

Manchester City Women's Training Facility



Management of works adjacent to the Ashton Canal

This Management Statement has been developed to demonstrate how we will carry out works within 20 metres of the Ashton Canal, in order to satisfy planning condition 37 of the relevant application (reference 138987/FO/2024)

The requirements of condition 37 are:

Prior to any development taking place within 20 metres of the Ashton Canal, a scheme for works close to the canal infrastructure shall be submitted for approval in writing by the City Council, as Local Planning Authority. This shall include:

- 1. Cross sections showing the foundation details of the proposed extension, including written dimensions and relative levels to the canal; the cross sections shall also include details of the external plant/air conditioning units and chemical store and associated foundations and proximity to the canal**
- 2. Cross sections of the existing and proposed bund to be created/extended on the boundary of the canal, including written dimensions and relative levels and clearly showing the proximity to the canal and towpath**
- 3. Outline the means of construction of the foundations of the extension, including proposed earth moving and excavation works required and set out how the canal infrastructure would be protected during the works (include details of any proposed temporary protective fencing or buffer zone to be erected) and in terms of vibration monitoring to safeguard the waterway infrastructure during construction.**

Requirements 1 and 2 are covered by the Marston and Grundy drawings 350-353 inclusive which accompany this document. Requirement 3 is dealt with below.

Introduction

The project consists of the design and construction of a new training facility for the Manchester City Women's Football Club, with associated landscaping and external works. The new facility comprises an approximately 600m² footprint extension to the existing former HSBC bank building which sits alongside the Ashton Canal and fronts onto Ashton New Road. The bank building itself is to be refurbished to integrate into the facility as a whole, housing the new gymnasium and medical rooms. The new extension will provide hydrotherapy and changing facilities, with office and dining provision to the upper floor.

Externally, a new access road and turning circle is proposed, to facilitate access from the existing 'north gate' visitor's car park. Redistribution of some site spoil will create contoured mounds which are to be enhanced with semi-mature tree planting and creation of habitat zones. An external running track will be provided, along with a ramped pathway to connect to adjacent training pitches.

Marston and Grundy drawing MCW-MaG-ZZ-XX-DR-C-350 rev P2, shows the plan arrangement of the proposed site in relation to the adjacent canal and includes a blue dashed line to indicate the 20m offset from the canal edge, effectively delineating the zone of the site to which this planning condition applies. The work elements that encroach into this zone comprise:

- Earthworks including the excavation of existing ground down to reduced levels, and the subsequent remodelling of existing earth bunds close to the site boundary
- Foundation, structural frame and façade works to the 17m long elevation of new extension between gridlines A and C1 and along gridline 6
- Construction of the proposed external plant area slab and associated screening
- External works paving to the perimeter of the building
- Soft landscaping to residual area including imported topsoil, grass seeding, tree and boundary hedge planting

Existing boundary security fencing is to remain and is not being removed or replaced as part of this contract.

Outline the means of construction of the foundations of the extension, including proposed earth moving and excavation works required and set out how the canal infrastructure would be protected during the works (include details of any proposed temporary protective fencing or buffer zone to be erected) and in terms of vibration monitoring to safeguard the waterway infrastructure during construction

Whilst a proportion of the site boundary at its interface with the Ashton Canal corridor remains outside the scope of the construction works, there is a window of approximately 30m wide where site works have the potential to impact the canal infrastructure. The following describes the sequence and methodology which will be employed to carry out this work, along with the measures to be implemented in order to mitigate any negative impacts.

Site set up and clearance

The initial phase of the development project will be a scheme of enabling works which comprises the clearance of vegetation and bulk earthworks required to level the site to make way for the new extension and access road. The site accommodation for this phase will be self-contained welfare units positioned on the car park at the front of the HSBC Bank building. The existing perimeter security fence is to remain in position and additional internal hoarding is to be erected to segregate the work area from the wider CFA premises. Extract below illustrates this arrangement:



The existing security fence is to have a layer of green debris netting fastened to it to mitigate against excessive dust, loose material or litter being blown from the site into the canal corridor. The netting will be securely tie-wrapped to the fence and a bund of earth approximately 300mm high will be banked up against the bottom of the fence to ensure the netting remains in place and is protected from damage. The bund will also mitigate any surface water run-off inadvertently flowing from within the site.



Prior to commencement of the works, a full photographic dilapidation survey will be carried out to record the condition of all adjacent existing structures and surfaces, including the canal infrastructure. This information will be made available to the Canal & Rivers Trust if required.

Site work will commence with the clearance of site vegetation. This will be carried out by a specialist tree contractor, who will fell the small trees present on site and clear all low level vegetation.

Bulk Excavation and Earthworks

Once the vegetation clearance is complete, the earthworks will commence. There is significant mounding of earth present on site which is to be dealt with by removing a proportion altogether to create a level pediment for the new extension, and then redistributing the remainder to re-profile the landscaping surrounding the development. This work will be carried out by a specialist earthworks contractor, using heavy plant and machinery including excavators, dumpers and 20T tipper wagons.

Referring to the accompanying Marston and Grundy drawings, the cross sections 3-3, 4-4 and 5-5 illustrate how this work interfaces with the canal corridor:

Section 3-3 – shows that the existing ground level needs to be reduced slightly to allow it to be built back up to approximate the original level via installation of the external plant compound. The earthworks here are of minimal impact upon the canal corridor as they involve a nominal reduction of ground level to be carried out to the rear of the existing masonry retaining wall. When working close to this wall, mechanical excavation will be limited to no closer than 500mm from the structure. The residual flake of earth adhering to the rear of the wall will then be manually pared away by an operative with a hand shovel.

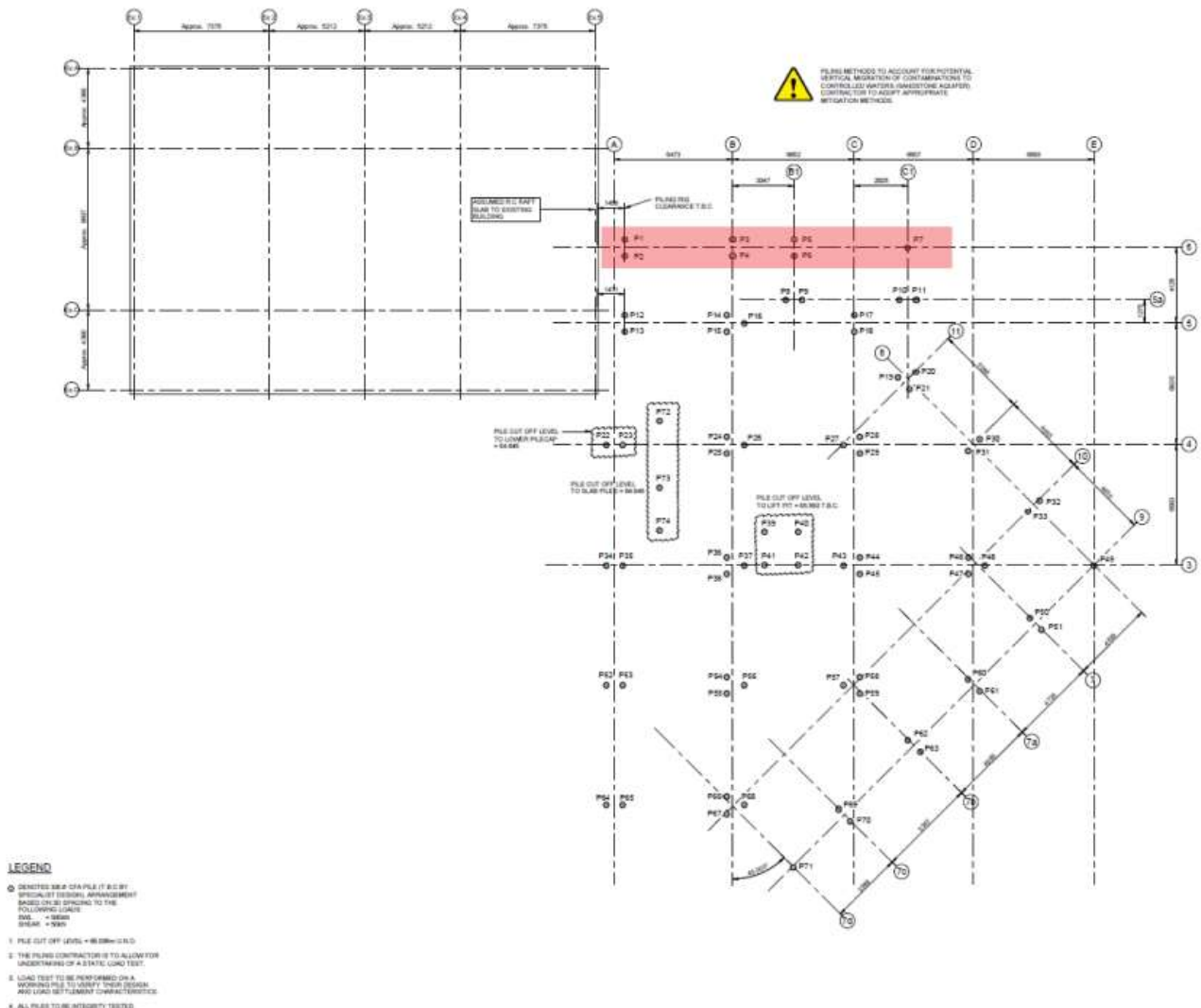
Section 4-4 – shows that the existing ground level slopes up from the development boundary. The procedure for the reduction of levels is as for section 3-3, save for the volume of earth removal being greater as we reach 10m inside the boundary.

Section 5-5 – at this point, no work is carried out within 20m of the canal, apart from the planting of a new hedge inside the existing boundary fence.

Foundation Construction

The foundations for the new extension are to be concrete piles. These will be 300-350mm in diameter and will extend to a depth of approximately 15-18m below ground level in order to transfer the building loads into capable strata. The piles installed along building gridline 6 fall just within the 20m from edge of canal zone. This line of piles is shown highlighted red in the extract below, taken from Marston and Grundy foundation drawing DR-S-001.

Sections 3-3 and 4-4 also indicate this line of piles in section.



The following mitigation measures will be implemented in order to prevent any negative impact upon the Ashton Canal infrastructure:

- Piling will be installed from a level platform of built-up hardcore – i.e. a ‘piling mat’ – that has been designed by a qualified temporary works engineer, installed and compacted to an agreed methodology, and then CBR tested to verify it is suitable to withstand the loads imposed by the piling rig and its attendant plant such as concrete wagons etc. The installation and ongoing condition of the platform will be inspected and signed-off by our Temporary Works Coordinator (TWC) and the inspection and permits recorded in the on-site temporary works file. This procedure will ensure that the stability of the ground – and consequently the rig itself - is maintained throughout the operation.
- The rig will work out towards the GL6 line of piles – in other words the main body of the rig will be positioned facing into the site over the building footprint so as to keep the zone between the piling line and the boundary fence clear of heavy plant during the operation.

- The piles have been designed as 'Continuous Flight Auger' or CFA. In this method a rotary auger is bored into the ground down to the required depth and as it is withdrawn, concrete is pumped down the auger's hollow shaft to immediately fill the resultant void. As the auger is withdrawn, the borehole therefore fills with concrete up to ground level. A primary benefit of this methodology is that very low levels of vibration result and it can therefore be employed when piling adjacent to existing structures. In the case of this project, proximity to the existing former HSBC bank building, and to the Ashton Canal corridor, means that CFA piling is an ideal choice.
- Notwithstanding the above, we will ensure that during the piling works and subsequent excavation and concreting of pads and groundbeams, the specialist contractor carries out vibration monitoring at the site boundary. This will be implemented in accordance with the contractor's method statement, using microelectromechanical technology provided by instrumentation such as the Piletec Vibration Monitor. A vibration upper threshold will be identified and agreed and if levels are exceeded at the site boundary, work shall cease and a review of work methods will be carried out and method statements revised accordingly.

Structure erection and façade works

As illustrated by Marston and Grundy sections 3-3 and 4-4, once the foundations are installed, there is a zone of at least 9m in width remaining between the new building line and the existing site boundary fence. This represents a generous easement zone in which the gridline 6 elevation of the new extension can be erected without having any impact upon the canal corridor. The piling platform hardstanding will extend to approximately 3m beyond the building line, which affords a stable and level base from which the external cladding works can be carried out, using Mobile Elevated Work Platforms (MEWPs), such as scissor and boom lifts.

Structural steel erection will be carried out from within the building footprint, with the crane situation to the west of the building, between that and the CFA visitor car park. No oversailing of the canal will therefore be necessary.

External plant compound work

The proposed external plant and chemical storage compound sits between the gridline 6 elevation of the new extension and the existing security fence, therefore falling within the 20m from canal edge zone. In consideration of its proximity to the site boundary, Marston and Gundy have detailed the slab for the compound to be of shallow 'raft' construction, thus mitigating the need to carry out deeper excavations in close proximity to the boundary retaining wall. The work required to construct this compound is therefore light in nature, does not involve hoisting or heavy lifting and will not result in excessive levels of vibration.

Contract Completion

As a follow-up to the pre-commencement dilapidation survey, a second survey will be undertaken at contract completion to verify that the construction works have not resulted in undue damage to any property outside the site boundary. This will be carried out in conjunction with a Canal & Rivers Trust representative present if required.