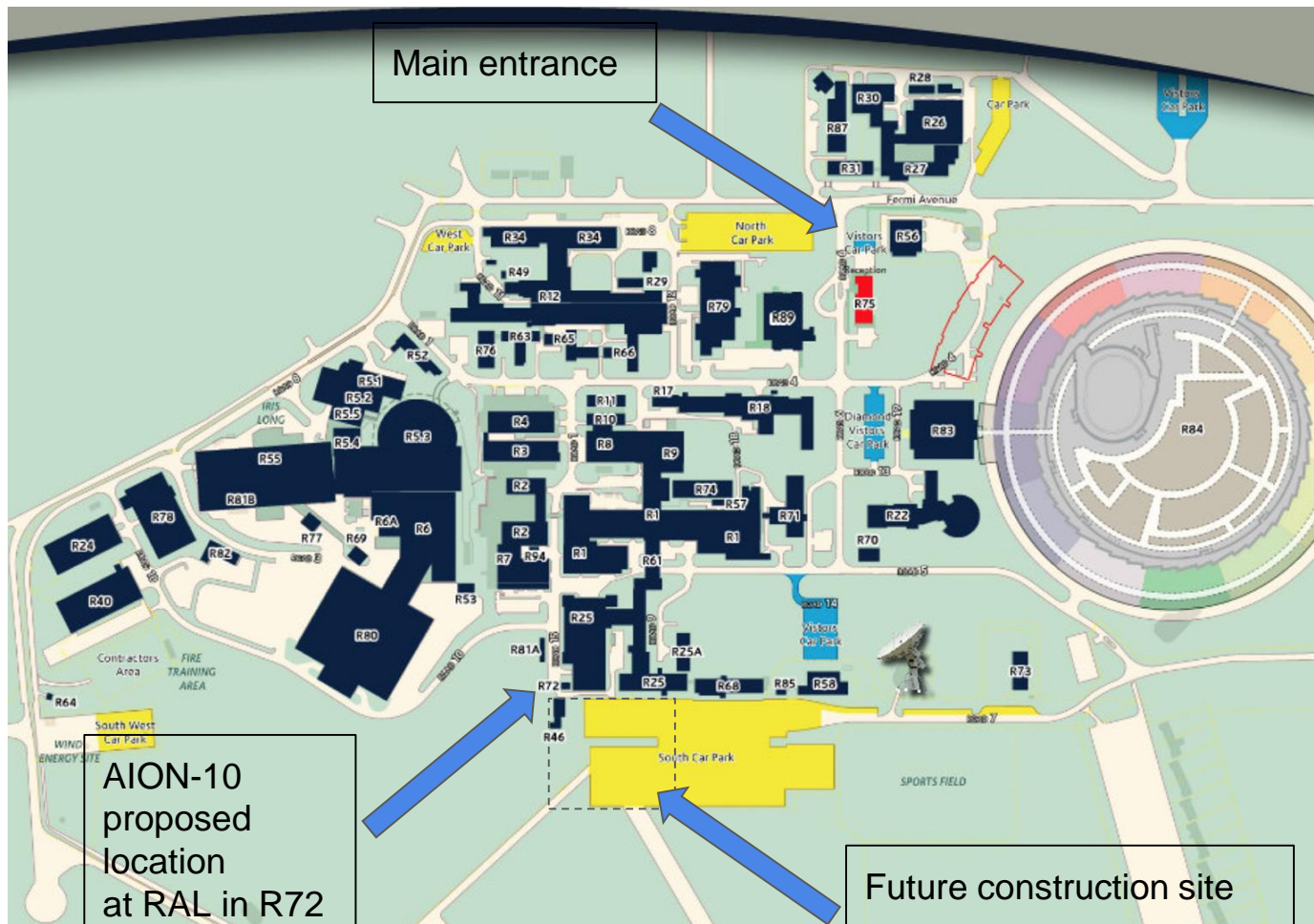


AION-10 location at RAL

Pawel and Tristan

25 January 2019

Map of RAL



Main entrance

AION-10
proposed
location
at RAL in R72

Future construction site

AION-10 at RAL



R72 - stand-alone building housing compressors used for activities in the adjacent building R25

Advantages: single user, easy access, overhead crane, ladder and internal metal structure giving access to different heights, can become available for adaptation work as soon as it is accepted by the project

AION-10 at RAL

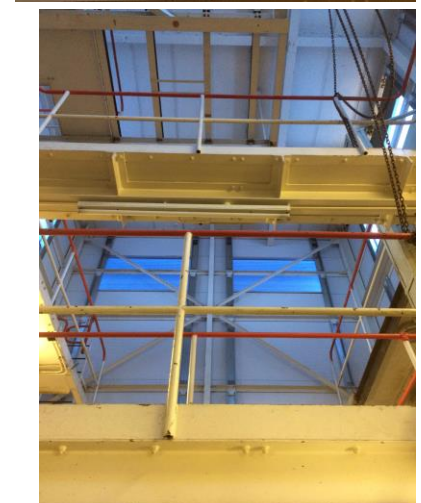
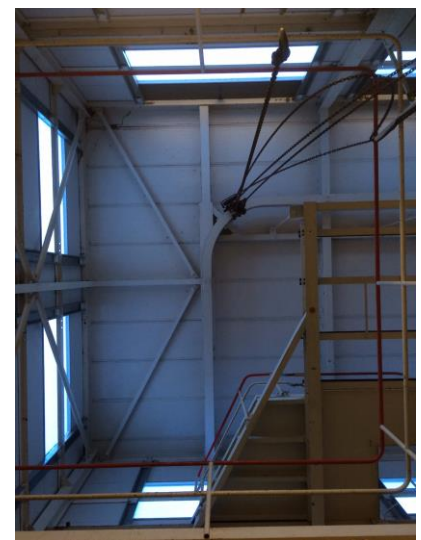
R72 building

Footprint: 7 m x 5 m

Height : 9 m

It requires:

- Asbestos survey
- Relocation of the compressors
- Adaptation to the project requirements
i.e. thermal insulation
- Refurbishment



Requirements for the AION-10 m site

1. Feasibility studies

- a. List of requirements for the site to achieve science goal by AION-10
 - i. Height for interferometer and total footprint of the experiment
 - ii. External electromagnetic interference level (activities around R-72 i.e. big car park, ISIS, mobile phone relay station - to be relocated in the near future)
 - iii. External vibration interference level (activities around R-72 i.e. future construction site, big car park)
 - iv. Probably more to add here

2. Possible in kind contribution from the host institution to adaptation of the site to AION-10 requirements

- a. Decision of the director of the host institution on the evaluation of the adaptation cost
 - i. High likelihood that in kind contribution from RAL will be accepted by the director of the lab

AION-10 site decision should be based on fulfilling (1) and (2)