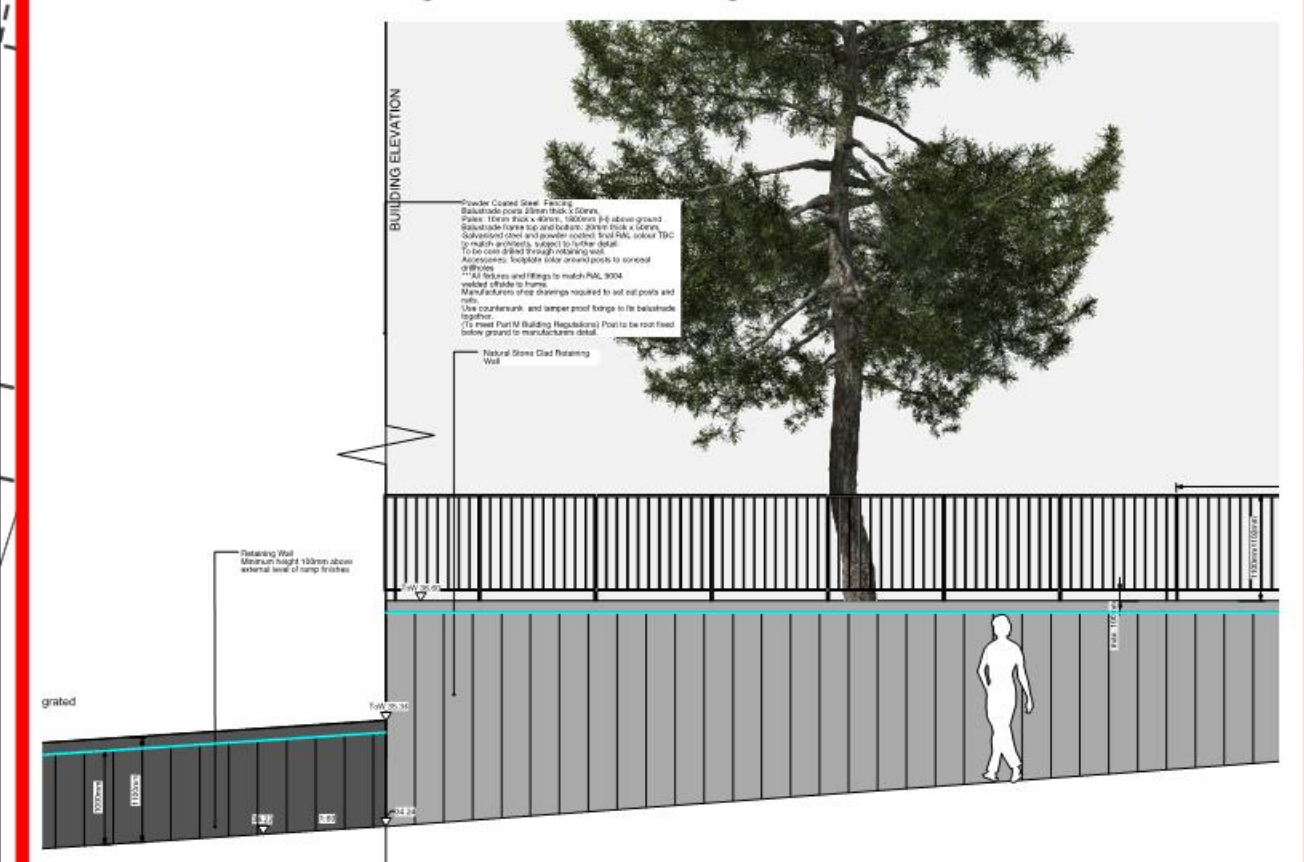
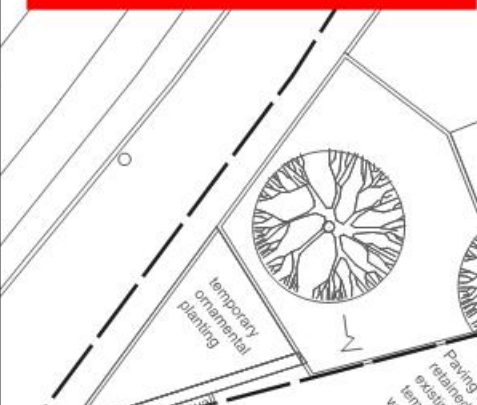


These tree pits are raised planters to avoid the pile caps and foundations beneath. Therefore levels do not allow drainage to discharge into them.



These vegetated areas are part of the temporary car park until the Phase 2 office building is constructed.



We have managed to utilise the raised ground levels along the ramp to discharge into this raised planter. Do to the large size of this planter, it can accommodate up to 4.5m³ of storm water attenuation. As this bio-retention tree pit is above ground, it will not clash with the below ground attenuation tank.



These trees are within raised planters to act as public realm seating and provide wind mitigation - therefore the drainage is deeper than the base of the tree pits.



Storm Return Period (Year)	Pre-development Discharge Rate (l/s)	Drainage Design Discharge (l/s)	
		Catchment 1	Catchment 2
2	65	5	40
30	123	5	42
100	157		
100+20%CC		6	42

Flow Rate Restrictions Table

This area is adjacent to the Metrolink and so levels have been designed specifically to avoid draining onto this land, to prevent surface runoff from our site.

This tree pit is situated on the site boundary, therefore levels specifically aim to drain away from here.

This area is a raised podium. Therefore, shallow channel drains are utilised within the structural deck, a deeper outfall from a tree pit could not be accommodated.

Ground Floor Level - Footbridge Drainage

- Notes:
- All dimensions are in mm, all levels in mAOD unless specified otherwise.
 - This drawing is based upon the Work Stage 3 Design package, and been amended following discussions with MCC regarding planning conditions approval.
 - The positions of existing drainage shown on this drawing are indicative only and reflect the level of information obtained from statutory records, the SEP (January 2016), and drawings 2018 and 2018.
 - Refer to drawing VIC-ARUP-ZZ-EX-DR-CD-2004 for the Surface Water Drainage Manhole Schedule.
 - The proposed geocellular attenuation tanks shall be Hydro-International Stormbloc or similar approved. The tanks shall be wrapped with an impermeable geo-membrane and sealed to the manufacturers recommendations.
 - Petrol interceptors shall be Class 1 Bypass Separators. An allowance for vent and alarm shall be made, connectivity and location TBC at detailed design.
 - Refer to drawing VIC-ARUP-ZZ-EX-DR-CD-2004 for the Surface Water Drainage Manhole Schedule.

ARUP

Three Piccadilly Place, Manchester, M1 3BN
Tel+44(0)161 228 2331 Fax+44(0)161 228 6879

Client
Muse Developments Ltd

Project Title
New Victoria

Explanation
of SuDS
Usage

17/07/2019