Plan: attenuation measures

6.8 SUSTAINABLE URBAN DRAINAGE STRATEGY

The landscape masterplan incorporates measures to surface water run-off from the site, which also address the requirement identified in the Environmental Impact Assessment to provide mitigation.

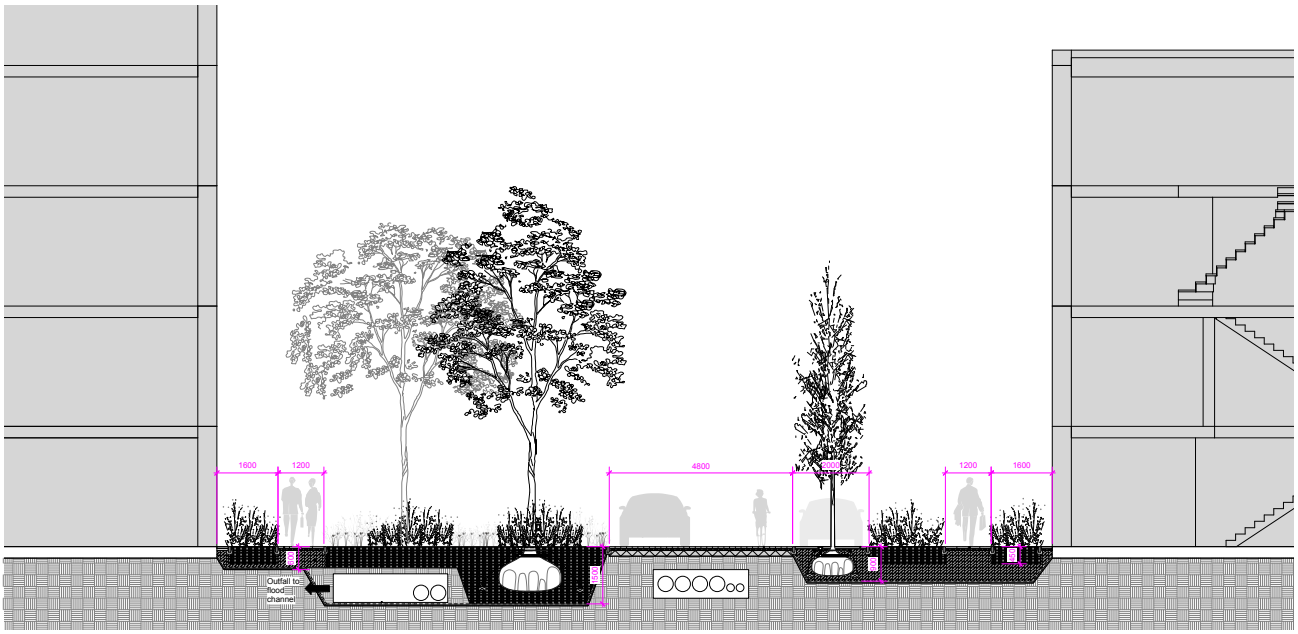
The existing site is primarily hard surfaced, and currently all surface water drains to the surrounding watercourses.

The redevelopment of the site provides an opportunity to provide places for the establishment of :

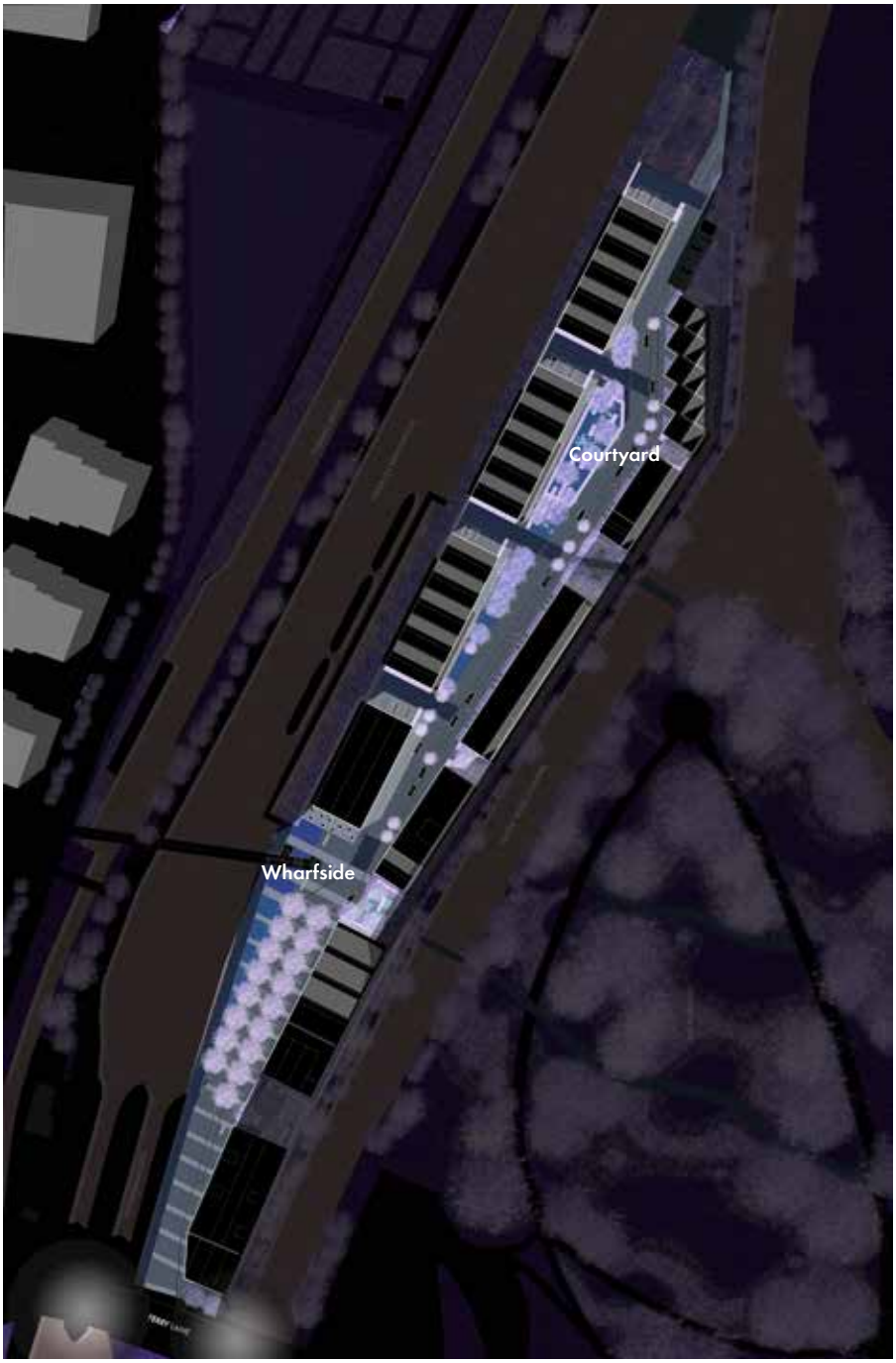
1. water attentuation measures, which are designed to reduce run-off during a storm event, delaying its discharge into surrounding watercourse until after the storm has subsided. The following areas will be treated in this way:

- Areas beneath porous paved hardstanding areas, such as the car court areas between buildings, and in public realm areas at the Wharfside. These areas will drain via outfalls.
- *Landscape areas:* Here surface water will infiltrate the ground, and will drain into land-drains, which in turn will discharge into the surface water attenuation system.

2. Ground water contamination-prevention measures: geotextile liners and membranes will be used as appropriate in areas for attenuation, sub-bases for construction, and areas for planting and landscape.



typical section through public realm, showing location attenuation alongside other below ground features.



Lighting Masterplan, showing adequately lit Wharfside and Courtyard areas, while minimising lighting spillage into surrounding sensitive areas.

6.9 LIGHTING

Precedents : Bollard lighting

Precedents : column mounted lighting

The landscape masterplan incorporates a lighting strategy which aims to :

- provide a safe and attractive setting for residents and visitors, allowing them to use public spaces after dark
- be carefully located to address the requirement identified in the Environmental Impact Assessment to provide mitigation to ensure minimum light disturbance to birds on the local SSI and Ramsar sites, and on foraging bats using the Lea Navigation corridor..

6.9.1 Lighting proposal

Lighting will be provided through the public realm areas of the site in the following ways:

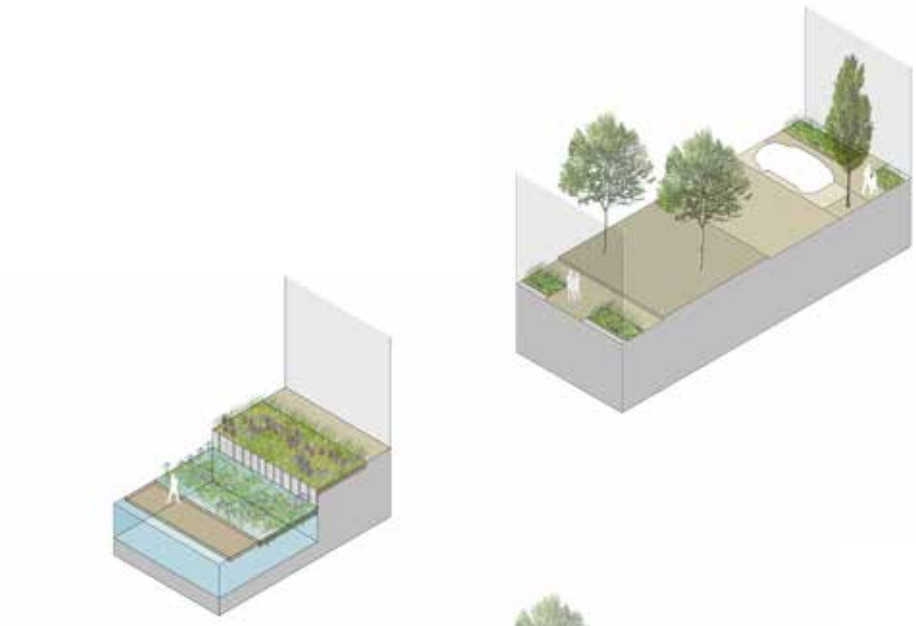
1. primary routes and entrances will be lit to levels which allow facial recognition; these will be lit from column mounted fittings (max height 5m column) and, where appropriate, from building frontages. Lighting fittings will be selected with adequate shades to ensure sharp cut-off and minimal light spillage.

2. amenity areas and gardens will be lit by low-level bollard lighting located in robust fittings.

6.9.2 External lighting

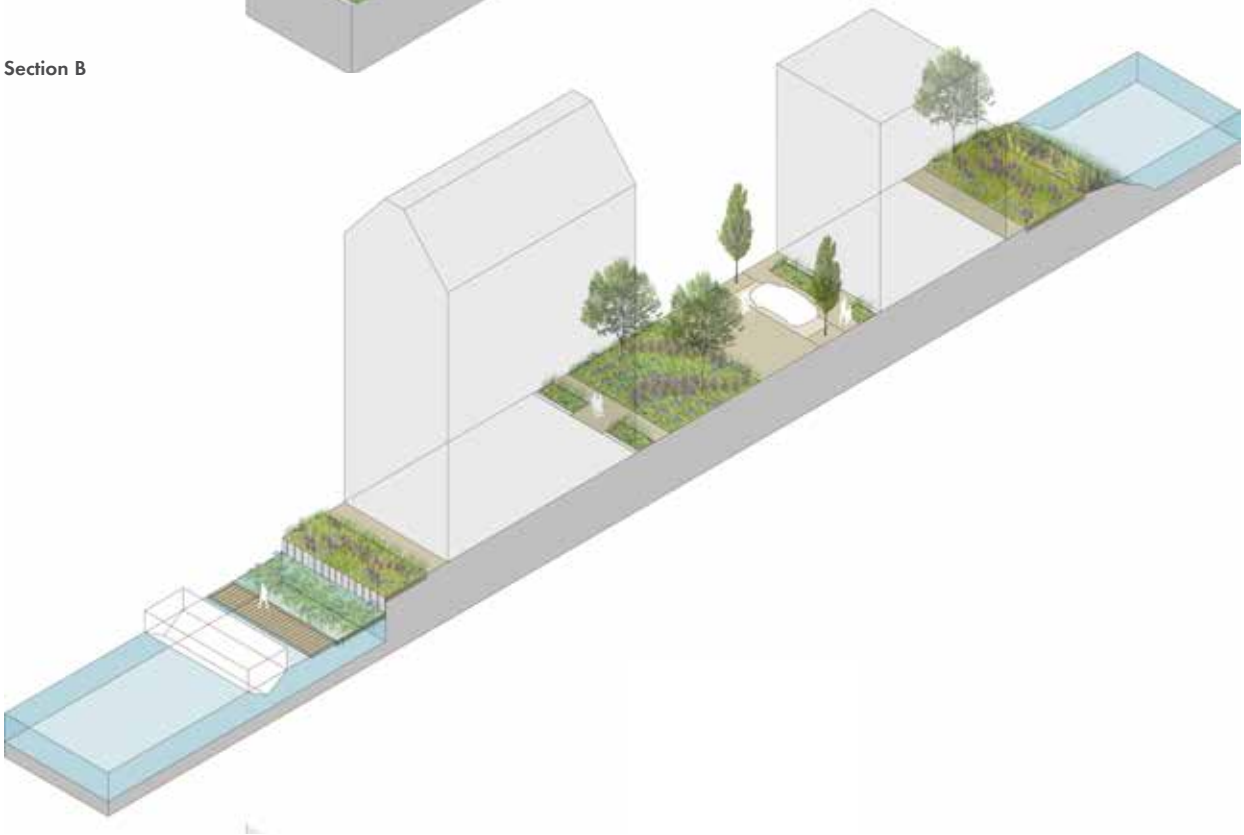
The lighting design should respect the external lighting performance requirements and metrics as defined in BS EN 5489-1 Code of Practice for the Design of Road Lighting (2013), BS EN 13201-2 Road Lighting - Part 2: Performance Requirements (2015), and the CIBSE/SLL Lighting Guide 6 - The Outdoor Environment (2016)

The lighting design should also conform to the Lighting Design Code, Appendix C of this document.



Section C

Section B



Section A

6.10 BIODIVERSITY MITIGATION AND ENHANCEMENT STRATEGY

plan: landscape sections

The landscape masterplan incorporates measures to enhance the bio-diversity of the site, which also address the requirement identified in the Environmental Impact Assessment to provide mitigation.

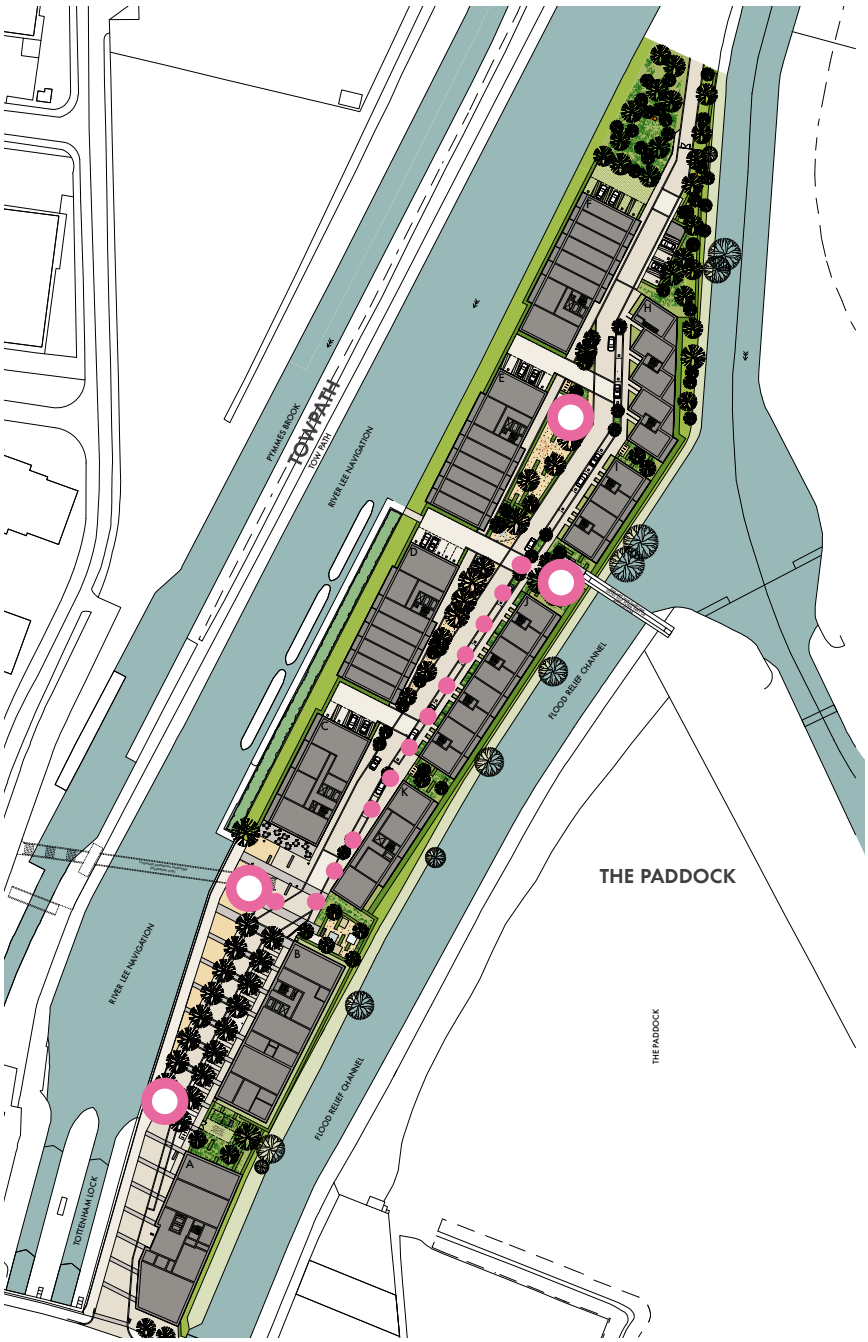
The existing site is primarily hard surfaced, and where planting occurs it comprises self-seeded, ruderal species. Along the eastern side of the site, the boundary with the Flood Relief Channel has become overgrown with self-seeded Salix (Willow) and Bramble (Rubus). The construction works will require the removal of some of this planting.

The redevelopment of the site provides an opportunity to provide places for the establishment of native plant species which grow locally in the Tottenham Hale and Lee Valley Park. The following areas will be treated in this way:

- *Banks to Lee Navigation:* a 3.8m wide verge will be established between the bank of the navigation and the east face of adjacent buidings. This will be porous, and reinforced using "geocell" trays which will allow herbaceous planting, such as grasses and forbs to thrive, while providing periodic access for maintenance purposes.
- *Aquatic planting:* Floating reed beds will be installed in the Lee Navigation, in the gap between the bank and the pontoon for the business barges. This will provide support for aquatic plant species, and a protected underside for fish to breed in.
- *Banks to Flood Relief Channel:* a 3.8m wide verge will be established between the top of the bank and the east face of adjacent buidings. This will be porous, and reinforced using "geocell" trays which will allow herbaceous planting, such as grasses and forbs to thrive, while providing periodic access for maintenance purposes.

Access to these areas will be restricted to maintenance staff only.

Fauna: Insect Hotels will be located within the biodiversity zones outlined above, to provide additional habitat for fauna.



Plan: public art oppourtunities

6.11 PUBLIC ART STRATEGY

Example: public art alongside Lea Navigation

The redevelopment of the site provides an opportunity to provide places for public art. Public art in the context of Hale Wharf can provide:

- enhanced sense of place
- identity
- wayfinding and landmarks
- playful features

There are several overlapping themes which might generate artworks, as shown on adjacent plan.

1. Lee Navigation: a chain of artworks already extends along this popular route; Tottenham Wharf could make its own contribution.
2. Wharfside / Bridge square: artworks could signify this special place, enhancing visual links to the Paddock and greenspace within the Lea Valley; it could contribute to the play space adjacent.
3. Flood Channel: artwork could relate to the watersedge and the entrance to The Paddock
4. Courtyard: artwork could contribute to the identity of thsi important place; it could provide a playful thoughtful feature.
5. Wayfinding: artwork could assist in the wayfinding route between the bridges.