

From: JOAN MUNRO

Sent: 11 January 2023 10:10

To: Planning; Dan Pope

Cc: Alex Nickson; Andrzej Nowosielski; Adam Harrison (Cllr); Will Prince (Cllr); Izzy Lenga (Cllr); Nina de Ayala Parker (Cllr); Eddie Hanson (Cllr); Lloyd Hatton (Cllr); edward at flood forum; Nanouche Umeadi (Cllr); Tulip Siddiq MP

Subject: Comments on the O2 Masterplan's Drainage Strategy from South Hampstead Flood Action Group

Dear Camden Planning

Attached are our comments on the O2 Masterplan's Drainage Strategy.

The sewers from the O2 site run directly down to our area which, because of our topography, has a history of flooding in 1975, 2002 and 2021, predating the impact of climate change, but made much more vulnerable by it.

Are primary concerns are that:

1. The development fails to meet the Greenfield Run Off Standard set out in the London Plan. Although the proposals reduce the run off rate from the existing position, the Strategy provides no explanation as to why the Standard cannot be met.

2. The development provides further opportunities to reduce the risk of flooding in our area and those beyond it that have not been taken.

Joan Munro

South Hampstead Flood Action Group

Comments on Landsec's planning application Jan 2023

1. Fails to meet the Greenfield Run Off Standard set out in the London Plan

Landsec's latest Proposed Drainage Strategy Report posted on the planning application webpages in November says it: "demonstrates how the local and national guidance has been considered" **rather than how it meets that guidance.**

The Strategy quotes the National Planning Policy Framework as saying that: "the surface water arising from a development site should, as far as practicable, be managed in a sustainable manner to mimic the surface water flows arising from the site prior to the proposed development. Opportunities to reduce the flood risk to the site itself and elsewhere, taking climate change into account, should be investigated."

The Strategy does not mention that the sewers from the site lead directly down to the South Hampstead/Belsize Road area that was badly flooded by heavy rainstorms in 1975, 2002 and 2021. On these three occasions it was demonstrated that the local sewers do not currently have the capacity to cope, so that the area is vulnerable to future flooding, particularly given the impact of climate change.

The Strategy refers to the London Plan which states that: "Development sites should aim to get as close to the greenfield run off rates as possible depending on the site conditions." In paragraph 2.2.4 it states that: "it is not feasible to reduce runoff to greenfield equivalent run off rates for all return period". **It does not explain why this is not possible.**

The Strategy argues that the development will improve the run off rate from the existing position. This is welcome, but **given the vulnerability of our local area Camden Council should insist that the developer meets at least the greenfield rate.**

Thames Water objected to the first draft of Landsec's Drainage Strategy. They tell us that they haven't been formally consulted on this revised Strategy.

The greenfield rate is 36 litres per second. In the revised Strategy Landsec is suggesting run off rates of:

- 57 litres a second for 1 in 30 year rainstorm;
- 79 litres a second for 1 in 100 year rainstorm;
- 93 litres a second for a 1 in 200 year rainstorm.

Unfortunately because of climate change, more extreme rainstorms are likely to occur more frequently.

Thames Water told us that they would consider putting water storage tanks in the O2 development site to protect our area. They explained that for them this is a much cheaper option than digging up the road. However they are not willing to do so unless the developer meets the greenfield run off rate. (They are not willing to invest in developments that fail to meet good practice standards.)

We would like the Planning Committee to insist that Landsec:

- Sets out a revised drainage Strategy that achieves the greenfield run off rates for all levels of rainstorms up to 1 in 200; and
- Works with Thames Water to install additional water storage tanks within the site (paid for by Thames Water) to further reduce the vulnerability of our area to future flooding.

2. Opportunities provided by the underground rivers that may flow through the site

Paragraph 2.1.2 suggests that no culverted underground rivers run through this site.

However a number of sources suggest that two branches of the Westbourne river run through the site. This is of significance to our area, as these flow down from Hampstead and on southwards to

our area. Some maps suggest that they meet in our area. They also go onto Maida Vale which suffered extensive flooding in 2021.

As they feed into the sewers, they add to the pressure on the drainage system in extreme rainstorms.

If these branches of this old river flow through this site this could provide further opportunities for holding back water in an extreme rainstorm, contributing to reducing the risk of flooding in our area and those beyond.

If these still exist Landsec needs to take account of these, and use this opportunity to further protect our area and others in its planning.

More information about the course of this river is provided below.

South Hampstead Flood Action Group

More details about the Westbourne

<https://www.hiddenhydrology.org/london-barton-the-lost-rivers-of-london/>

<https://www.hiddenhydrology.org/london-walking-on-water-with-myers/>

<http://kilburnwesthampstead.blogspot.com/2020/09/the-kilbourne-stream.html>

<https://www.theundergroundmap.com/wp/tracing-the-westbourne/>

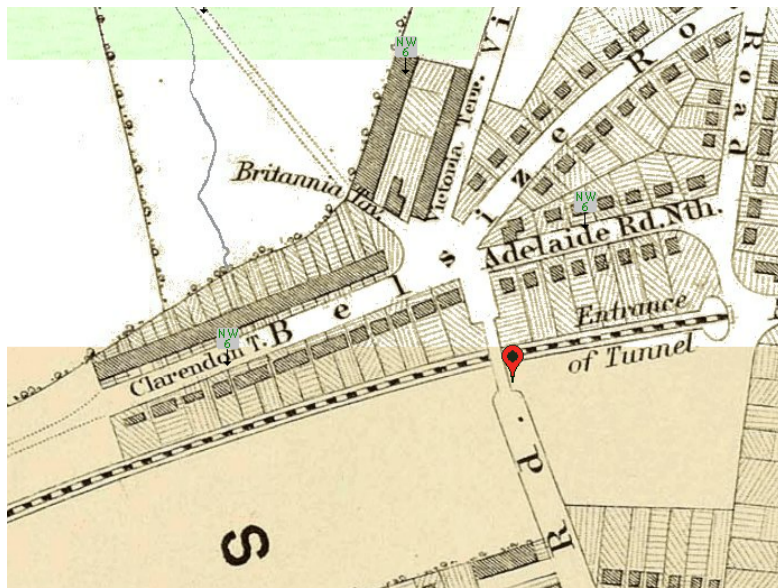
<http://hampsteadforum.org.uk/evidence/Basement%20evidence/Hydrology%20evidence/Sub-surface%20water%20mapping%20exercise%20RedFrog%20and%20Hampstead%20area.pdf>

<https://www.redfrogassociation.org/underground-rivers/>

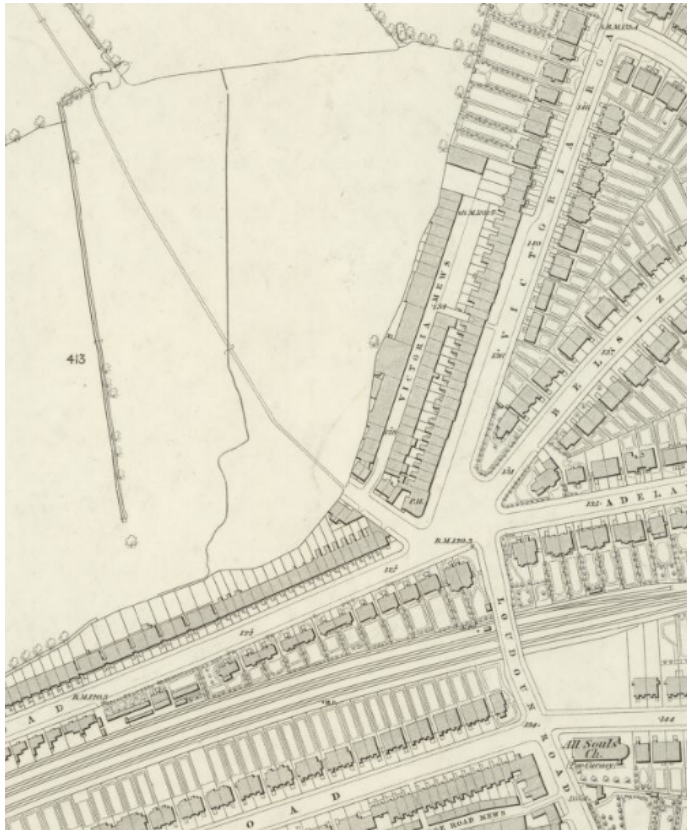
From independent flood consultants Warwick York

The following map from 1860 and 1866 suggest that Westbourne Stream, (or possibly Kilbourne Stream), flowed freely through the catchment towards Belsize Road. The houses on Goldhurst Terrace had not been built at this time.

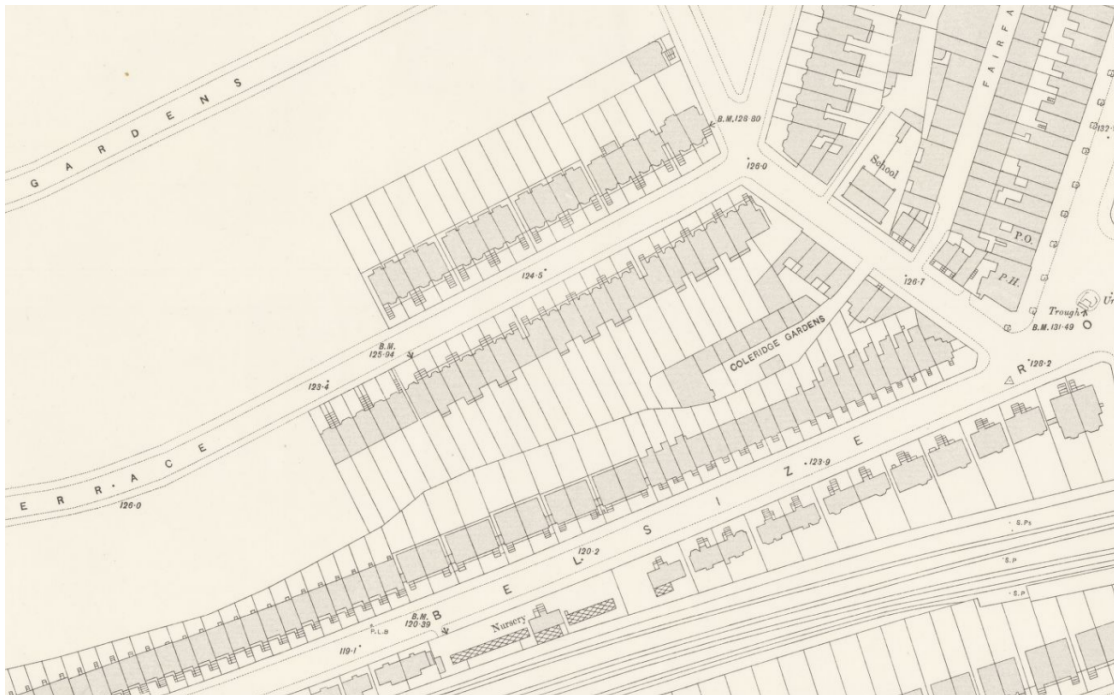
1860



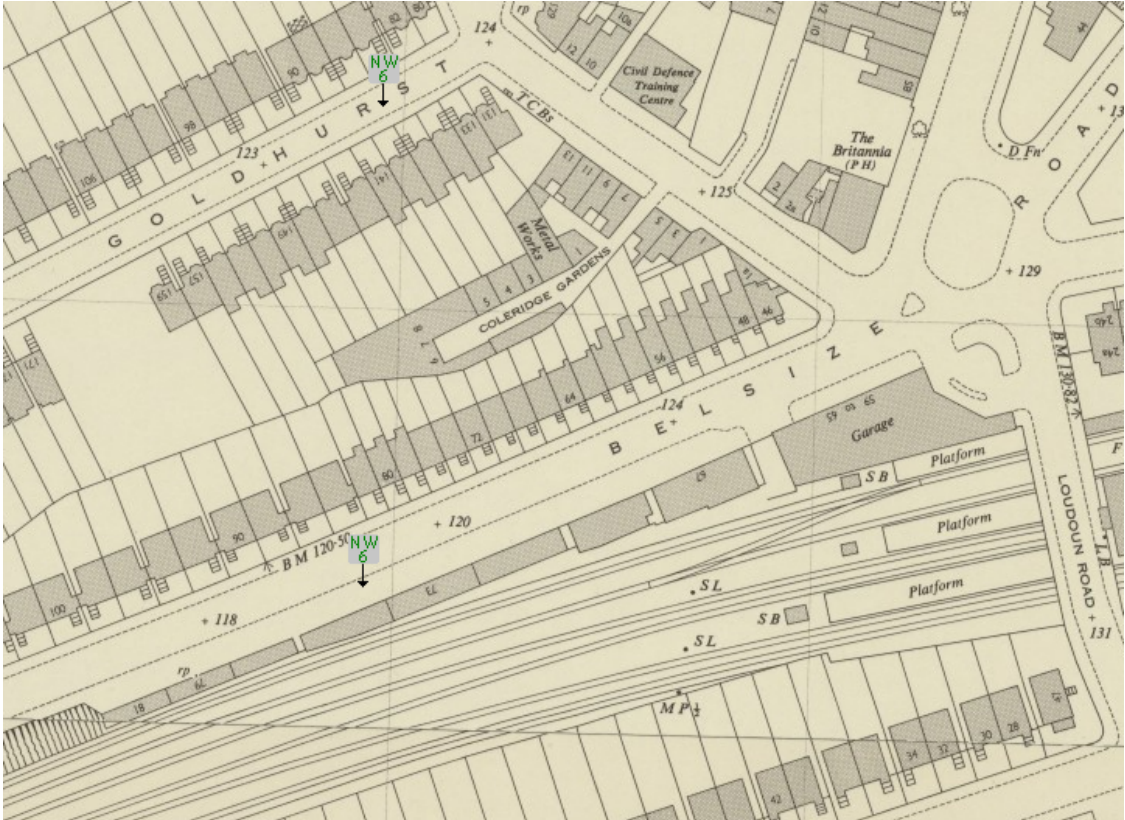
1866 map – Line of stream still visible and mapped.



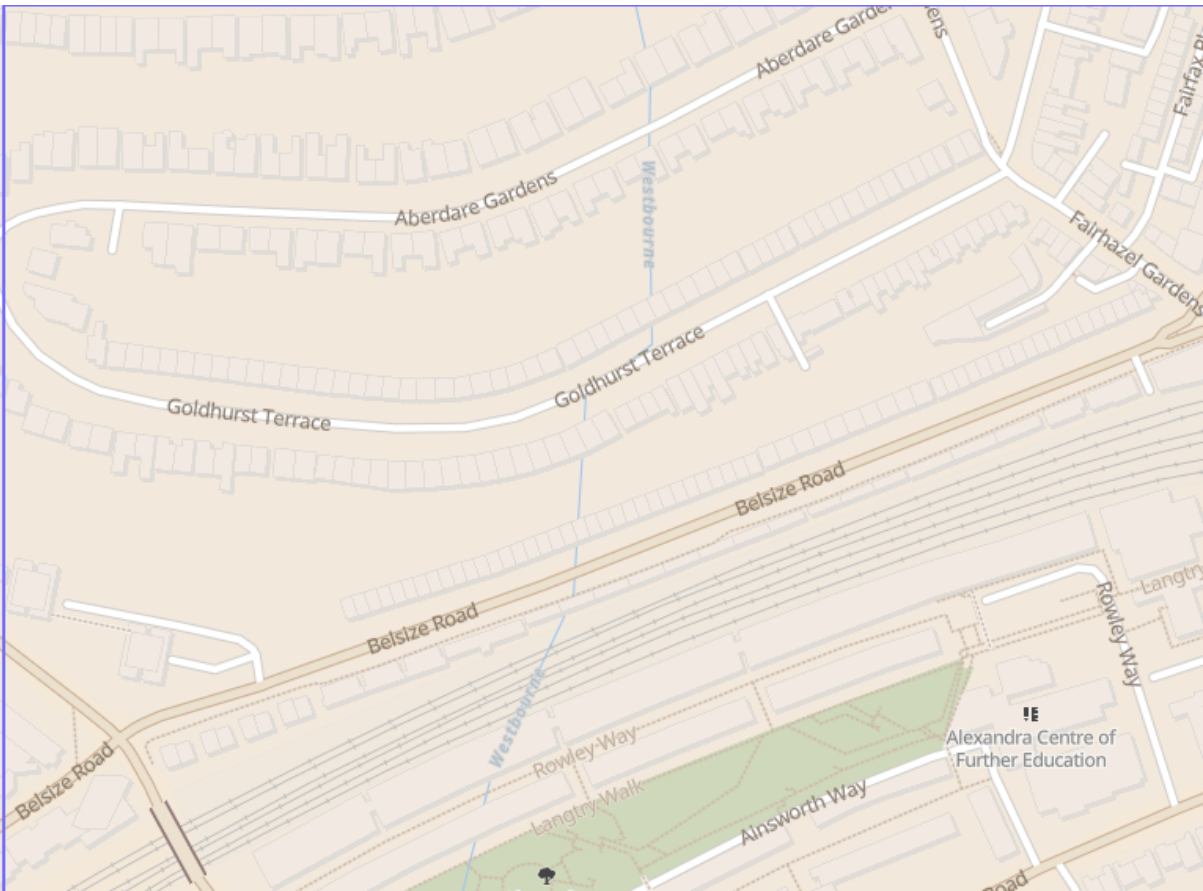
Approx 1890. No indication of the stream



1950



The following map highlights the assumed line of the culvert carrying the Westbourne Stream



From an exhibition about the Westbourne at Burgh House February 2022

