

[REDACTED]

To: Diver, John
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Subject: RE: 12466-65: 31 St Mark's Crescent F1

Categories: Key Info

Hi John

I have reviewed this further - the objector's comments refer to:

- distance from the canal, including potential for stability issues and groundwater issues (ie potential for water to leak from the canal into the excavation; potential for fill materials within the rear garden to collapse or provide inadequate support to the canal).

- distance from No 59, specifically the rear extension.

The BIA documents refer to 10m between the rear wall of the proposed basement and the canal structure itself. Site investigation undertaken to date, including in the rear garden, does not indicate hydraulic conductivity with the canal since groundwater was not observed during the works. Subsequent groundwater monitoring indicates seepages of groundwater, that may or may not be collecting within the borehole monitoring pipe (as this is within LC, the low permeability of the soil means that groundwater records are not always straightforward to interpret). The BIA (and audit report) indicate that further monitoring is required to plan any dewatering requirements for the temporary works. This monitoring should alert the engineer to any likelihood of connectivity / flow from the canal to the excavation works.

The retaining walls are to be formed in an 'underpinning style' sequence, meaning that individual panels of ground will be opened up and kept temporarily supported whilst the retaining wall is formed. This allows any potential stability / groundwater issues to be observed in small, discrete excavations - again, this provides the Engineer with adequate opportunity to supervise and ensure the works are properly controlled. The main excavation works will not be undertaken until all the individual 'pins' have been constructed, and these in turn will be propped as the excavation is undertaken.

In regards to the Canal & Rivers Trust, the works should be undertaken in consultation with them, and as the asset owner they should impose their own restrictions on movements / protection of their asset. The correspondence indicates the developer is in consultation with the C&RT.

The GMA does not mention No 59 or 61, but has concentrated on No 57 as a worst case. This approach seems sensible. The methodology and temporary works required to control damage to No 57 will also protect No 59 and 61. For this particular method of construction, we would not expect to see worse consequences further from the works (ie No 57, being closer, is the worst case. If piling works were involved, we may have required further assessment since ground movements from piling may cause maximum movements a little way from the works).

The structural monitoring strategy requires vertical / horizontal movements to be monitored and trigger levels / contingencies to control the works are proposed. No 59 / 61 should also be monitored and subject to the same trigger values.

Under the usual planning conditions, if the works have to progress as per the BIA, then all the above should be covered. However, if you wanted to be explicit you could condition: structural monitoring to ensure maximum damage of Cat 1 to neighbours including 57, 59, 61 etc; groundwater monitoring in advance of the works to establish dewatering requirements and demonstrate that seepage / flow from the canal is sufficiently low rate as not to cause stability issues; works to be undertaken in

consultation with C&RT, adopting the protection and movement restrictions required by C&RT.

Is that helpful? I am happy to discuss this with you further.

Regards

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