

To:	MCC Planning	Job number:	2561-01
From:	Chris Kendrick, Civic Engineers	Date:	28/02/2023
Subject:	Jersey Street Bridge Demolition	Cc:	
	Planning Ref: 133406/VO/2022		
	Condition 3 – Surface Water Design Note		

Planning Approval Reference 133406/VO/2022 - Condition 3 Detail of Surface Water Drainage

The following documents are submitted in order to close out planning condition 3 for the Jersey Street bridge demolition application:

1826-01-CIV-XX-XX-D-C-30001 Drainage Strategy Ancoats Green (Final)
2561-CIV-XX-XX-D-H-40104_P04 Proposed Drainage Layout (Temporary)
2561-CIV-XX-XX-D-H-42001_P01 Drainage Details Sheet 1
2561-CIV-XX-XX-D-H-42002_P01 Drainage Details Sheet 2
2561 - Jersey Street Bridge - SuDS Maintenance

The Jersey Street Bridge demolition works will be undertaken in two key stages. The first stage will include the bridge demolition and general re-grading of the site to suit the proposed finished ground levels and adjacent plot boundaries. This stage also includes preparation of the footways, carriageways and raingardens to accept a temporary surfacing. This then allows for construction traffic to serve adjacent development sites in the future and avoid damage to permanent works and finishes. The highway will remain closed until such time that a suitable surfacing has been applied and the highway is safe for the public to access.

Phase 2 will commence following or close to completion of adjacent developments and includes the final paving materials, planting and street trees.

In response to the individual points within the condition:

Evidence that the rain gardens have been sized appropriately to ensure efficient lifetime functionality and no/limited flooding to the highway.

The purpose of the raingarden is to provide a direct replacement for existing road gullies such that there is a benefit to the surface water run-off in treating the flows and allowing contaminants, heavy metals, hydrocarbons to be filtered out of the surface water allowing these to be absorbed by planting and broken down naturally.

The raingardens, detail on drawing 2561-CIV-XX-XX-D-H-42001_P01 Drainage Details Sheet 1 include a permeable sub-base, Type 3 no fines within an impermeable membrane and perforated carrier drain. The storage provided is 0.12m³ per square meter which is equivalent to the storage provided within a typical (450mm diameter) trapped gully pot. In addition the raingarden sits lower than the surrounding hardstanding which allows for "depression storage" on the surface of the raingarden. In the event of saturated soils within the raingarden this depression storage still allows for positive run off from the footway and carriageway. Ponding is encouraged to occur within the raingarden rather than on a footway or carriageway.

Construction details of flow control and SuDS elements

There are no flow control devices proposed as the natural slowing down of the surface water flows comes through the infiltration of water through the layers of the raingarden.

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Other construction details are provided on the attached drawings 2561-CIV-XX-XX-D-H-42001_P01 Drainage Details Sheet 1, 2561-CIV-XX-XX-D-H-42002_P01 Drainage Details Sheet 2 including raingarden details on drawing 1826-01-CIV-XX-XX-D-C-DE-01002- Rain Garden Details (Final)

Details of how the scheme shall be maintained and managed after completion and confirmation on who will be responsible for maintaining the SuDS systems

The raingardens will form part of the highway drainage system and therefore will be maintainable by MCC Highways. The attached maintenance strategy 2561 - Jersey Street Bridge - SuDS Maintenance will be available as part of the completed O&M file upon completion of the works.

Implementation of the works

The contractor, design team and Manchester City Council as client team will ensure the installation is in accordance with the approved drawings and specifications. Any variations required to the installation due to unidentified obstructions / constraints during construction will be agreed with the client to ensure there is no adverse effect on the operation of the surface water system.