

Oxygen Towers Planning Condition 12

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1.0 Oxygen Towers Planning Permission 122258/JO/2018

Condition 12 (Suds 2)

In order to discharge condition 12 of the planning conditions for Oxygen Towers please find attached a short report describing the surface water drainage design installed on the project, design drawings, record drawings and a selection of photographs of the drainage being installed. We have a CCTV survey of the drainage system which can be issued if required

2.0 Drainage Description

Oxygen Towers is a new apartment building, it has been built on land between Store St & Millbank in Ancoats, and Manchester .Its consists of 381no. 1, 2 & 3 bedroom apartments.

All the surface drainage from the roofs & terraces drops under gravity to the basement where it is directed via pipes that have been cast beneath the basement slab & pile caps to an attenuation tank .

An oil /petrol interceptor was installed just upstream of the attenuation tank to capture any such liquids.

The attenuation tank has been sized to store a 1/100 year storm plus 30% for climate change .The rate of discharge from the tank is controlled a rate of 5l/s by a hydro brake installed within the last upstream man hole prior to water entering the United Utilities sewer on Store St .

3.0 Drainage Design Drawings

The drainage design has been undertaken by WSP .Copies of the relevant drawings are attached

WSP-B1-PL-PH-001 C02 tower 3

WSP-B1-PL-PH-002 C03 tower 2

WSP-B1-PL-PH-003 C03 tower 1

WSP –XX-DT-PH-005 C02 Attenuation tank

WSP-XX-DT-PH-003 C01 Hydro brake & attenuation tank details

4.0 As built records

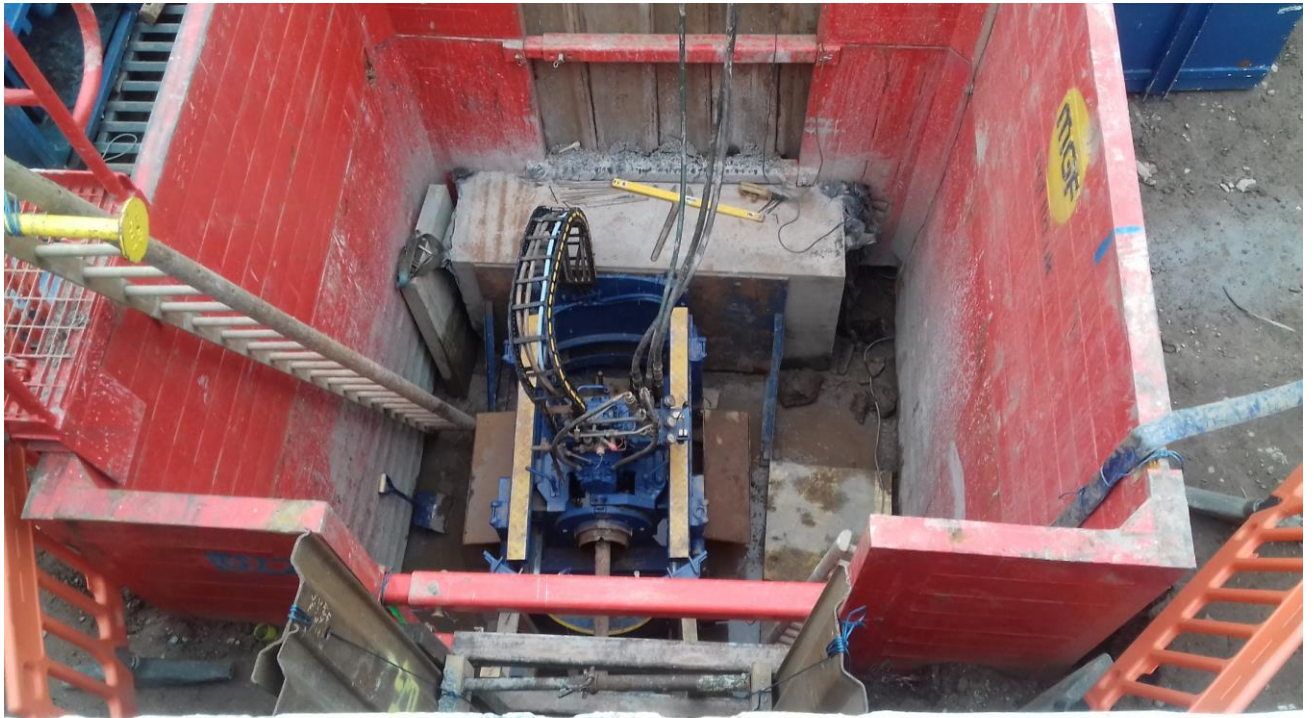
Attached are the engineer's records for recording the testing of the various drainage runs.

5.0 Photographs

Attached below are a series of photographs indicating the drainage works being installed onsite

Sept 2019

Due to the depth of the existing sewer in Store St (circa 7m) & the quantity of other services in the footpath on Store St it was decided to thrust bore the connection between site and the existing sewer prior to the main works commencing .





January 2019

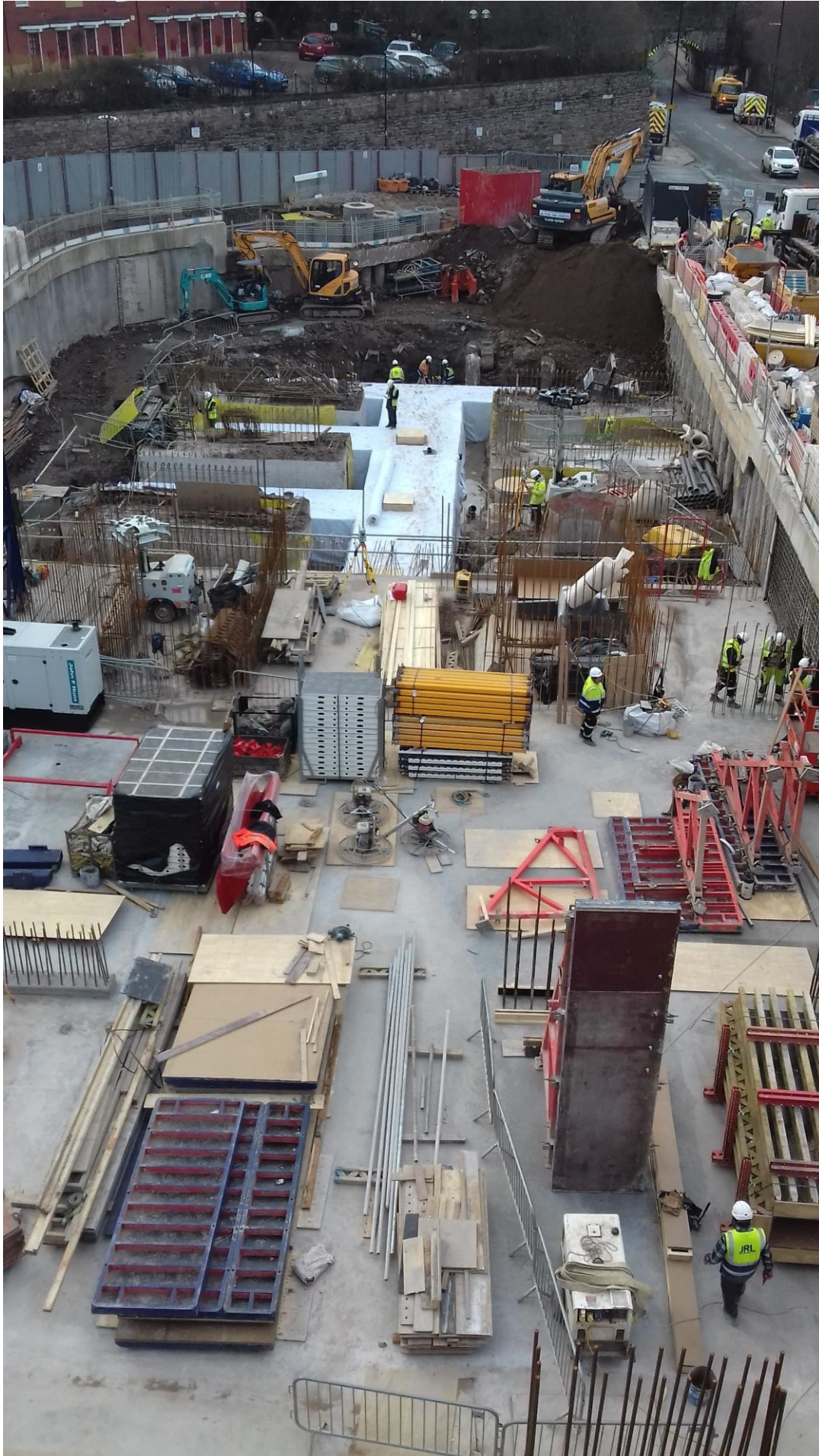
Photograph below indicates a typical example where drainage pipework had to be threaded through pile cap bases.



February 2019

Selection of photos indicating the attenuation tank









February 2019

Further, photograph of drainage being installed.



