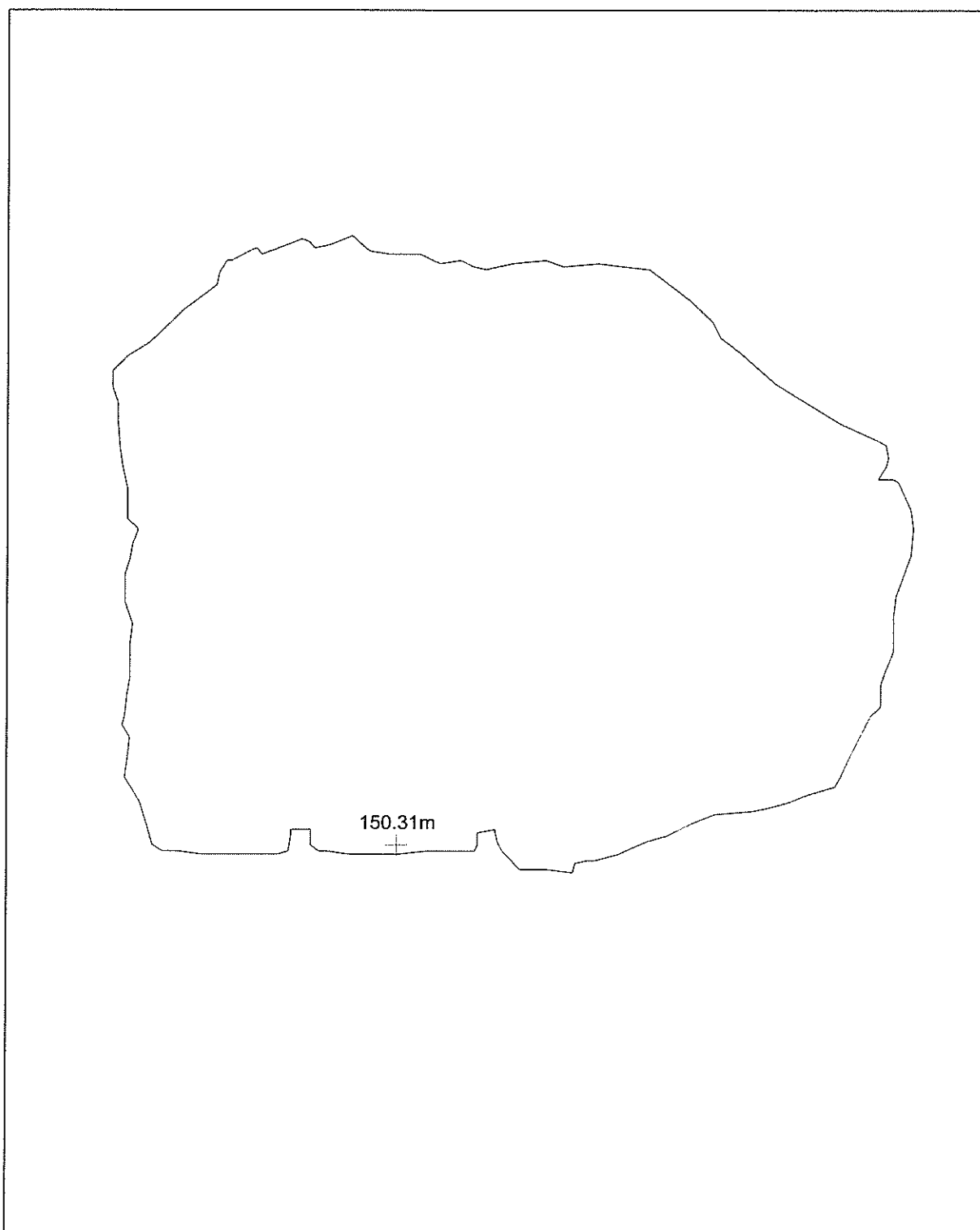
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PROFILE OF ADIT 30m FROM ADIT ENTRANCE
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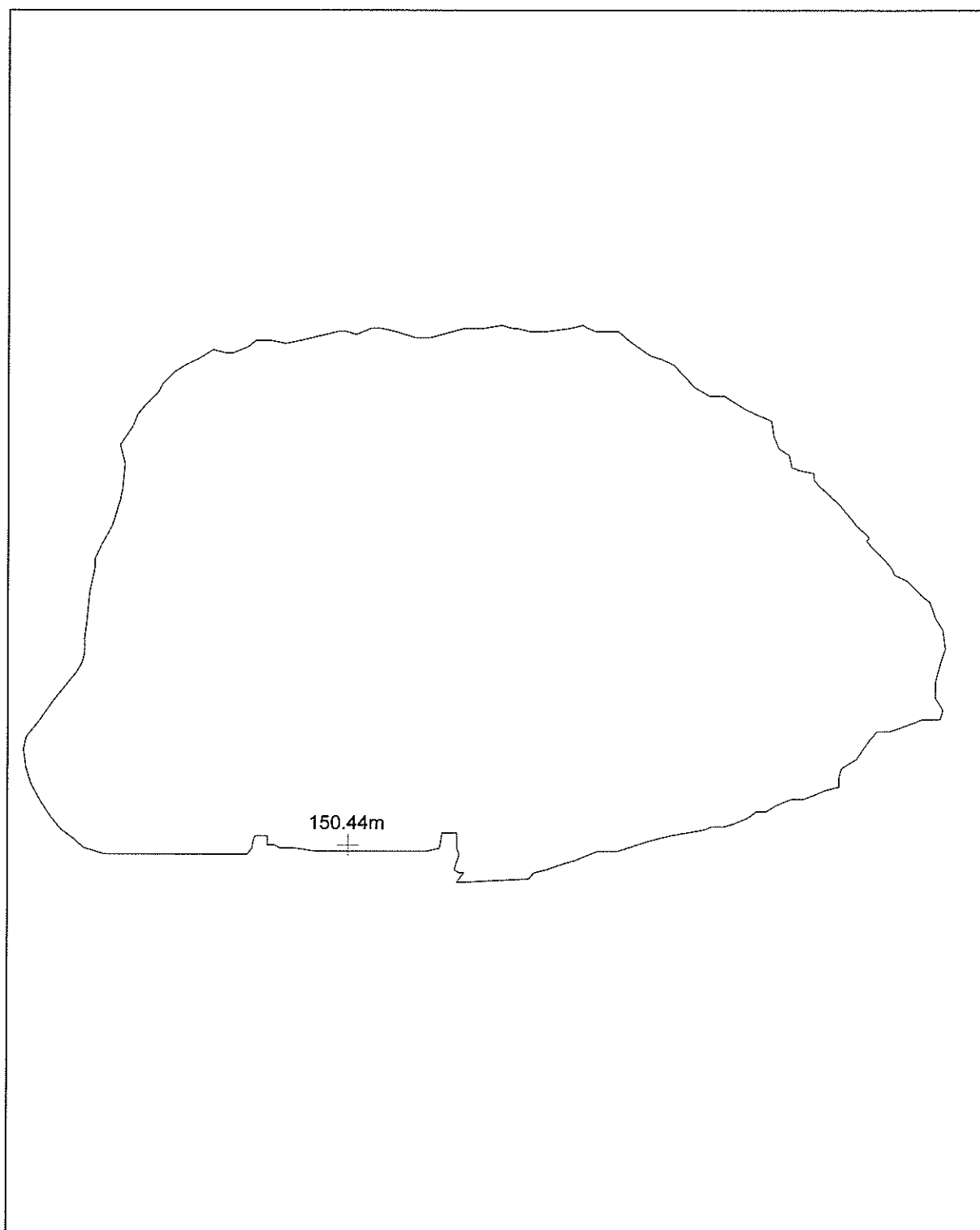
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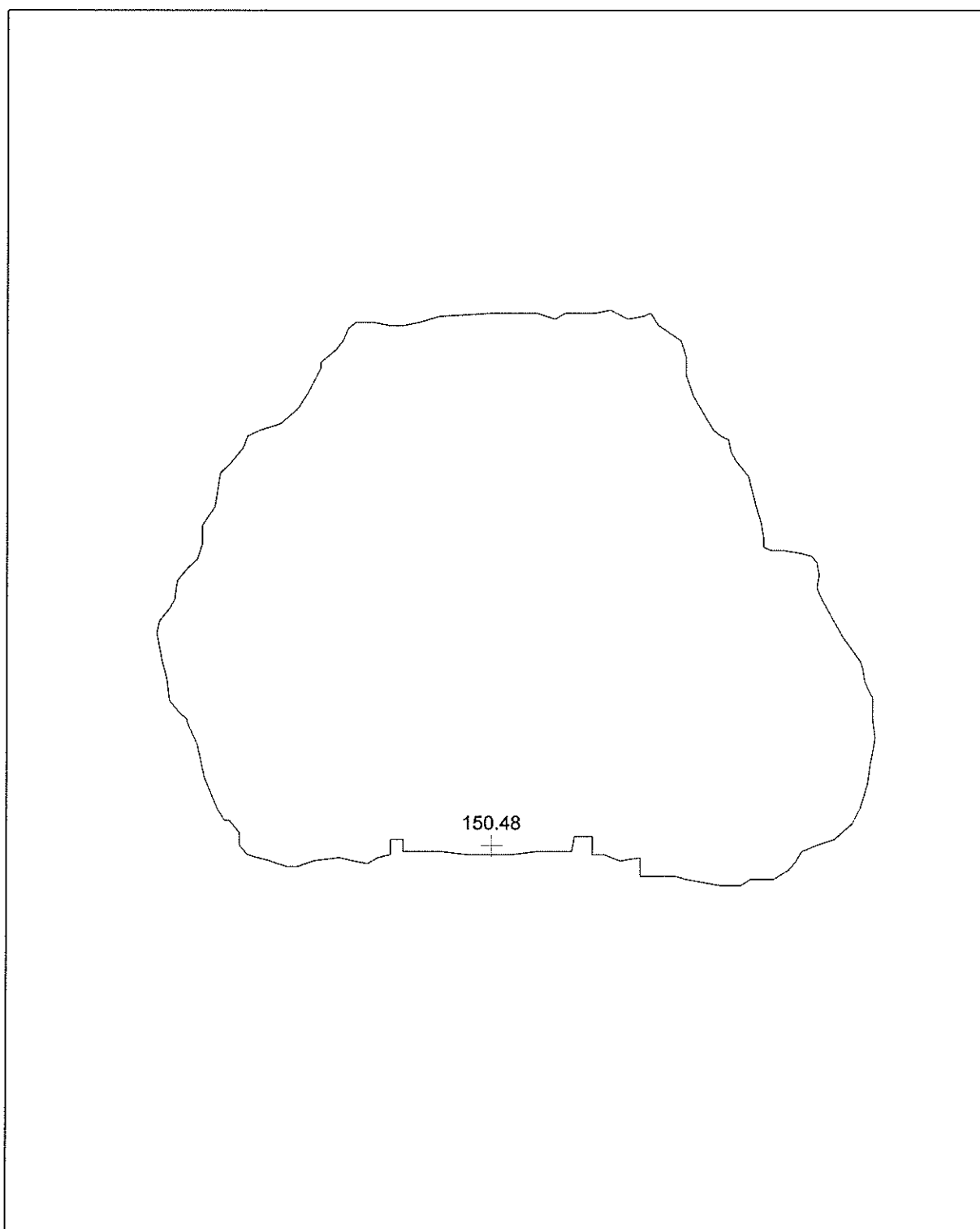
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PROFILE OF ADIT 40m FROM ADIT ENTRANCE
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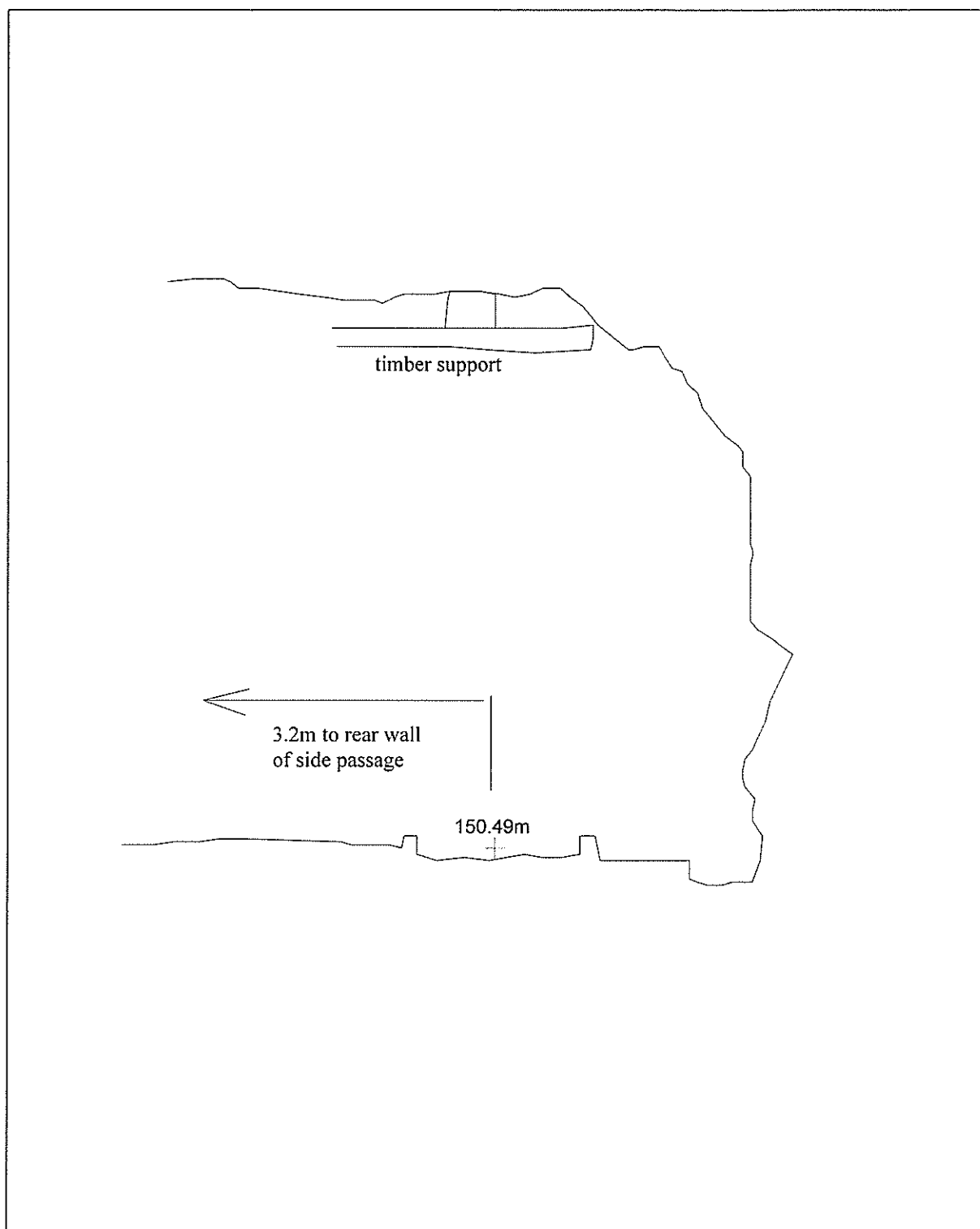
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PROFILE OF ADIT 45m FROM ADIT ENTRANCE
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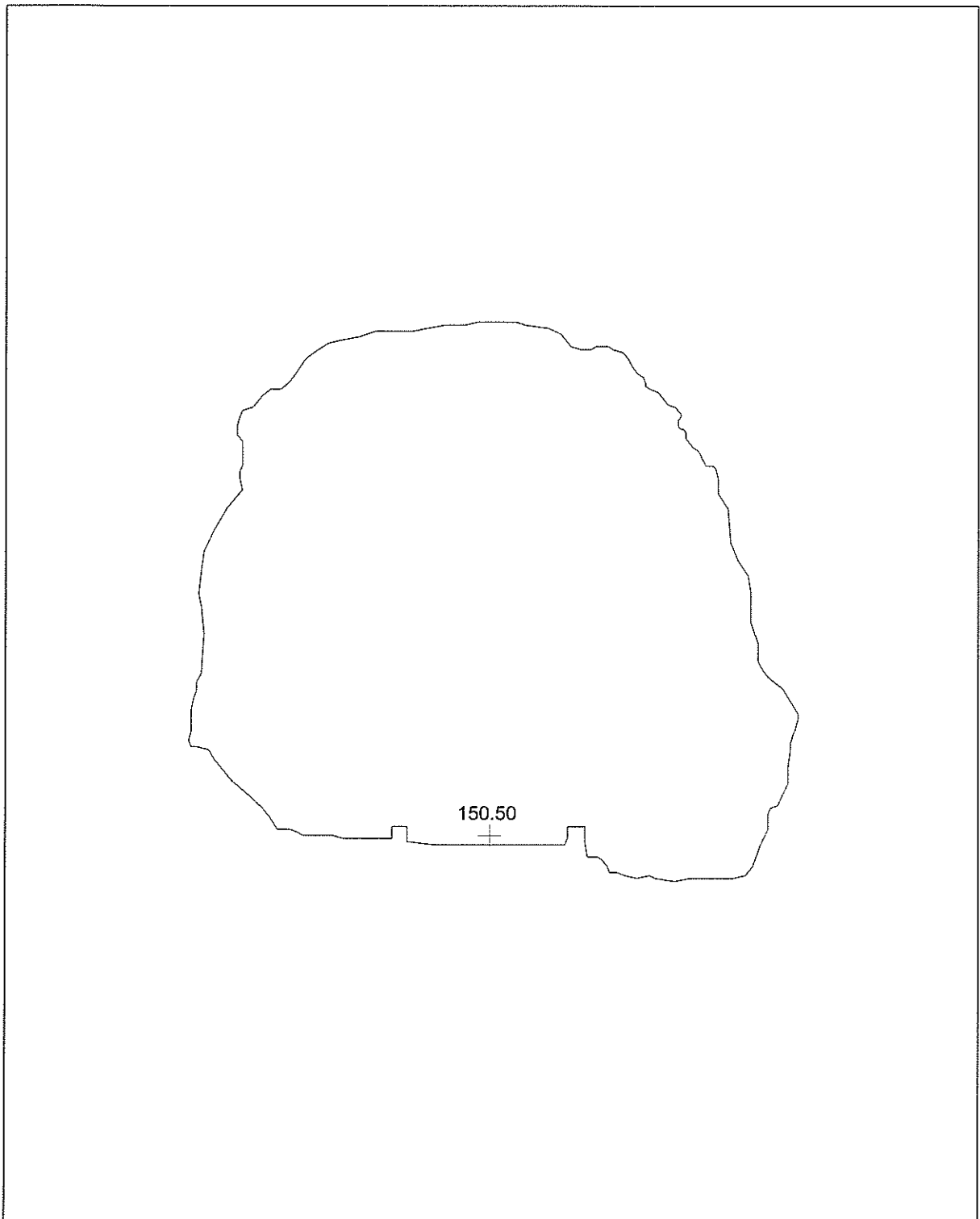
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PROFILE OF ADIT 50m FROM ADIT ENTRANCE
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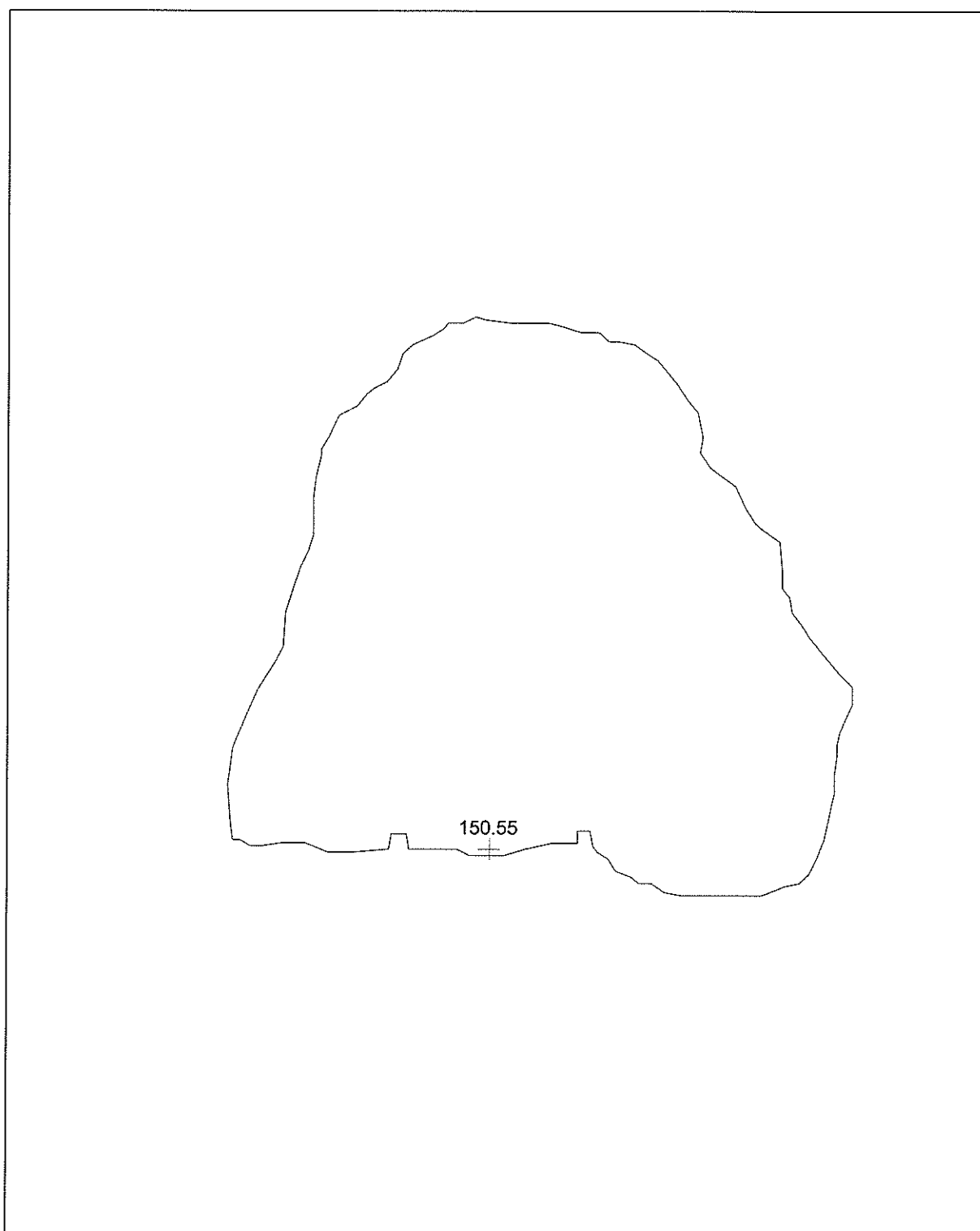
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PROFILE OF ADIT 55m FROM ADIT ENTRANCE
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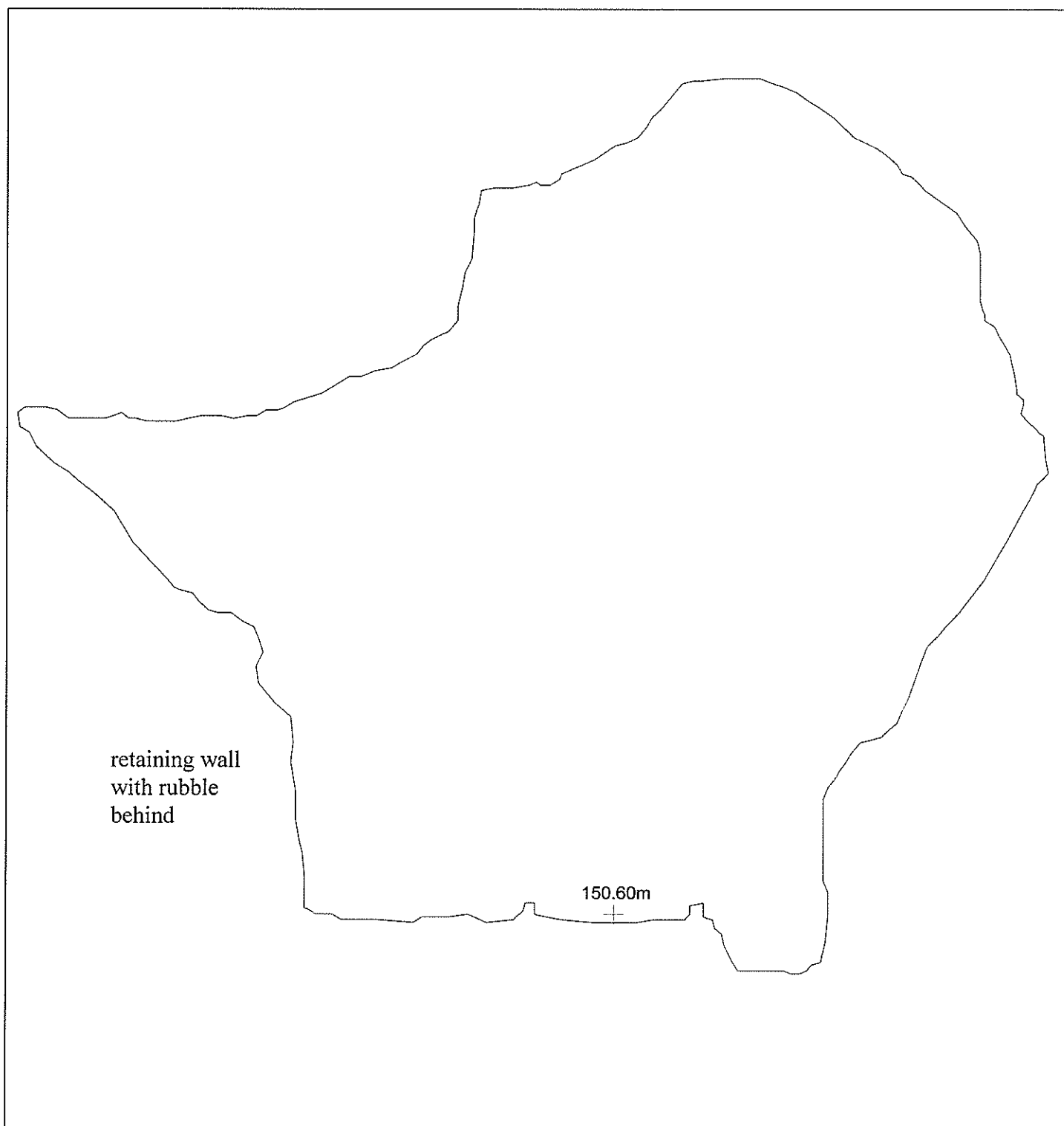
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PROFILE OF ADIT 60m FROM ADIT ENTRANCE
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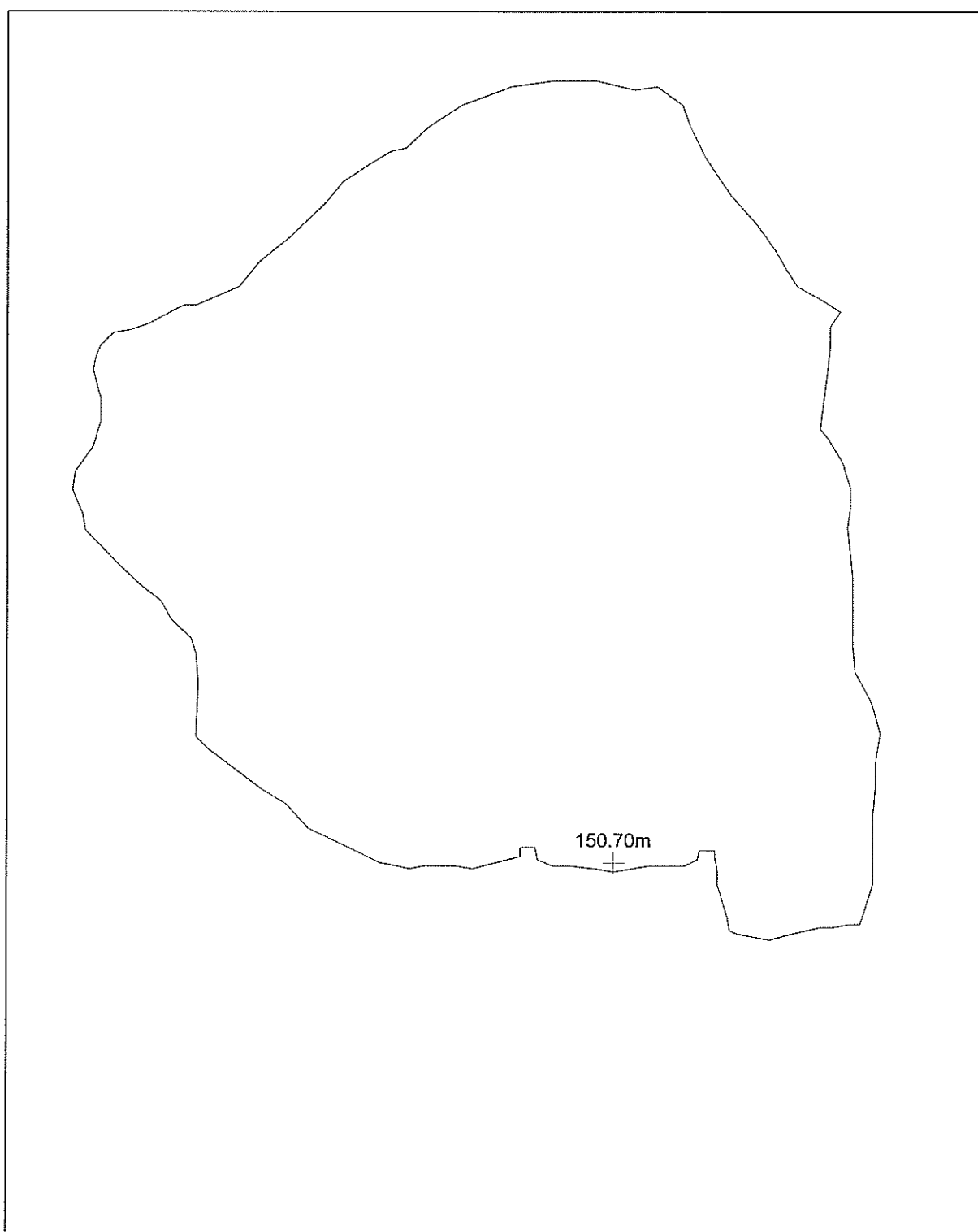
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PROFILE OF ADIT 65m FROM ADIT ENTRANCE
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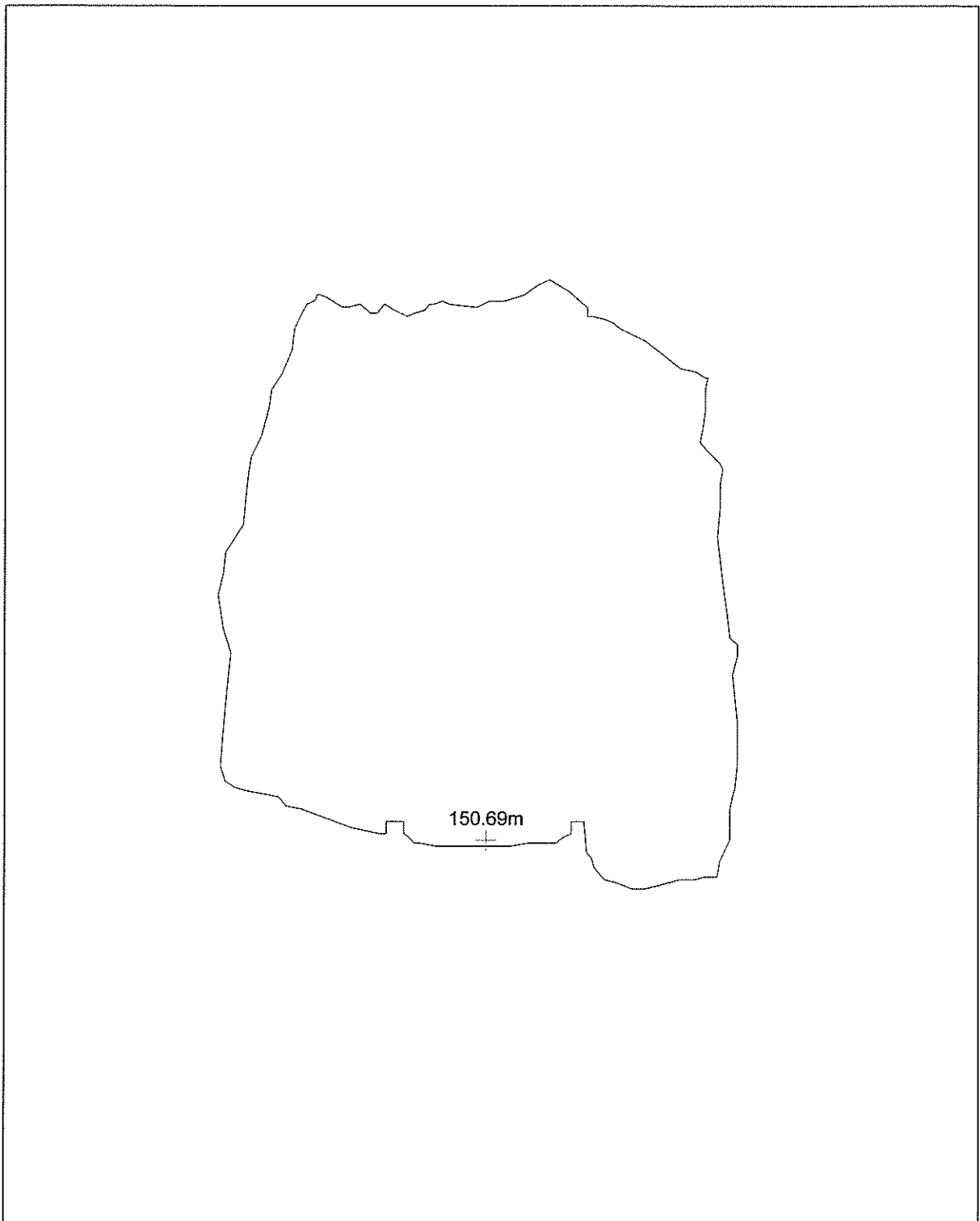
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PROFILE OF ADIT 70m FROM ADIT ENTRANCE
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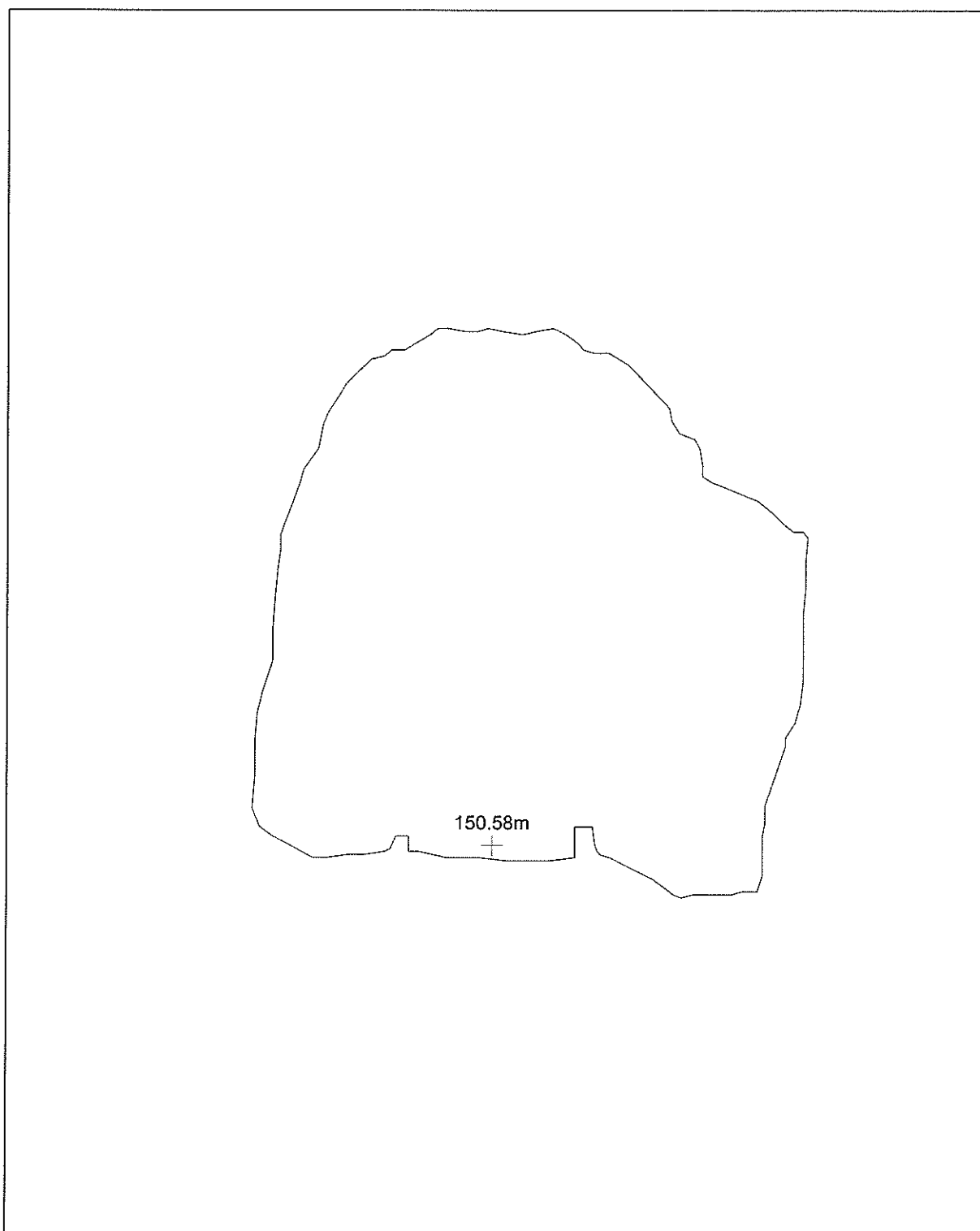
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PROFILE OF ADIT 75m FROM ADIT ENTRANCE
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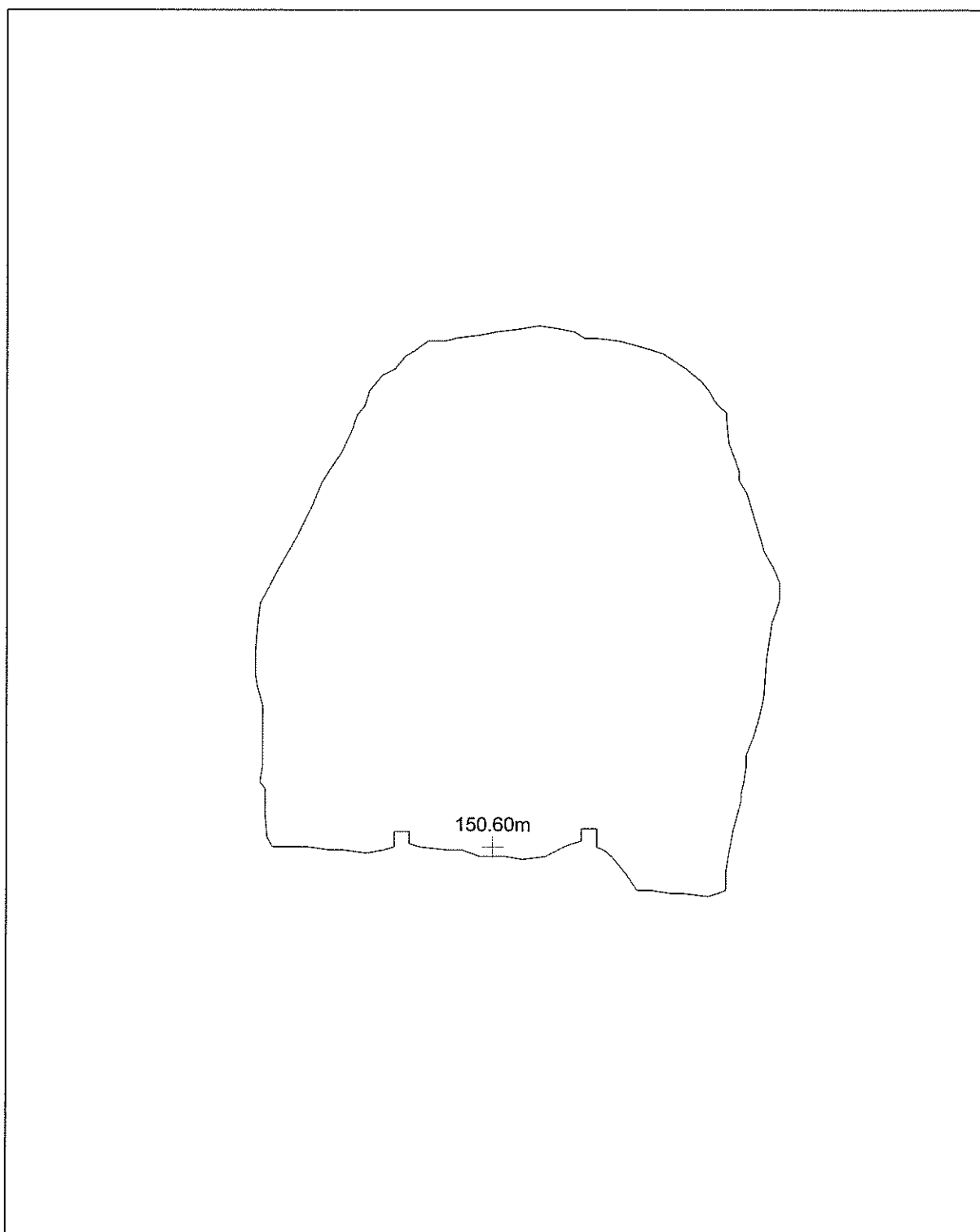
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PROFILE OF ADIT 80m FROM ADIT ENTRANCE
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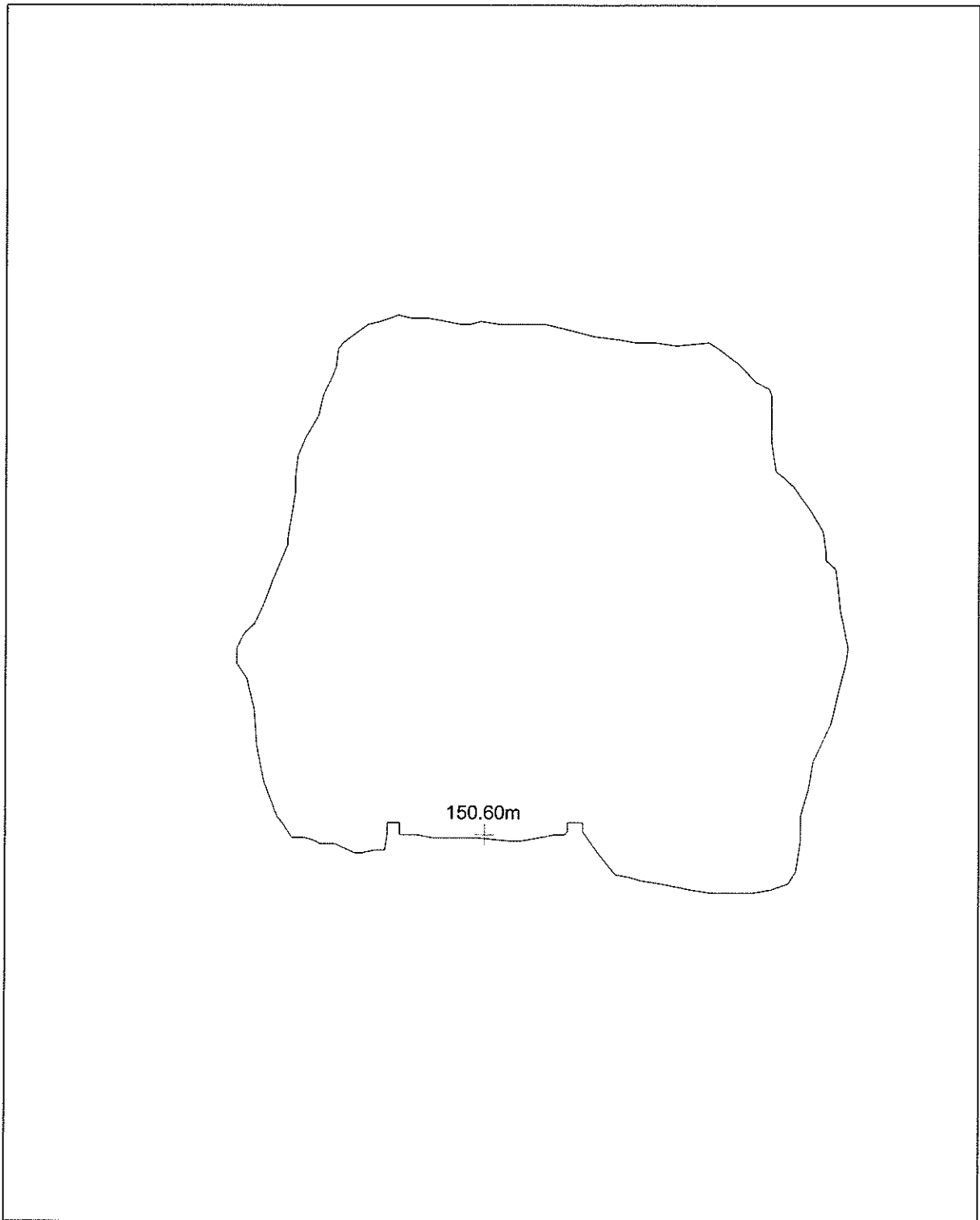
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PROFILE OF ADIT 85m FROM ADIT ENTRANCE
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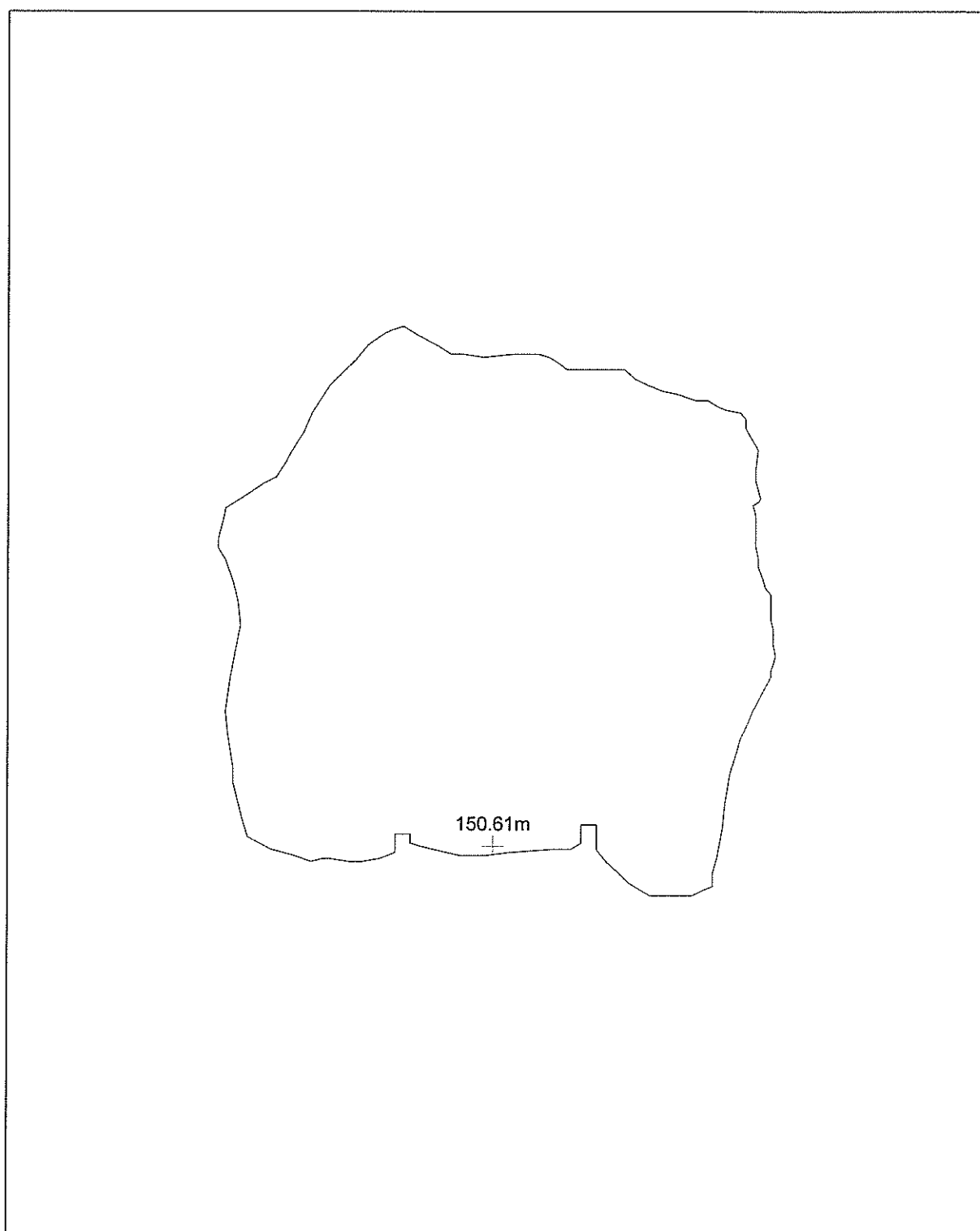
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PROFILE OF ADIT 90m FROM ADIT ENTRANCE
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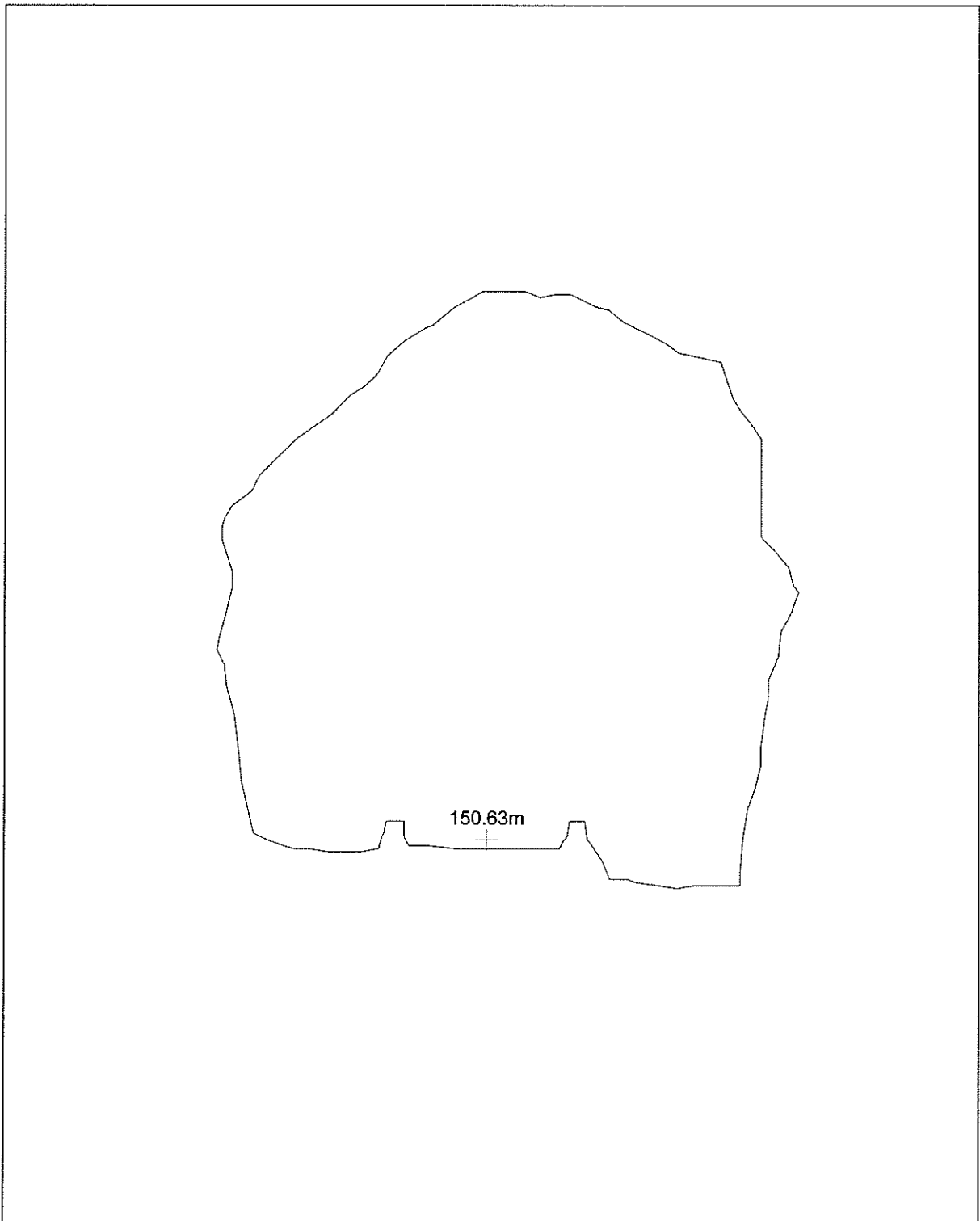
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PROFILE OF ADIT 95m FROM ADIT ENTRANCE
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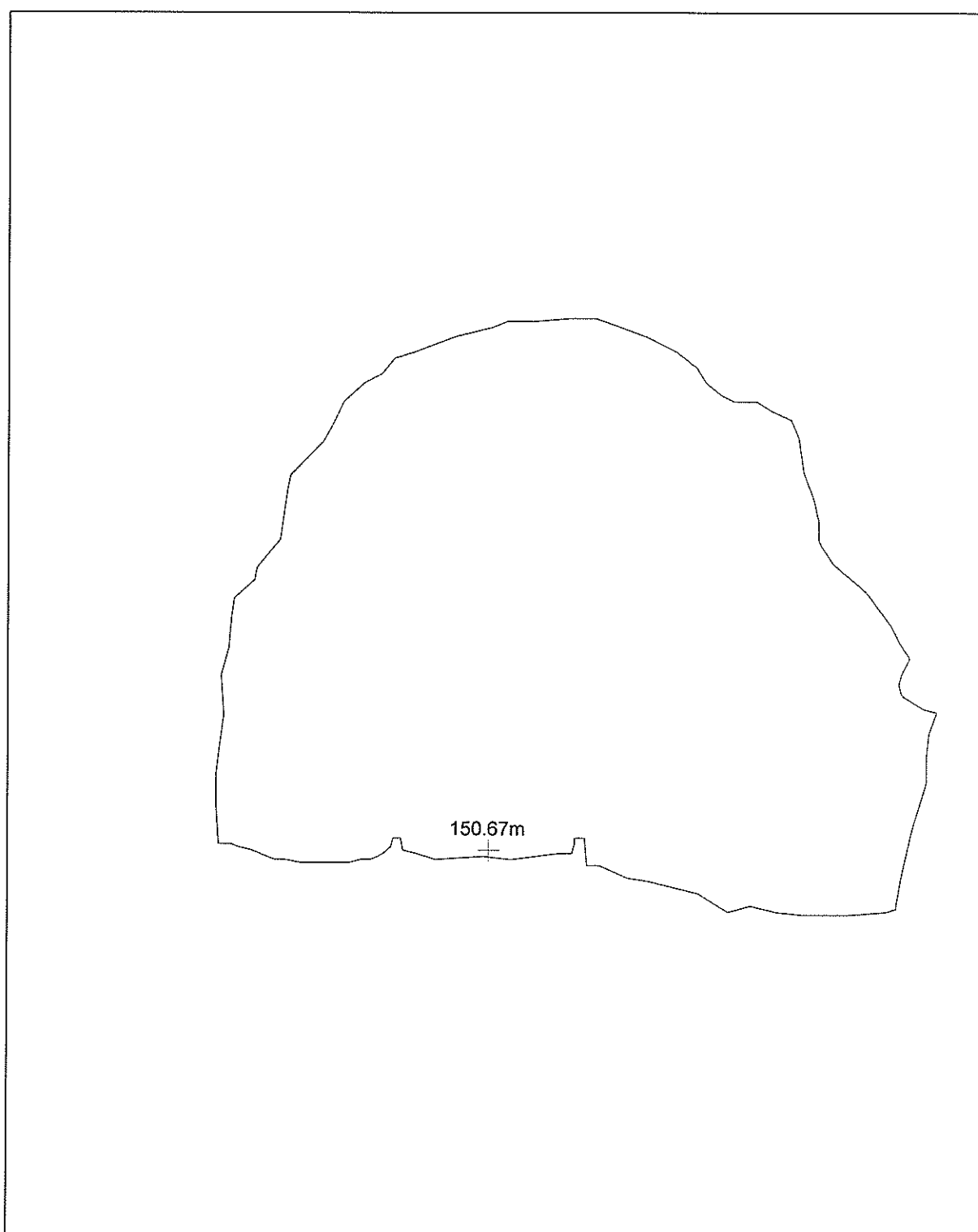
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PROFILE OF ADIT 100m FROM ADIT ENTRANCE
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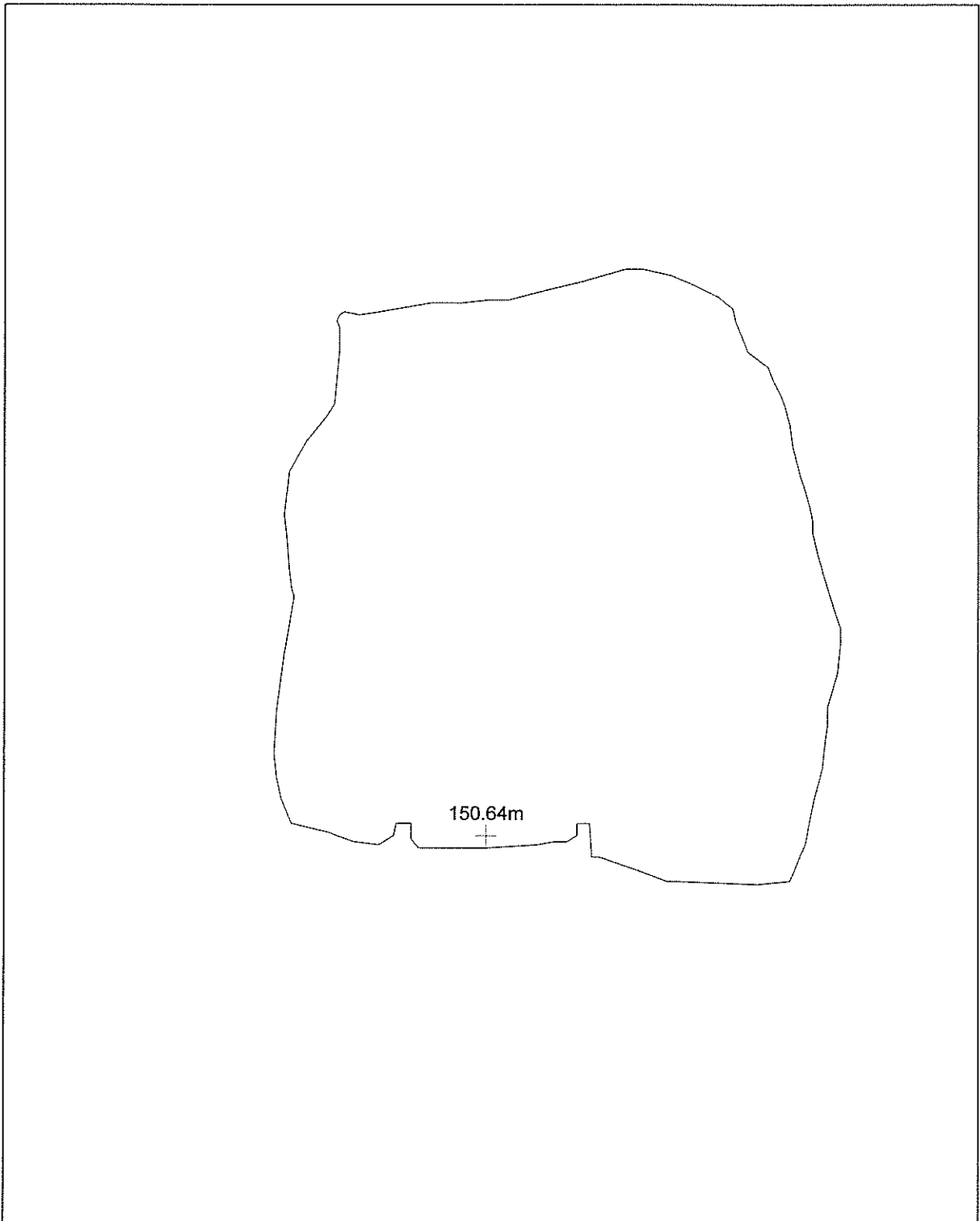
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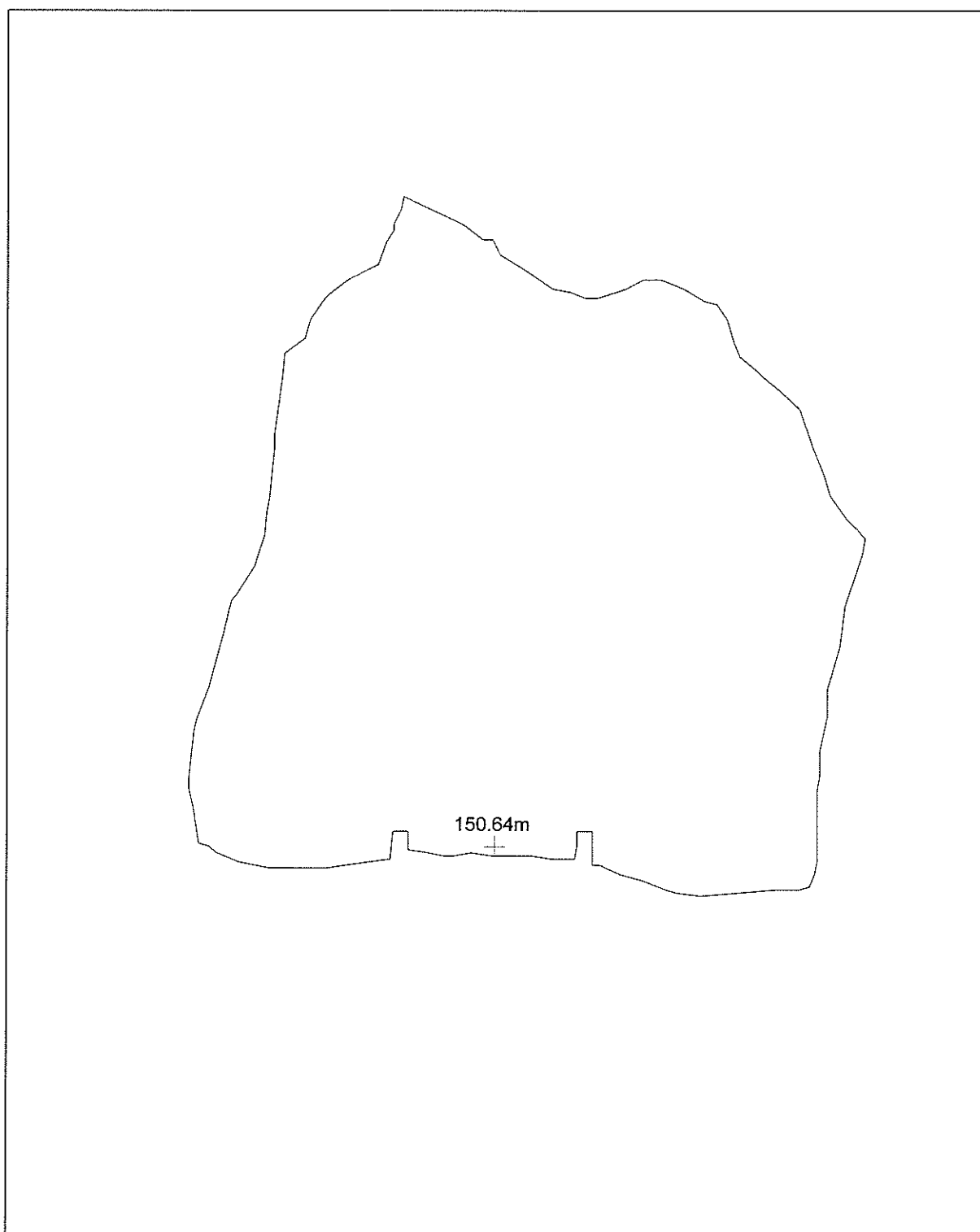
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PROFILE OF ADIT 110m FROM ADIT ENTRANCE
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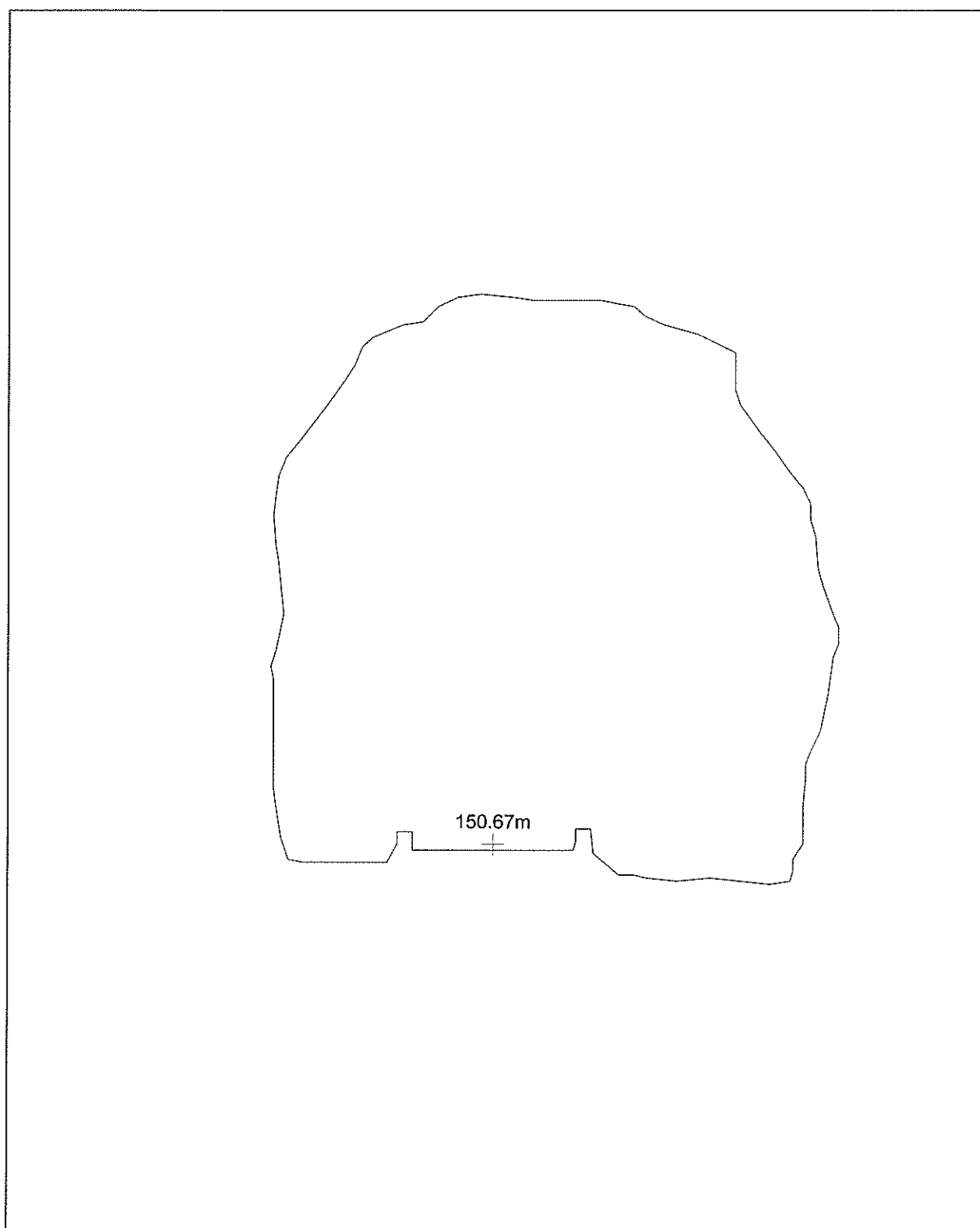
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PROFILE OF ADIT 115m FROM ADIT ENTRANCE
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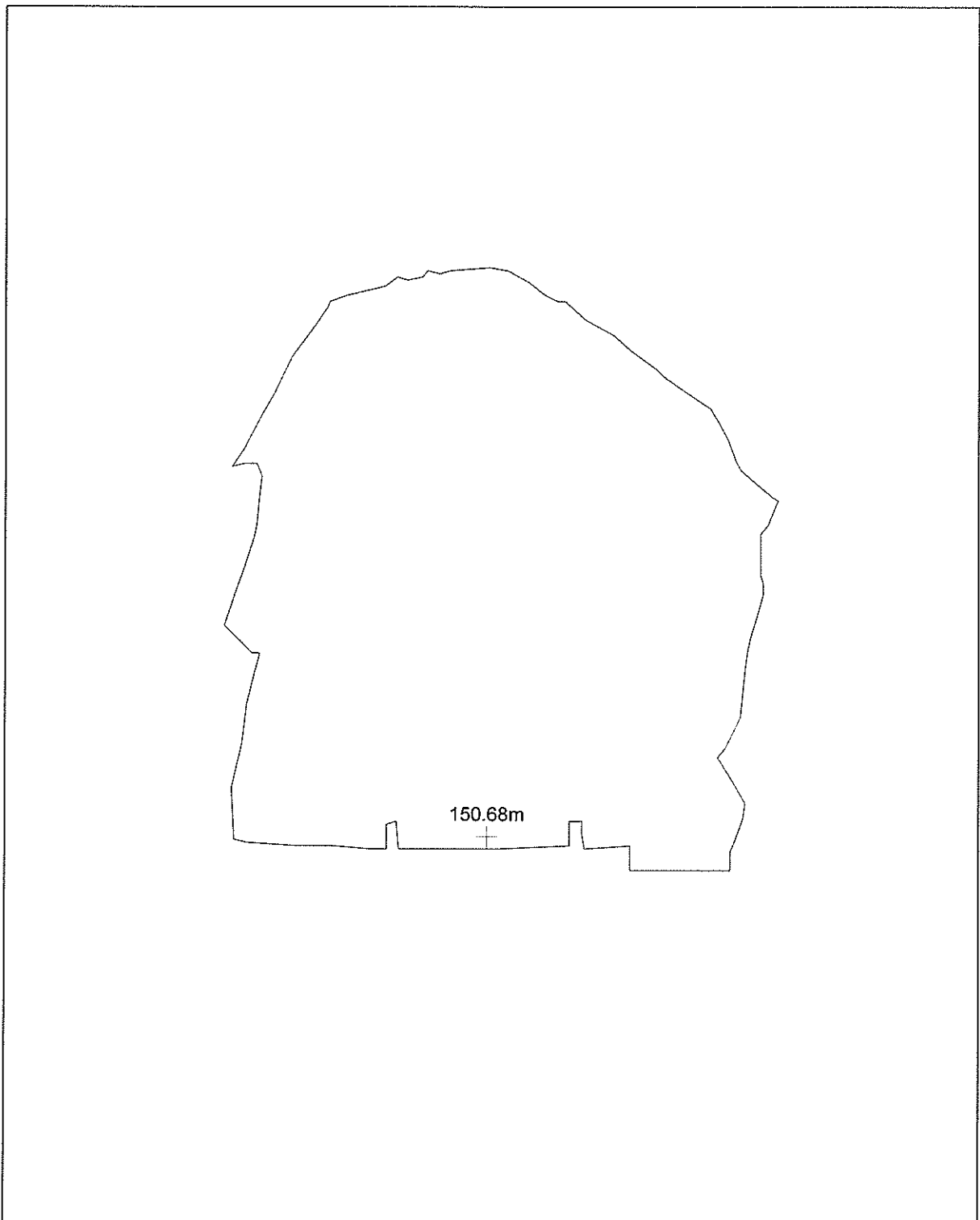
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PROFILE OF ADIT 120m FROM ADIT ENTRANCE
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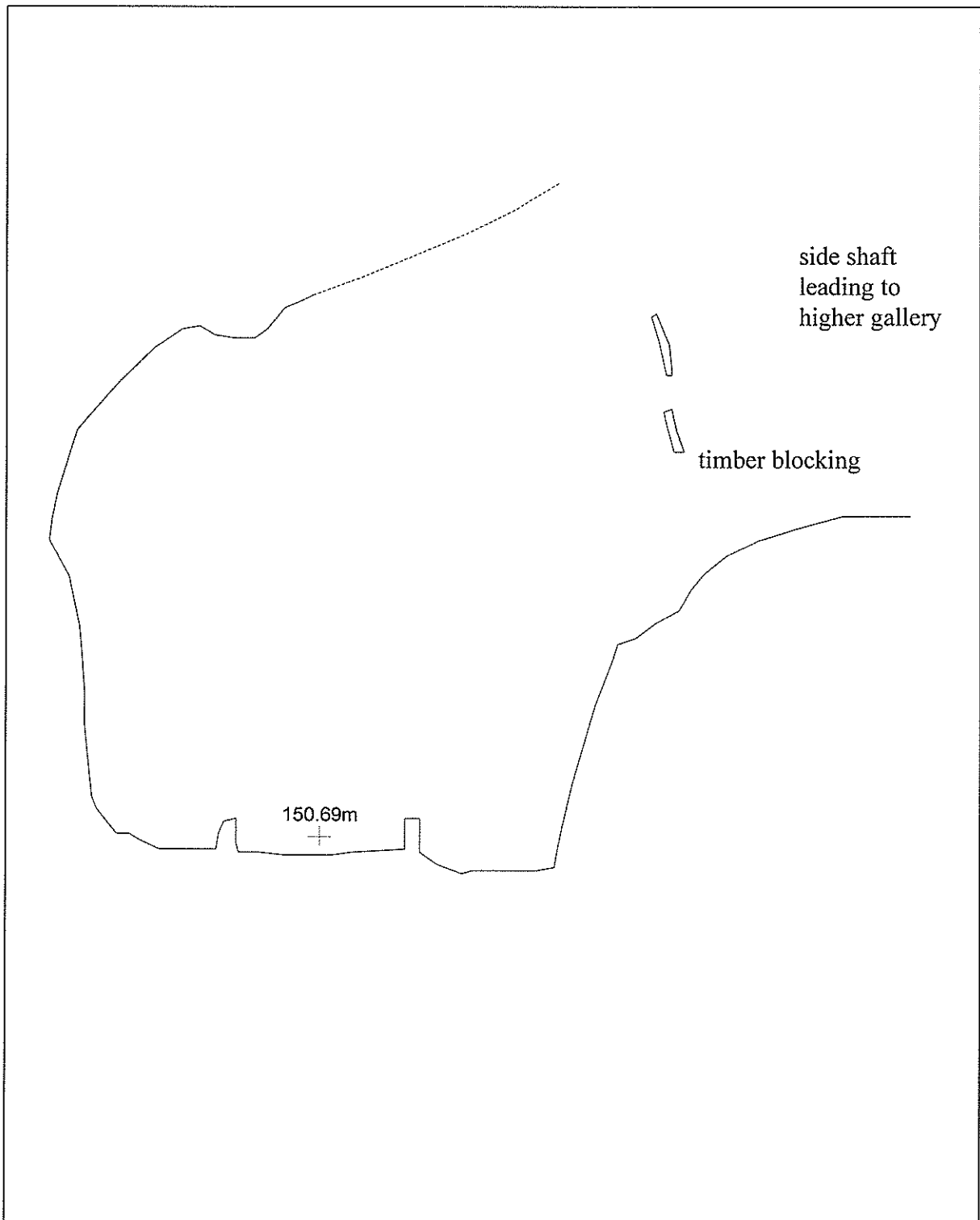
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PROFILE OF ADIT 125m FROM ADIT ENTRANCE
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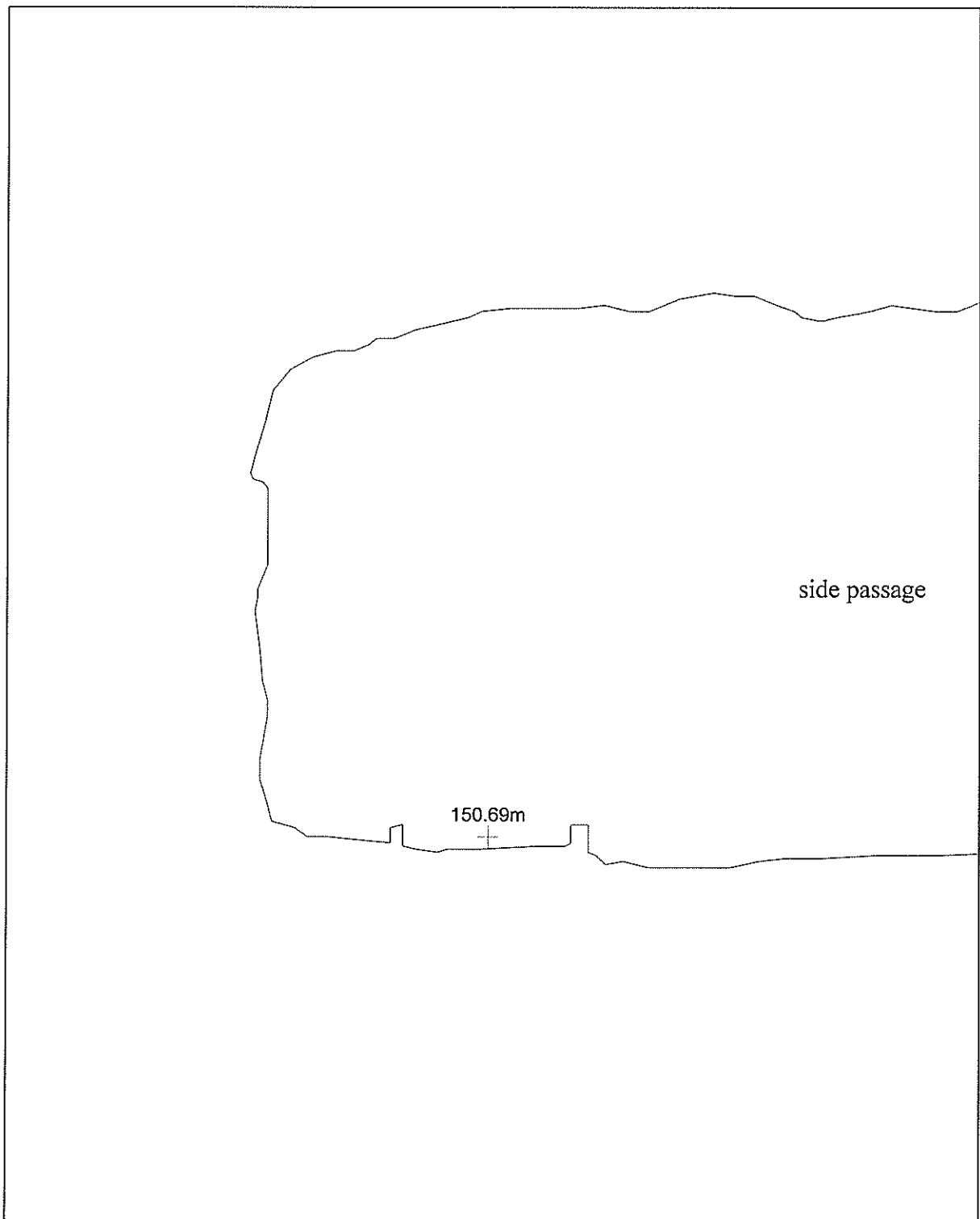
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PROFILE OF ADIT 130m FROM ADIT ENTRANCE
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SCALE 1:20
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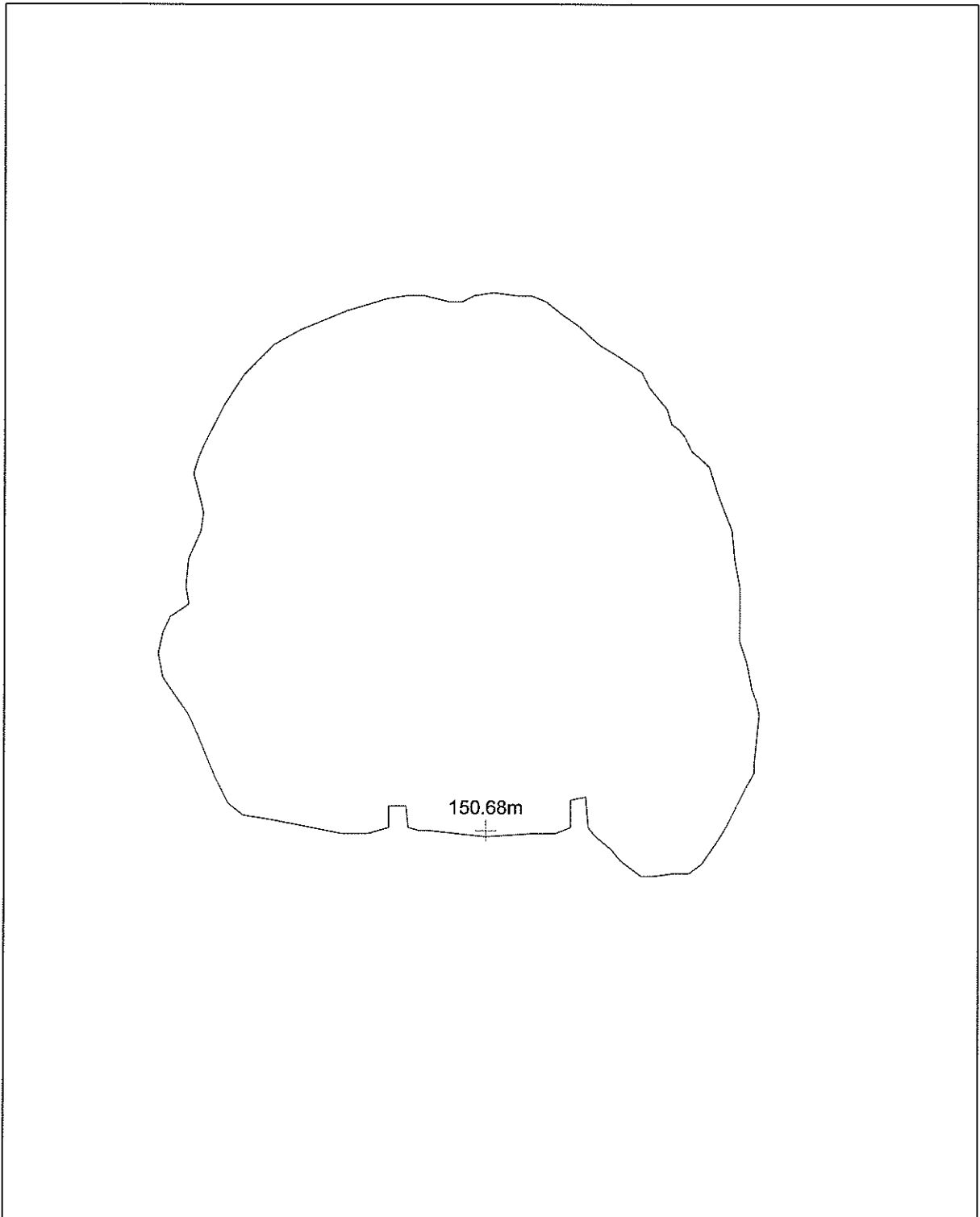
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PROFILE OF ADIT 135m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
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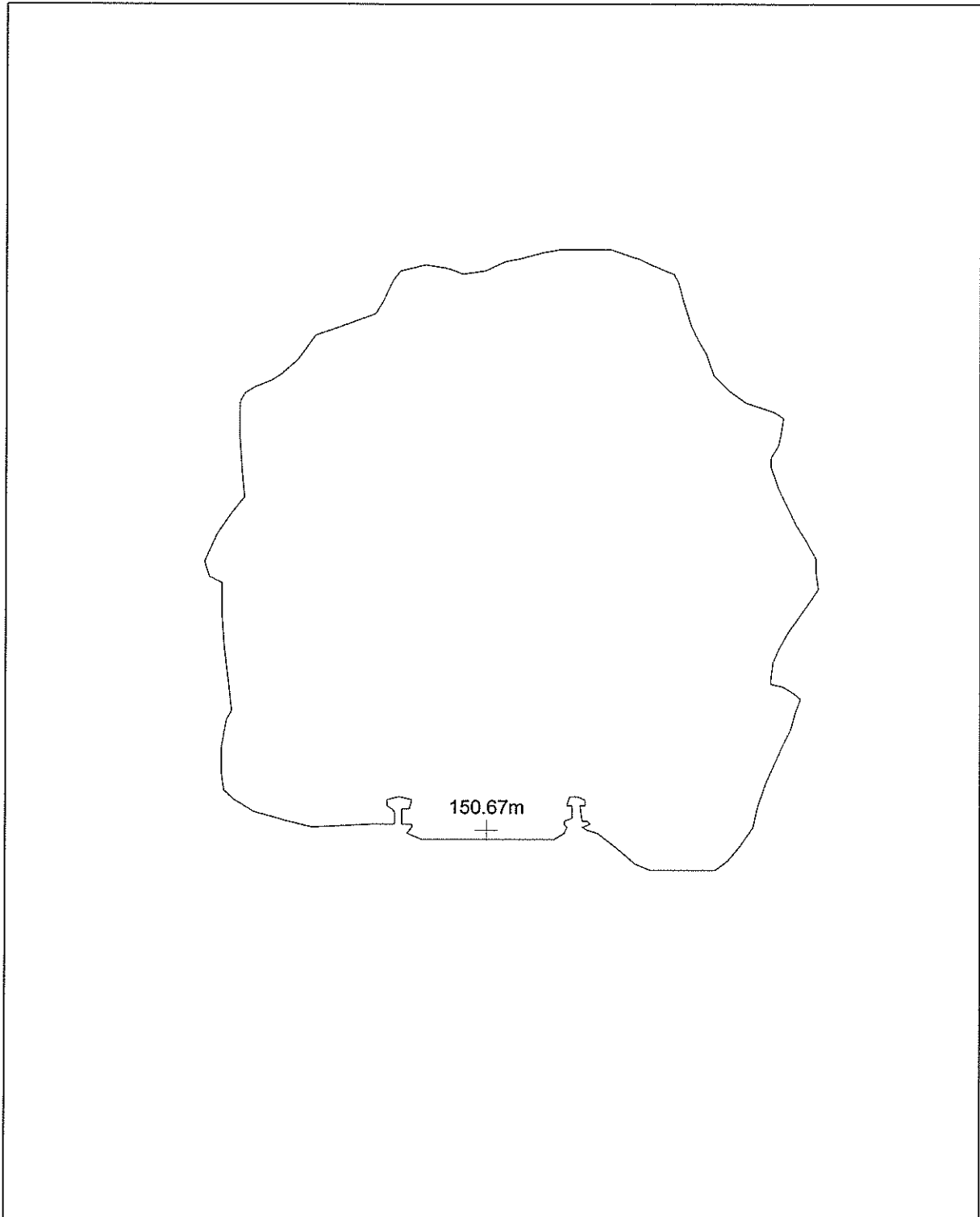
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PROFILE OF ADIT 140m FROM ADIT ENTRANCE
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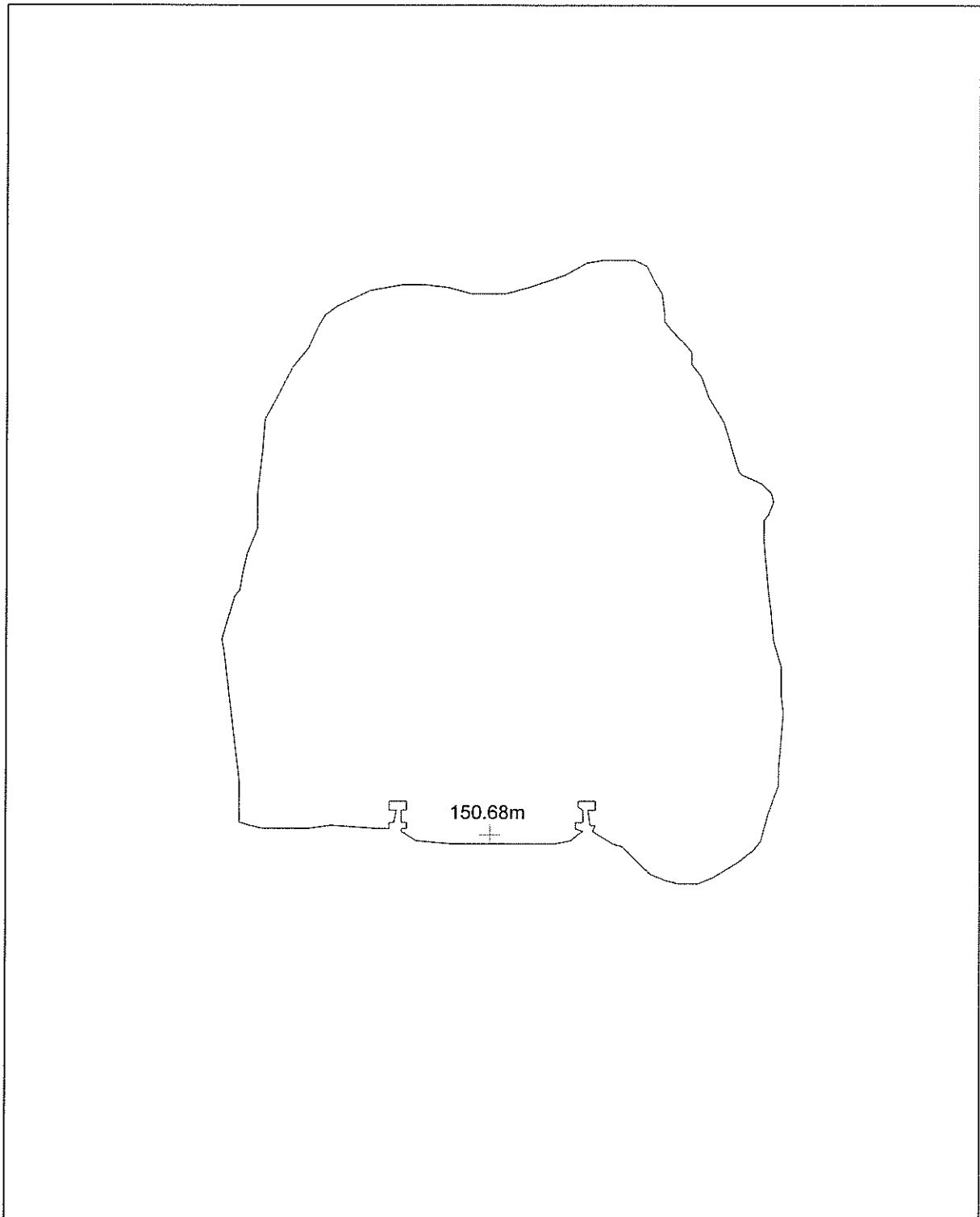
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PROFILE OF ADIT 145m FROM ADIT ENTRANCE
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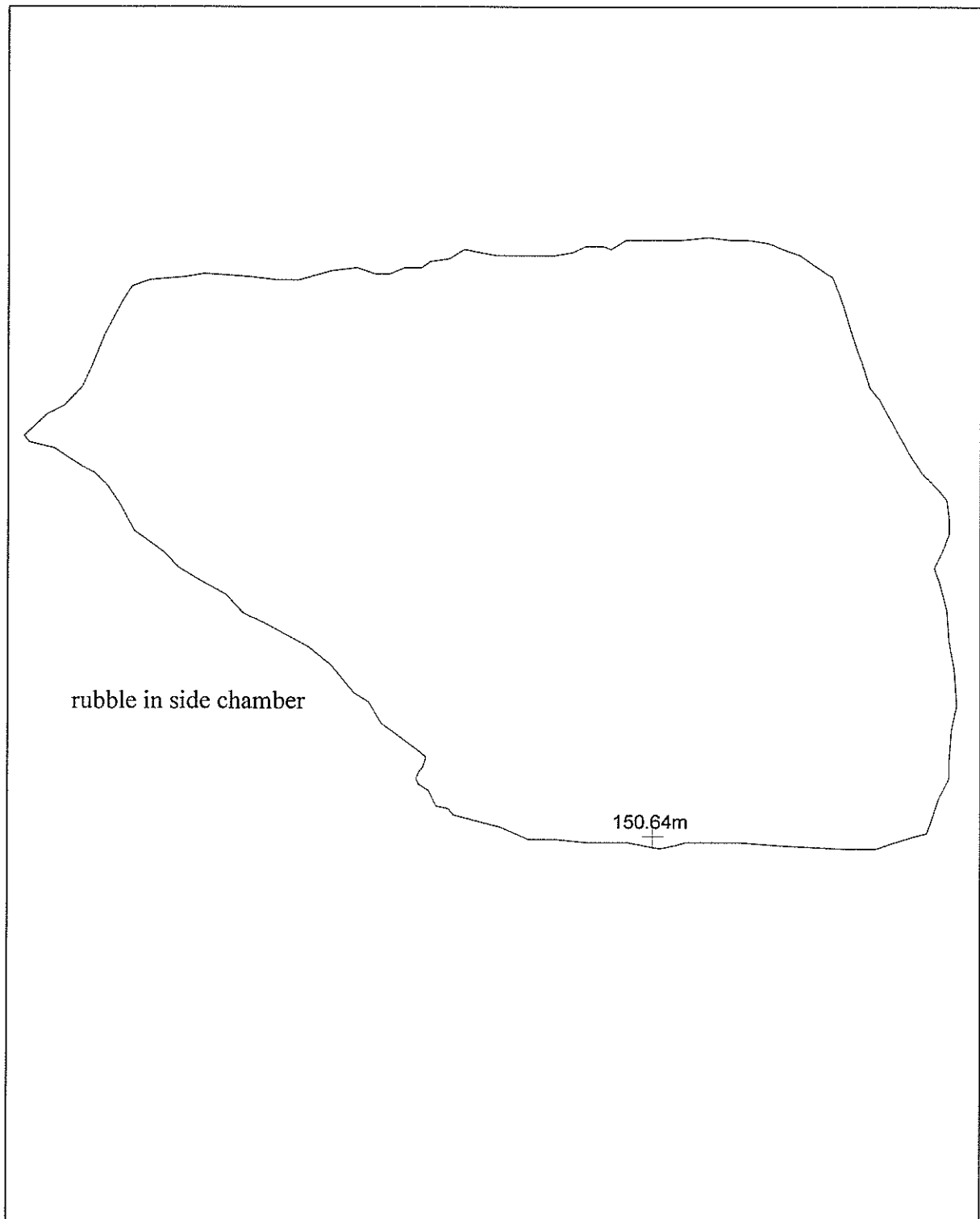
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PROFILE OF ADIT 150m FROM ADIT ENTRANCE
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MARCH 2004



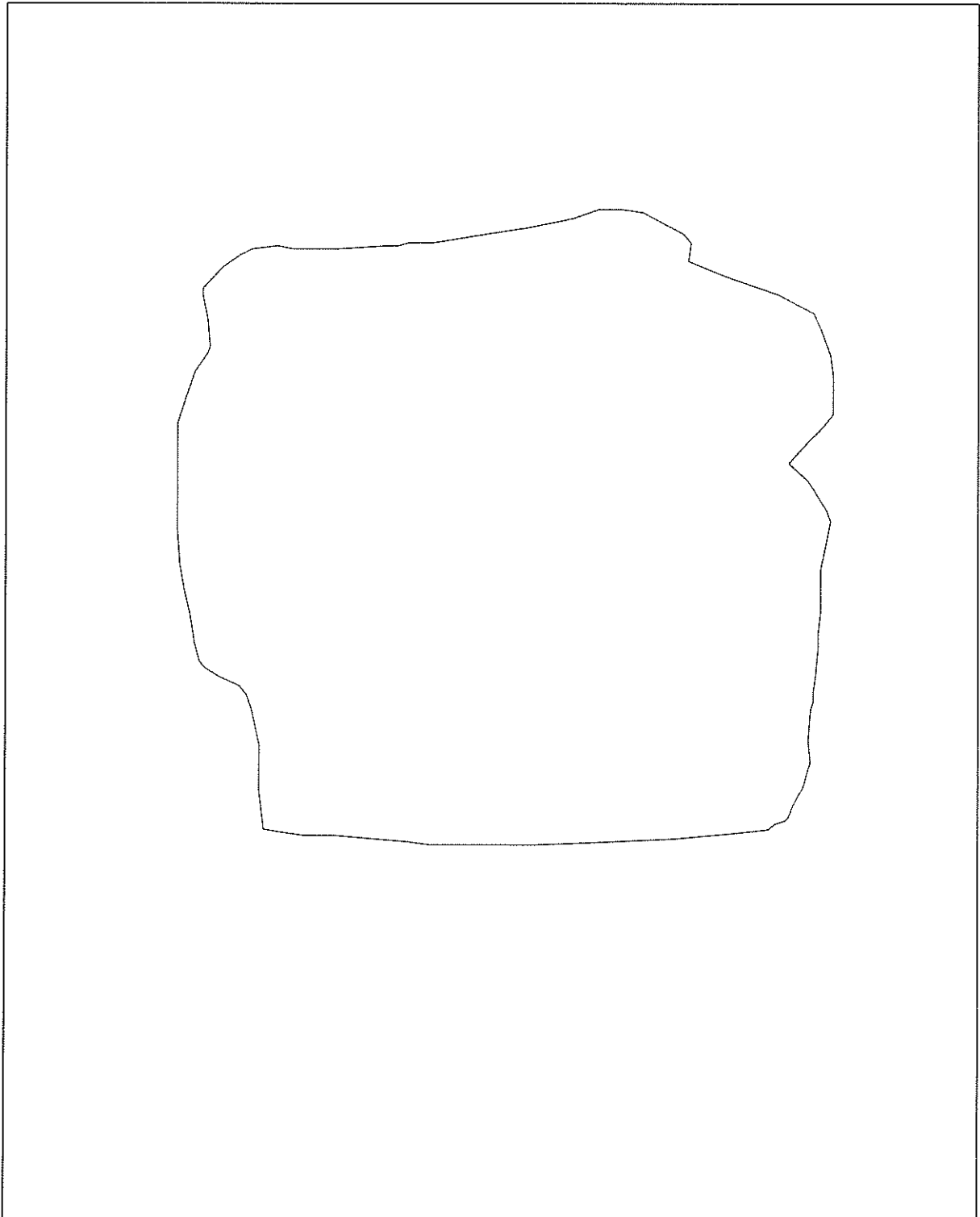
DOLAUCOTHI GOLD MINES - LONG ADIT
PROFILE OF ADIT 155m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
SURVEY FOR: THE NATIONAL TRUST
SURVEY BY: CAMBRIA ARCHAEOLOGY
MARCH 2004



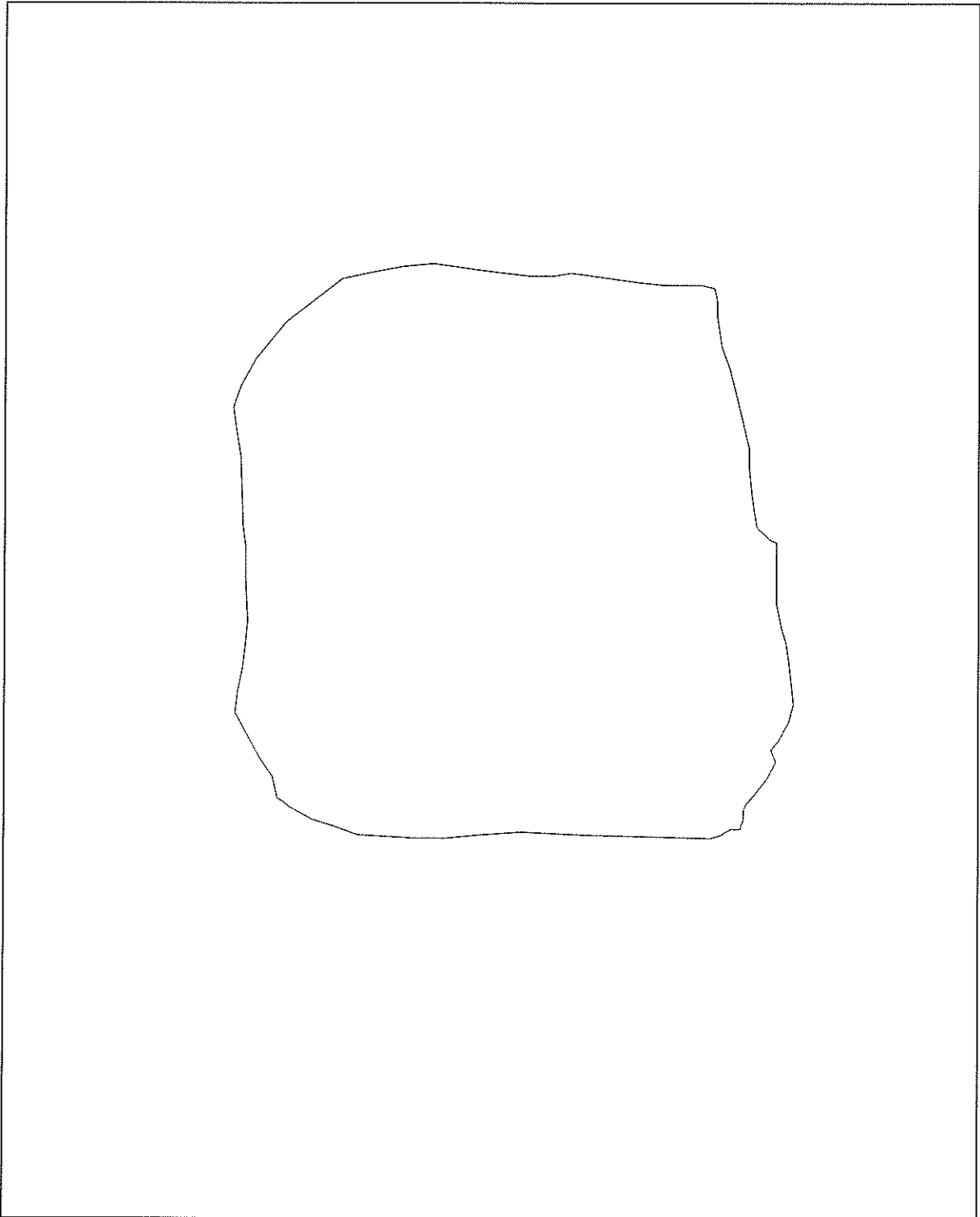
DOLAUCOTHI GOLD MINES - LONG ADIT
PROFILE OF ADIT 160m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
SURVEY FOR: THE NATIONAL TRUST
SURVEY BY: CAMBRIA ARCHAEOLOGY
MARCH 2004



DOLAUCOTHI GOLD MINES - LONG ADIT
PROFILE OF ADIT 165m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
SURVEY FOR: THE NATIONAL TRUST
SURVEY BY: CAMBRIA ARCHAEOLOGY
MARCH 2004



DOLAUCOTHI GOLD MINES - LONG ADIT
PROFILE OF ADIT 170m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
SURVEY FOR: THE NATIONAL TRUST
SURVEY BY: CAMBRIA ARCHAEOLOGY
MARCH 2004



DOLAUCOTHI GOLD MINES - LONG ADIT
PROFILE OF ADIT 175m FROM ADIT ENTRANCE
VIEWED FROM THE ADIT ENTRANCE
SCALE 1:20
SURVEY FOR: THE NATIONAL TRUST
SURVEY BY: CAMBRIA ARCHAEOLOGY
MARCH 2004

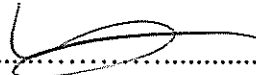
**DOLAUCOTHI GOLD MINES
LONG ADIT
SURVEY 2004**

RHIF YR ADRODDIAD / REPORT NUMBER 2004/42

**Mawrth 2004
March 2004**

Paratowyd yr adroddiad hwn gan / This report has been prepared by Ken Murphy

Swydd / Position: Principal Archaeologist – Field Services

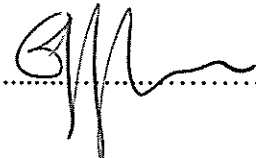
Llofnod / Signature  Dyddiad / Date 31/03/2004

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

Gwilym Hughes

ar ran Archaeoleg Cambria, Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Swydd / Position: Director

Llofnod / Signature  Dyddiad / Date 31/02/2004

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar
gynnwys neu strwythur yr adroddiad hwn
As part of our desire to provide a quality service we would welcome any comments you may have
on the content or presentation of this report