

garden barge

ACCESS + DESIGN STATEMENT



**Jan Kattein
Architects**
277 New North Road
London, N1 7AA
020 7704 0604
www.jankattein.com

**GLOBAL
GENERATION**

Oct
2021

introduction

This is the access + design statement for Global Generation's Garden Barge. The design has been conceived in close collaboration between Global Generation and Argent, ensuring that the proposals respond to the wider site context and the existing cultural/community offer across the King's Cross Development site.

The barge will be moored on the southern embankment of the Regent's Canal in Granary Square in King's Cross. The project supports Global Generation's education and outreach program hosting activities and workshops for local school children and young people.

Key aspects of the designs were developed in workshops with young people at the Story Garden. The design workshops culminated in the collaborative making of a large-scale barge model. The young people's design ideas were worked up to suit the conversion of an existing barge which Global Generation purchased with funds from Argent and Camden Council in 2021. Important design parameters include the provision of immersive and green learning spaces that connect with the natural environment and provide for group activities as well as reflective experiences.

The barge provides an accessible classroom, a wc, small office and sequence of open or partially enclosed green spaces.



the Story Garden at the British Library

who we are

Founded in 2004, **Global Generation** are a London-based environmental education charity that provides opportunities for different people to come together in the rich and diverse context of the natural world. It is an approach they call 'I, We and the Planet'. Through their work with people of all ages they have experienced time and again the healing power of nature; healing relationships within and between people and between all of humanity and the earth. Along with the outer changes they hope to achieve, their name 'Global Generation' refers to an inner change of perspective that includes rather than separates people.

Global Generation are also creators of the Skip Garden in King's Cross, the Story Garden at the British Library, the Urban Campsite at Regents' Place and the Paper Garden in Canada Water.

A worldview which sees the earth purely as a commodity coupled with the growth of consumerist lifestyles is threatening the health of our planet and the wellbeing of our communities. Unprecedented extinction of wildlife, mass deforestation, floods and droughts are causing displacement and migration of whole populations and rising social and economic inequalities are part of our everyday life.

Global Generation operates in areas of London that are experiencing some of the highest levels of growth alongside deprivation and poverty. New developments are changing the face of these areas, with businesses perceived as out of bounds by young people from surrounding areas. Many of the young people live daily with the challenges of loneliness and isolation, fear of crime and increasing territorial lines. There is a sense of 'them and us' which fuels resentment and tension between neighbours and communities.

Global Generation's gardens are collaborative seedbeds in which to nurture creativity and community. Young people learn from older people, older people learn from young people and everyone learns from nature.

Global Generation will operate and manage the Garden Barge and run a range of educational, leadership and engagement programs from the site.

see also: www.globalgeneration.org.uk

Jan Kattein Architects work to realise both the spatial and civic opportunities that architecture presents. Projects like the High Road Leyton, the Kings Cross Story Garden and Blue House Yard are leaving a social and a physical legacy.

They achieve this by embracing an open, interactive design process that responds positively to the needs and aspirations of the people they work with. Through allowing the process to drive the project, they have built a portfolio of inventive projects, each of which makes the most of the unusual opportunities and particular challenges of its site context. Their method stimulates innovative design, and always seeks to add benefits through education, economic growth, cultural activity or greater community coherence.

They believe that an integrated approach is needed for any place to fulfil its potential. This conviction has led them to work across sectors, including regeneration, housing, economic development, education, public space and planning. In each field, their projects are united by their public purpose.

Jan Kattein Architects have worked with Global Generation for the past six years and were involved in the building of the Skip Garden on Tapper Walk, the Story Garden at the British Library and the design for the forthcoming new Skip Garden at the Triangle Site off York Way.

see also: www.jankattein.com



Global Generation in KX

Global Generation have been in King's Cross for 17 years, nearly for the entire duration of the regeneration program. Their Skip Garden has occupied 4 different plots across the site before their programmes finally moved to the current site, the Story Garden behind the British Library. The Story Garden is a temporary garden which will ultimately give way to the construction of the Allan Turing Institute. The Garden Barge together with the proposed Triangle site habitat area, located to the east of York Way represent the new permanent home for the charity in King's Cross. With the Triangle site habitat area tucked away behind the new w-zone mixed use development, the Garden Barge will attain great significance as Global Generation's 'front door' in the heart of King's Cross.



Approved design for the Triangle site habitat area (Islington Council planning ref. P2018/4209/FUL)

Consultation

Global Generation have been working in close dialogue with the Canal and River Trust in the conception, operational planning and educational program of the barge and both organisations have expressed a commitment to continue working together on the delivery of the educational program and co-ordination of the planting/ecology program including the floating habitat proposed as part of this planning application and the additional floating habitats that the CRT is proposing to site east of the barge. The following arrangements between the two organisations are material to the success of the proposal.

Works Proposal

An application submitted under the business boating regulations for the installation of canalside infra-structure (services pillar/connections) was approved by the CRT (Ref: BBWP-2021-3101) on 23 09 21. The next stage of the approvals process is undertaken once planning permission is formally granted with installation on site to be undertaken by King's Cross Construct.

Mooring Licence (water)

Heads of Terms for a mooring licence for a 20 year period have been confirmed in a document exchange between Global Generation and the CRT, dated 02 09 2021.

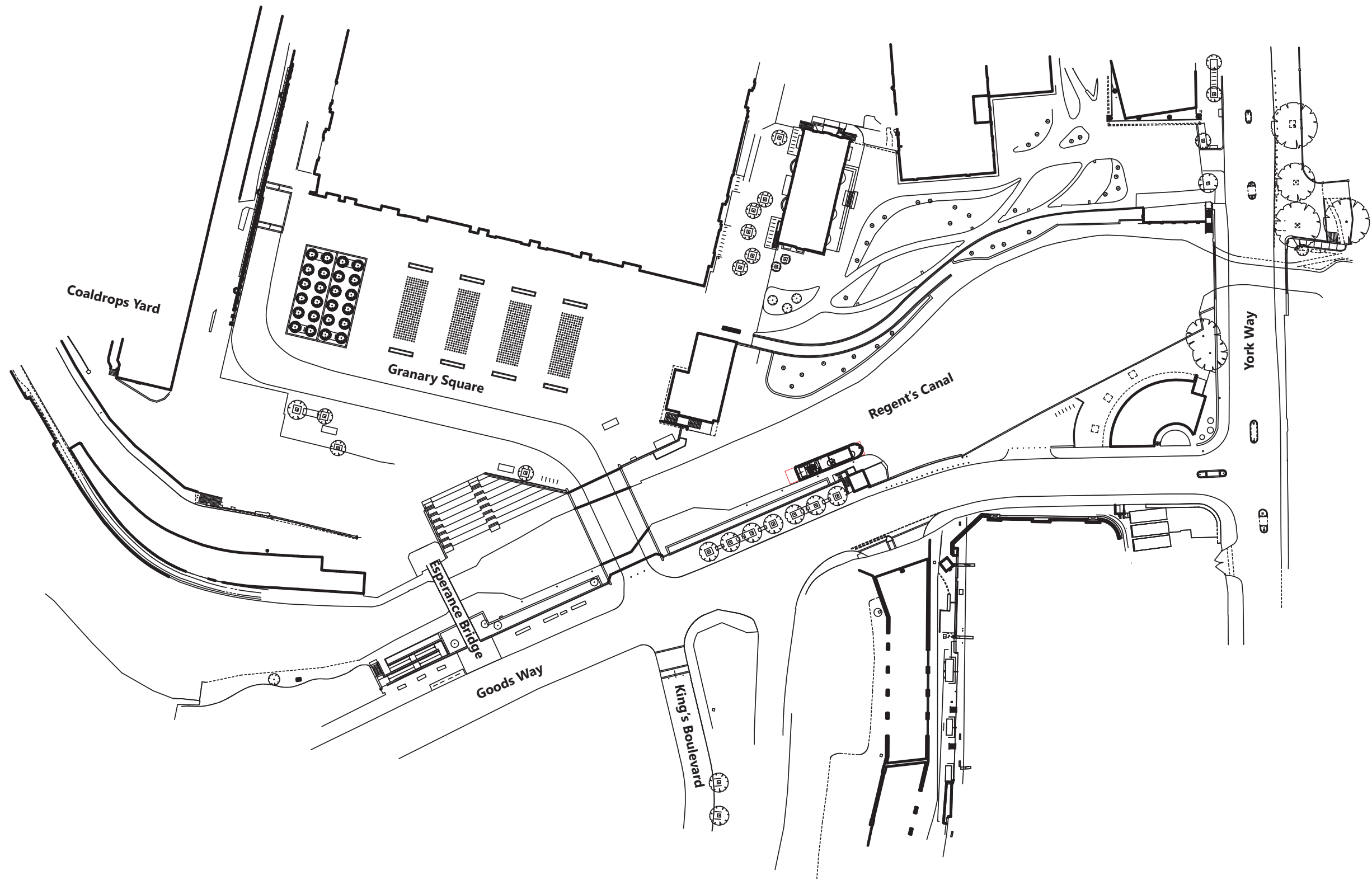
Mooring Licence (land)

Heads of Terms for a mooring licence for a 20 year period have been confirmed in a document exchange between Global Generation and the King's Cross Central Limited Partnership (KCCLP).

Pre-application consultation

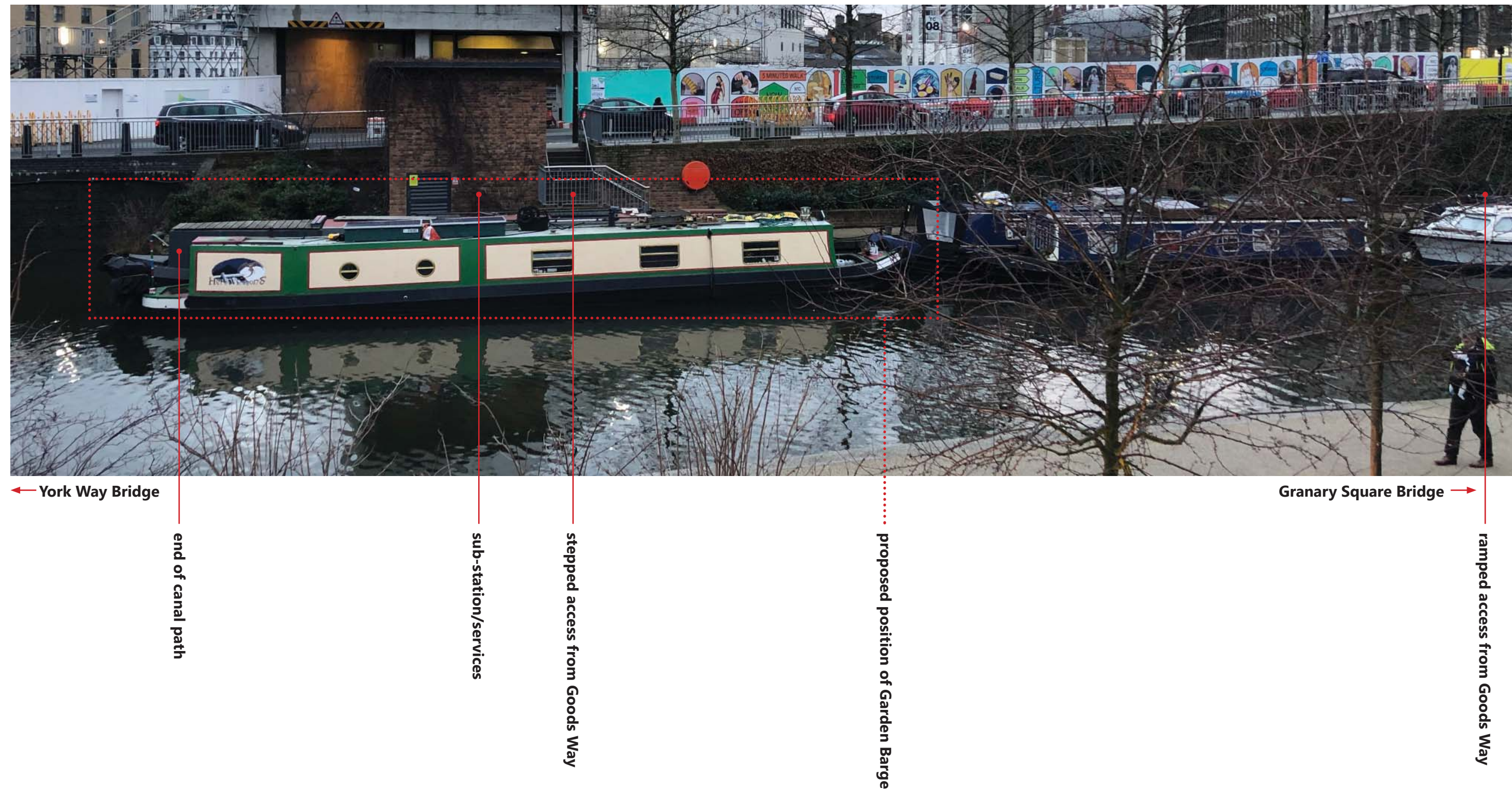
A formal pre-application consultation (ref. CRTR-PLAN-2021-33471) with the CRT took place between July and September 2021. An initial submission of proposals was followed by formal written feed-back from the CRT dated 26/08/21. A response to this correspondence was sent by the KCCLP on 21/09/21 and a meeting took place between CRT departments, Global Generation, Jan Kattein Architects and Argent on 27/09/21. This planning application includes revisions pursuant to the meeting, in particular revisions to the form of the canopies, the proposed finish of the trellis structure and reduction of the number of floating ecosystems.

site



location of Garden Barge

site



 indicative site boundary

planning context

The project responds to a requirement to bring forward a ‘floating classroom’ as part of an original s106 obligation associated with the King’s Cross Development. The planning obligation describes the project as:

“A vessel comprising a floating classroom using moorings in the vicinity of the Development.”,

which will fulfil the function of,

“bringing educational benefit to children living in or close to the Development.”

The site is located on the southern bank of the Regent’s Canal, opposite Granary Square. There is controlled access to the site off Goods Way with stepped access immediately south of the site and ramped/accessible access along the canal path, west of the site. The site is visible from Granary Square bridge, the tow path on the northern side of the Canal and the northern pavement on Goods Way. The site is immediately outside the King’s Cross and St Pancras Conservation area.

The proposal complements the existing community and educational offer in King’s Cross. Located almost equidistant between Global Generation’s Story Garden and the forthcoming Triangle Site Habitat Area (Islington Council planning ref. P2018/4209/FUL), it brings Global Generation’s educational and engagement program to the heart of King’s Cross. The Garden Barge and its ecology programme link to the wider narrative around the significance of the Regent’s Canal and adjacent green spaces as an important east-west ecology corridor in north London, a theme that is picked up in Global Generations ‘Voice of the Water’ National Heritage Lottery Funded educational programme.

The embankment along the southern edge of the Regent’s Canal is owned by the KCCL. KCCL are a key sponsor of the project and have been involved in the conception and design development and are supporting the implementation including the provision of utility connections for the Garden Barge. Regular dialogue is taking place with the Canal and River Trust who are supportive of the project and will provide a mooring licence and lease.

The initial project duration is 20 years.

A pre-planning meeting with Camden Council was held on 03. September 2021. This access and design statement includes further detail on the proposals, in particular in relation to the maintenance schedule, co-built process, guard rail design and consultation with the Canal and River Trust.

A separate Heritage Assessment has been prepared by Giles Quarme Architects in response to pre-application discussions with the Canal and River Trust.

design + participation

For sustainability reasons, the Garden Barge re-purposes an existing 60ft x 12ft events barge which will be converted to provide a series of immersive gardens across the front, main, middle and rear decks. A wc, small office and classroom with projection facilities will all be provided below deck. A light-weight trellis structure (de-mountable) accommodates climbing and suspended planting. A series of removable fabric canopies tied to the trellis structure create additional sheltered outdoor teaching and meeting space on the middle deck.

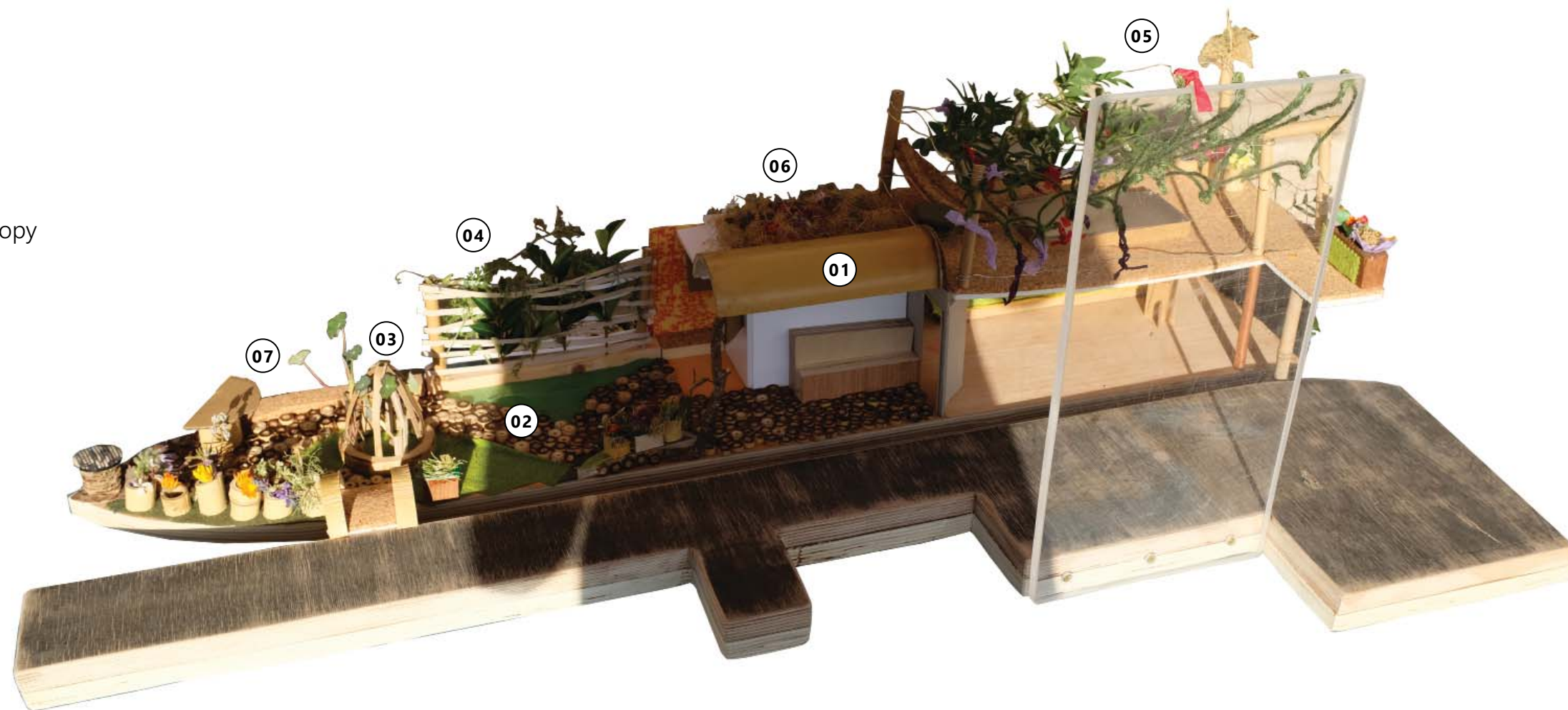
A group of small floating island pontoons secured east of the barge provide nesting space and expand the biodiverse planting beyond the confines of the boat.

The barge will be connected to existing services including water, electricity and sewage already installed below ground in the tow path.

The design principles were established in a series of workshops with young people from Somers Town in 2020. The workshops culminated in a large-scale wooden model which established the brief for the sequence of spaces on the barge. These principles were then developed into a specific design proposal that meets Global Generation's operational needs and the functional parameters and constraints of the existing boat.

LEGEND

- ① arched entrance canopy
- ② natural decking
- ③ willow dome
- ④ trellis railing
- ⑤ festoons
- ⑥ wildflowers
- ⑦ informal seating
- ⑧ top deck planting





young people presenting their design concepts for the Garden Barge at the Story Garden

existing barge

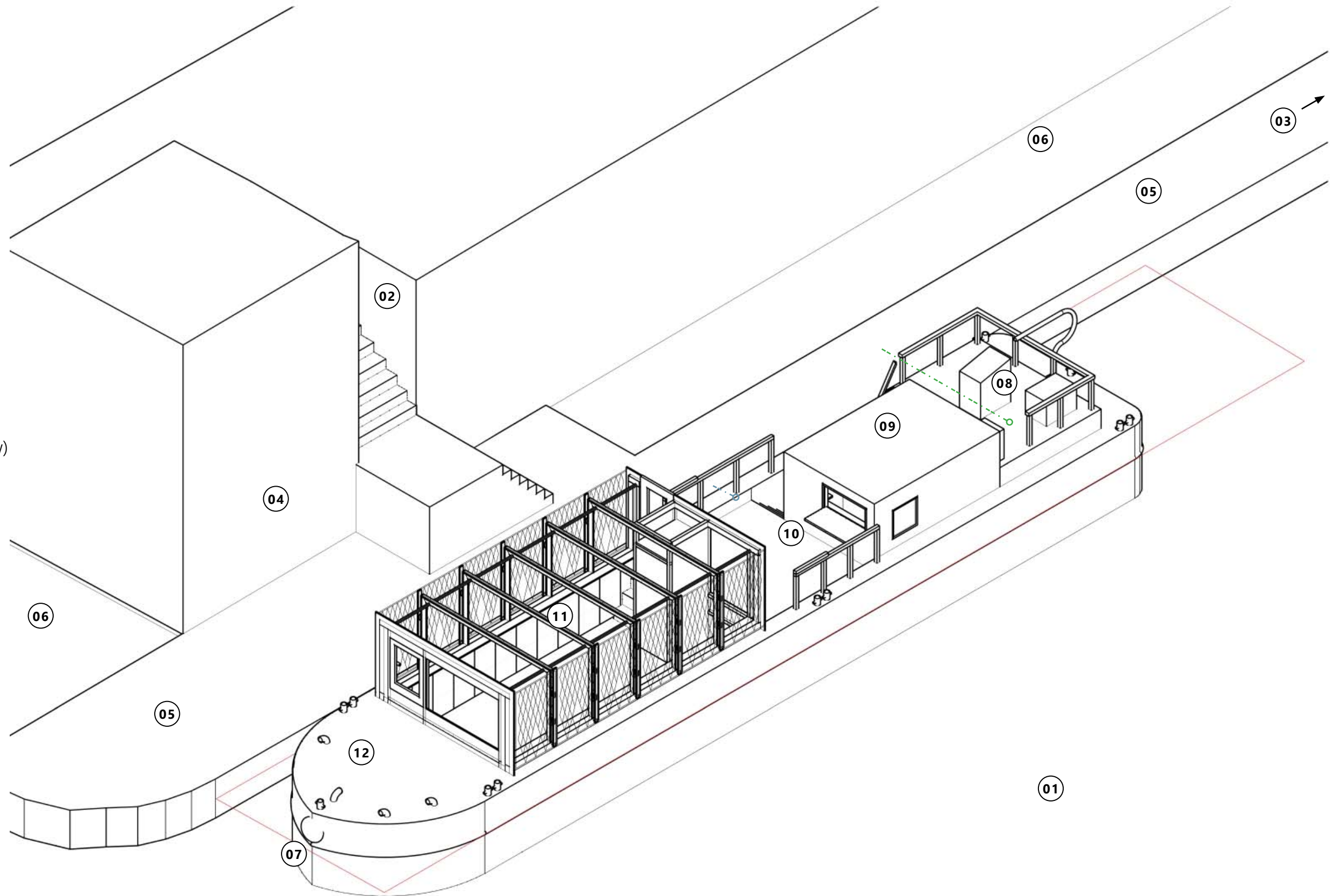


clockwise from top left: entrance platform to auditorium, front end, rear end, skippers cabin, inside auditorium

existing barge on site

LEGEND

- 01 Regent's Canal
- 02 stepped access from Goods Way
- 03 ramped access from Goods Way
- 04 sub station
- 05 tow-path
- 06 trees +shrubs
- 07 barge (floating cinema)
- 08 skippers plinth
- 09 rear deck (wc + office blw)
- 10 middle deck
- 11 cinema auditorium
- 12 front deck
- mooring boundary
- sewage connection
- electricity connection
- (steel roof removed for clarity)

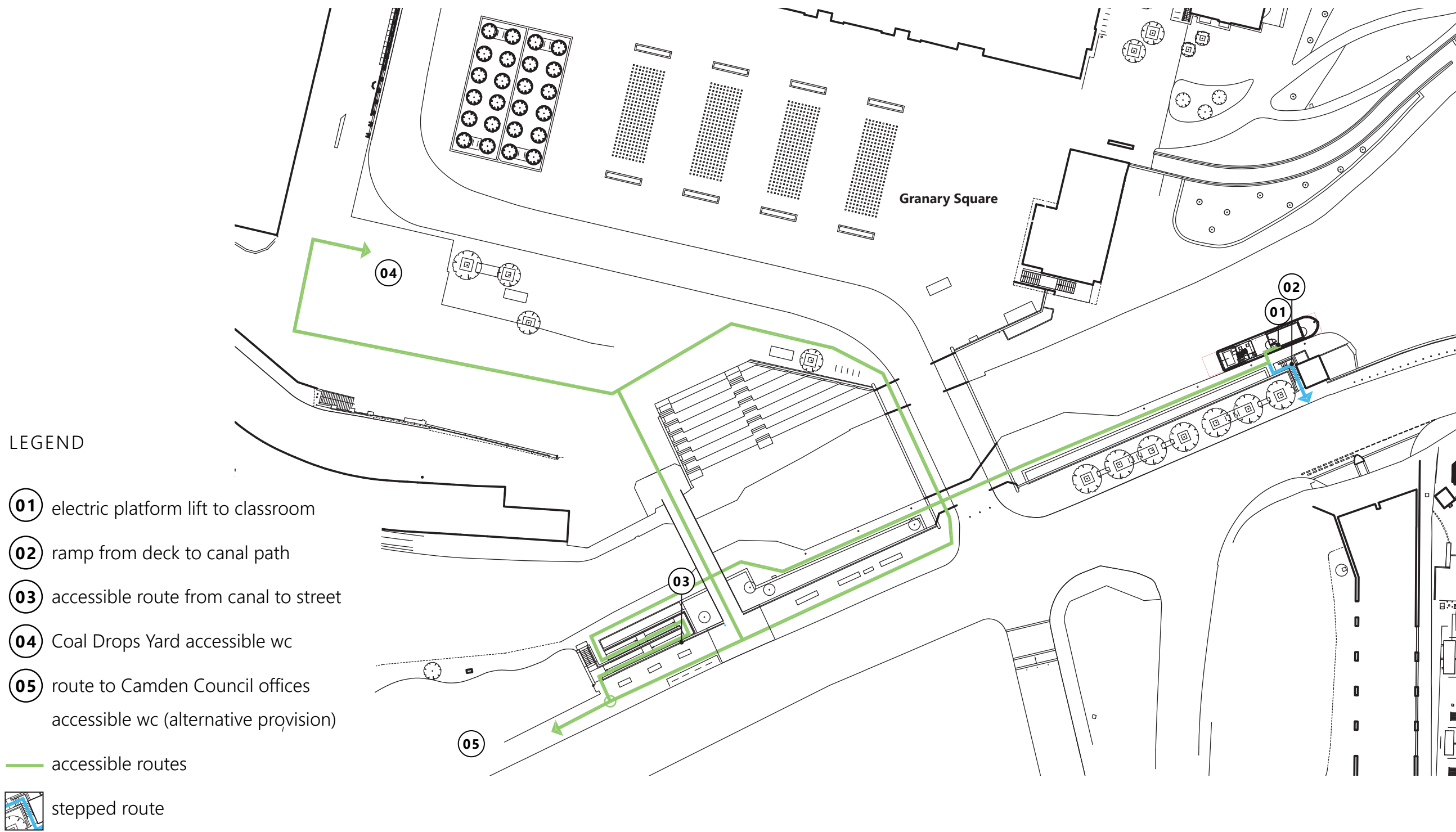




family activities at the Skip Garden

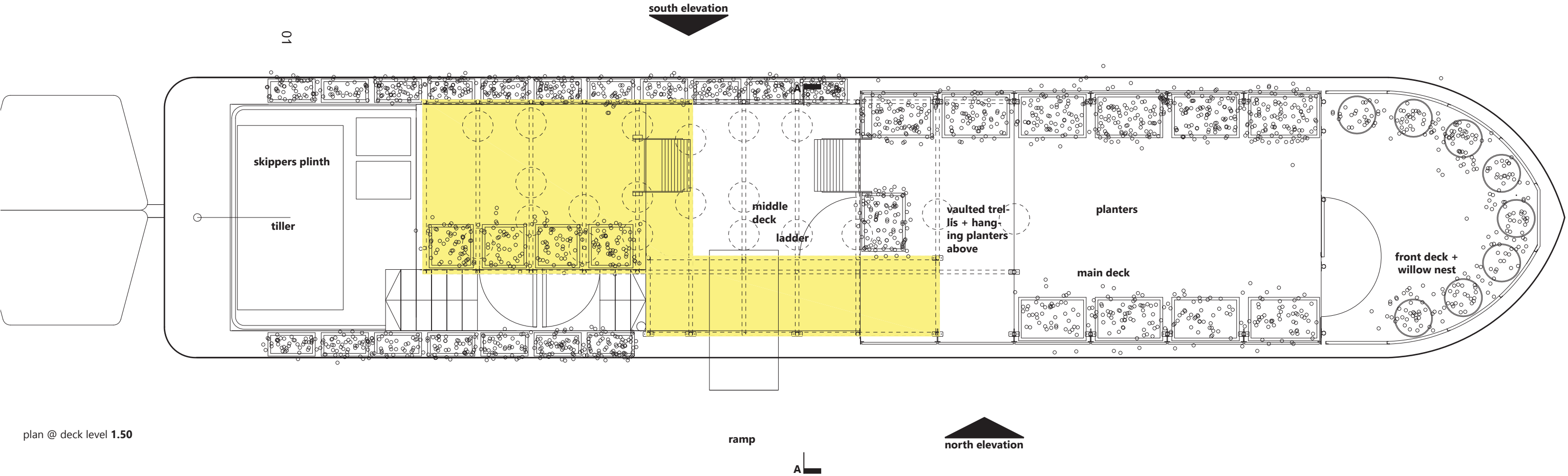
access + accessibility

Ramped access to the canalside is provided west of the site (see plan below). The proposals include a new ramp between the canal path and the middle deck of the Garden Barge and a new electric platform lift providing access to the classroom/main teaching space from the middle deck. Due to the physical constraints of the existing barge, the front deck, office and on-board wc are not accessible. Fully accessible wc provision nearby includes a wc in Camden Council offices and one at Coal Drops Yard. Visitors and workshop participants with limited mobility will be offered assistance to access facilities where required. The new Esperance Bridge will provide a useful accessible shortcut to the wc provision at Coal Drops Yard.

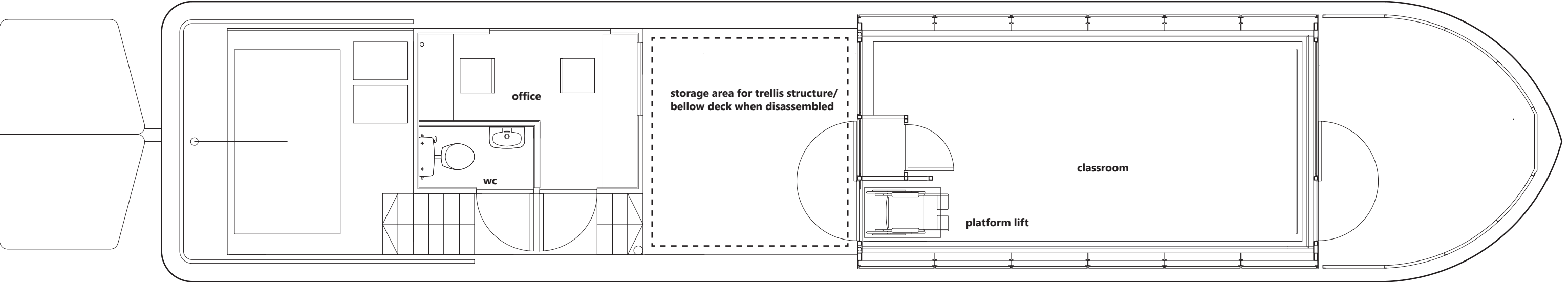


proposed plans

Proposed Canopy



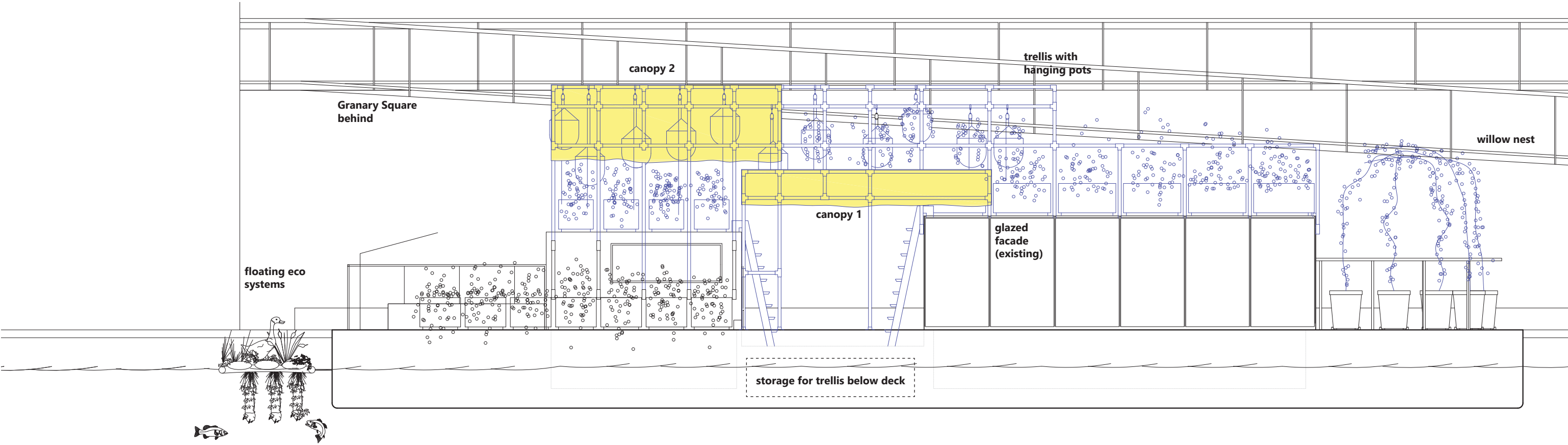
plan @ deck level 1.50



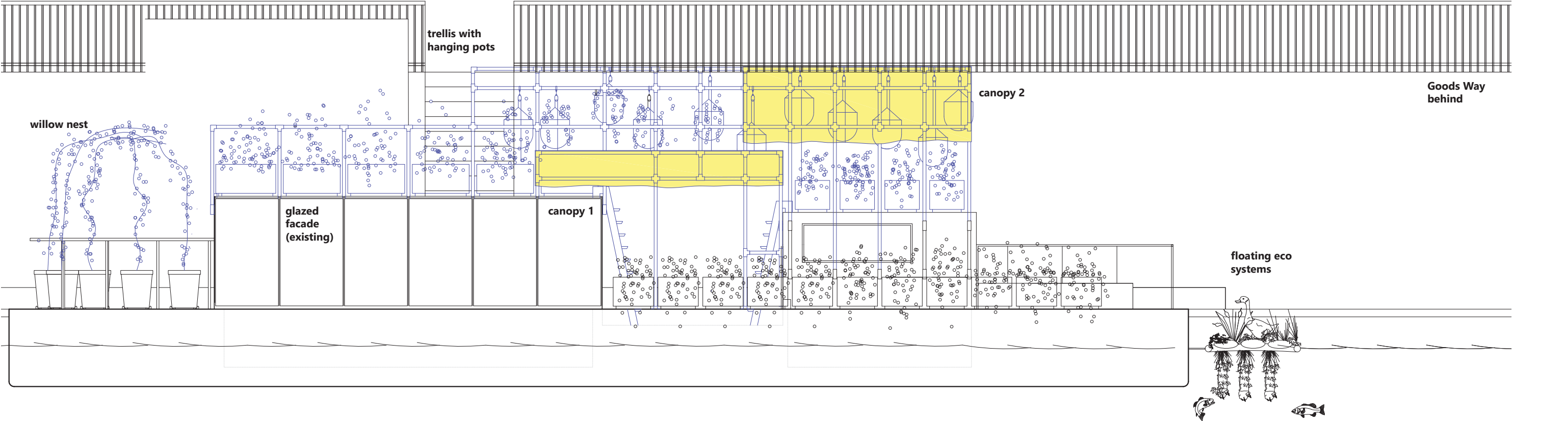
plan below deck 1.50

proposed elevations

Proposed Canopy
All components shown in blue are demountable when barge is moved for maintenance

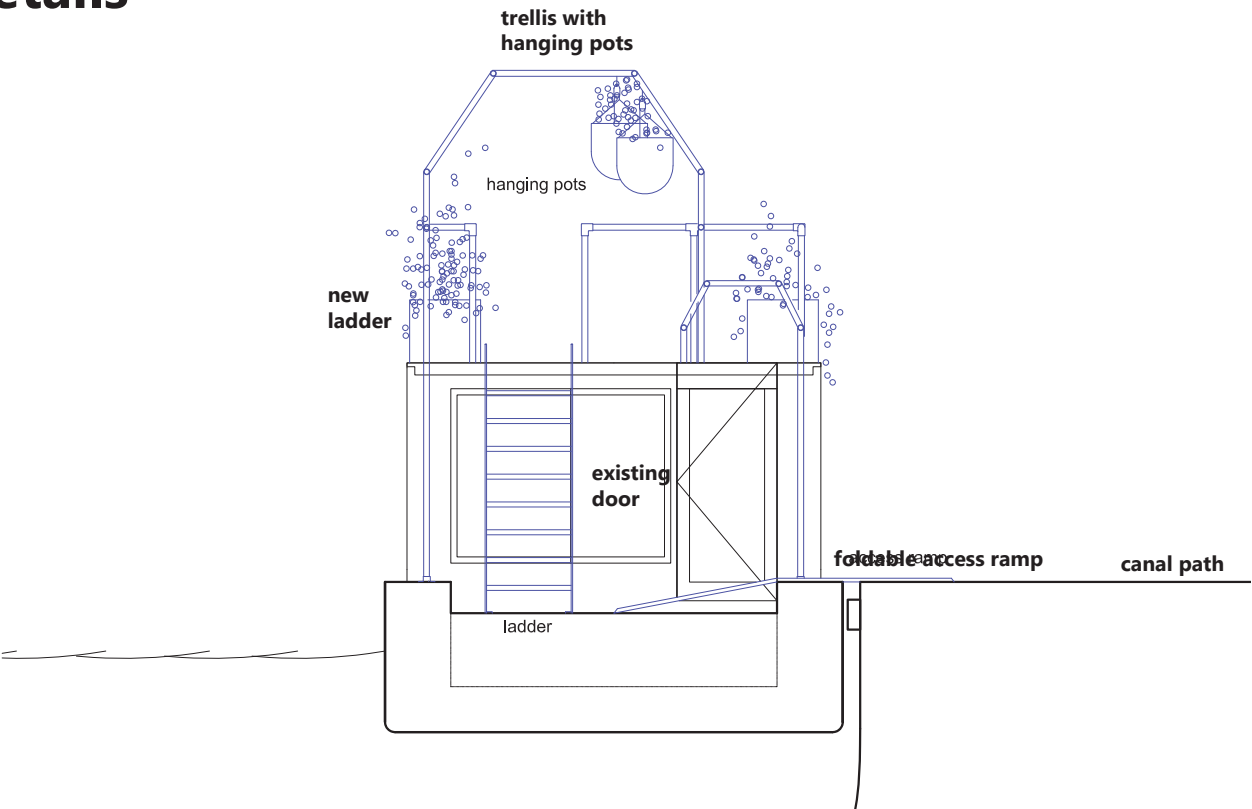


south elevation 1.100

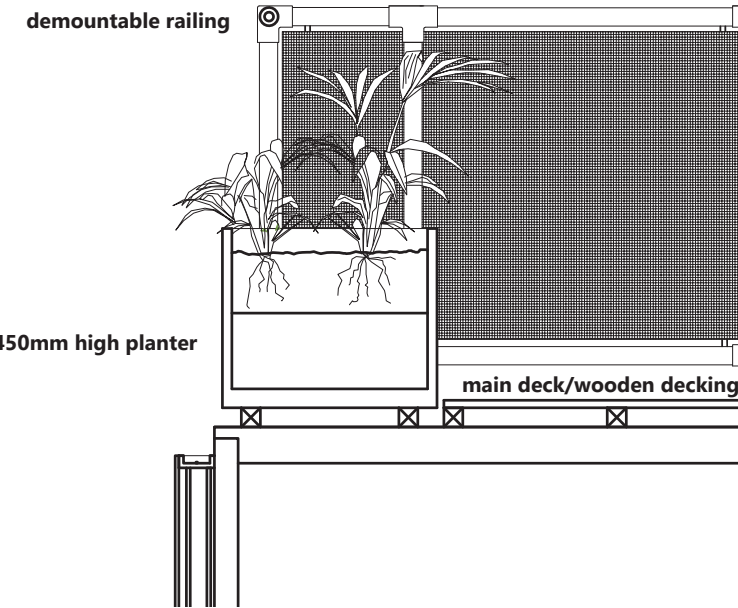


north elevation 1.100

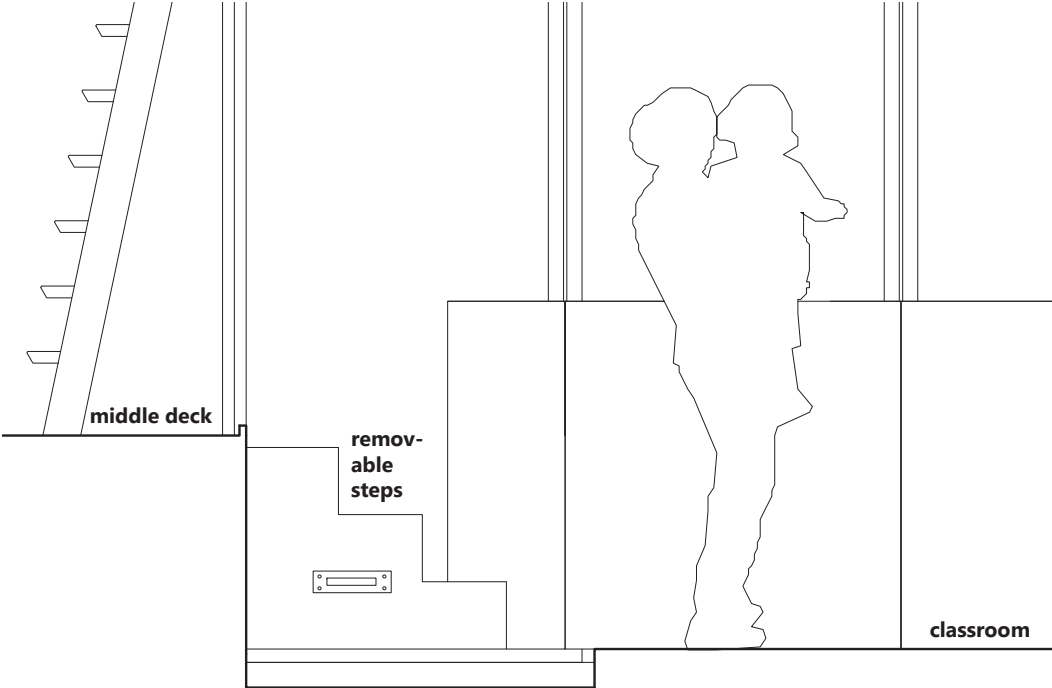
proposed sections +
key details



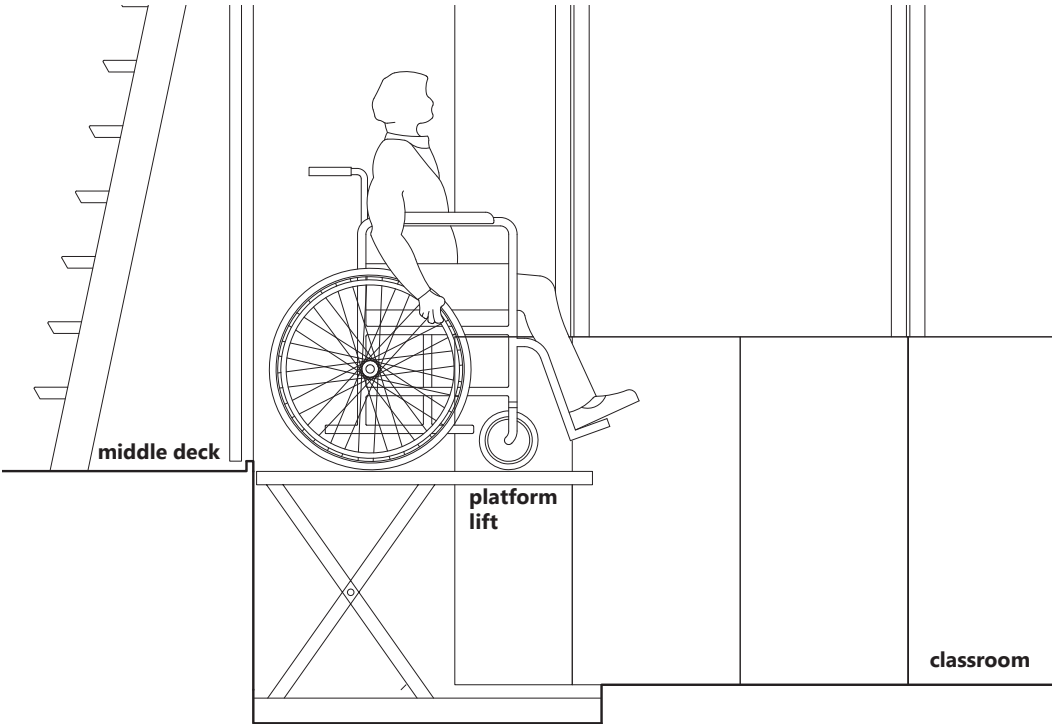
short section A 1.50



railing detail 1.20



platform lift detail (schematic) - steps in use 1.20



platform lift detail (schematic) - lift in use 1.20

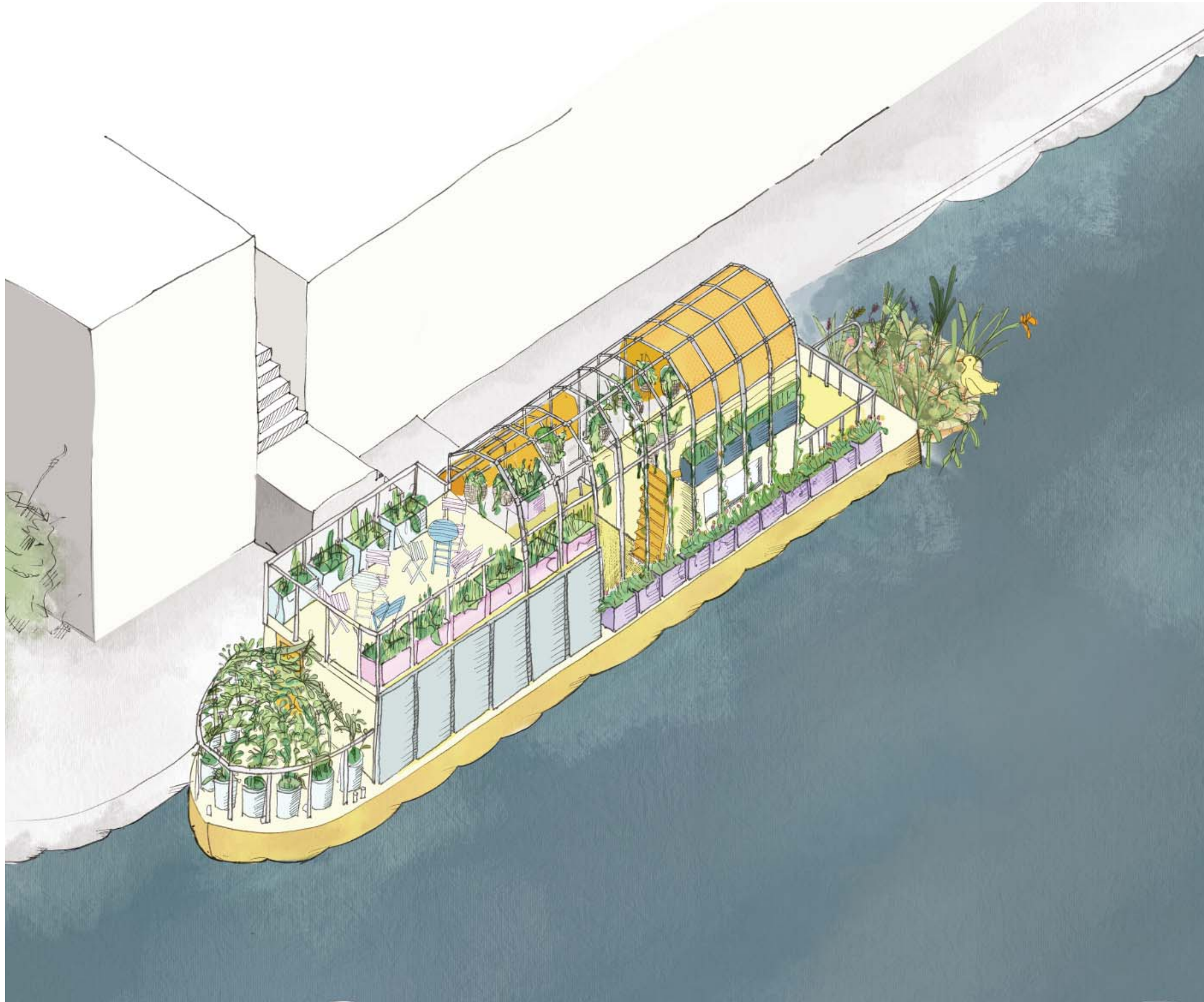
All components shown in blue are demountable when barge is moved for maintenance

system details



kee clamp system details in application clockwise from above: MK museum cafe, Netherlands, outdoor gym in Carlsberg, Denmark, kee clamp table structure

axonometric view



ecology + planting

Greening the barge is essential to its character and role as a learning venue with a focus on nature, plants and wildlife. Balancing the needs of wildlife with ornamental planting that will look good all year round will rely on well designed planting plans that accommodate seasonal change, varied growth types and relaxed informal planting that will soften the hard edges of the built structure and create habitats appropriate to species found locally on the canal and its environs. Plants will be selected for their ability to enjoy the hot, bright conditions by the water, and resilience to wind.

Due to ever increasing changes to our climate, we will be selecting species that are more suitable for warmer, dryer summers, wetter winters and earlier springs. All planting will be in containers with an automated irrigation system or with tanks.

Planting palette

We propose a mix of perennial, evergreen and wild plants that will be seasonally varied, ornamental, provide structure and include species to support pollinators and other invertebrates.

Growing philosophy

We use organic and regenerative gardening techniques that promote the health of the whole garden including plants and soil, as well as supporting the community of flora and fauna living within it. Using crop rotations, recycling of garden waste and composting, flowering green manures such as clover and phacelia as well as surface mulches, we'll build and maintain healthy soils which will be key to helping us manage water use on site. Planting schemes using companion plants and polycultures will minimise opportunities for pest damage, and the use of the right plants to attract friendly natural predators will aid pest control without the use of pesticides.

Habitat creation

Although the planting is largely ornamental, the focus on seasonal change and flowering species will ensure forage and cover for pollinating species throughout the year. Crafted habitats eg. a range of bee and bird boxes, small log piles and stacks etc will encourage nesting on the barge itself within the planted areas.

Maintenance.

Regular maintenance of the garden will take place through community sessions and overall responsibility is held by our maintenance gardeners. See also the detailed maintenance schedule on the following pages. Planting will be phased to ensure each area is fully planted before proceeding to other areas.

1. Planters at the side of the barge
2. Planters for edible plants
3. Plant and train climbers
4. Install roof planting
5. Plant willow dome
6. Install Biomatrix 3d system

ecology + planting

01 pallette for rooftop planters - 1



01 pallette for rooftop planters - 2



02 pallette for side planters



05 willow dome



plant maintenance

	Item	Detail	Maintenance	Frequency
01	General Deep planters	Deep planters approx 40cm depth, rich soil plus mulch to conserve water.	Regular organic liquid feed from worm bins, seaweed or similar to promote healthy plant growth. Vine weevil - regular checks for vine weevil and biological treatment at appropriate time of year. Aphids etc - organic treatments eg garlic spray, hand picking, use of cloches and other protection.	Bi weekly in the growing season. As required
	Shallow planters (rooftop wildflowers)		Regular organic feed as above. Hand weeding to manage spread of dominant species and blow ins. Pest control as above. Stepping stones to avoid compaction if needing to access beds.	Bi weekly in the growing season. As required
02	Barge side planting	Evergreen, semi evergreens, biannual and perennial planting. Wilder species including Betony, Foxglove, Scabious, Sedges, Knapweed, Agrimony, Galium and Filipendula interplanted with shrubs eg lavender, Hyssop, Santolina, Hebe etc will form a naturalised planted buffer around the barge making a strong connection with other life on the water.	Evergreens - lightly trimmed after flowering to promote compact and bushy growth. Loose or dead material removed regularly. Perennials - loose or dead material removed regularly, seed heads and any remaining leafy growth left over winter to ensure forage and habitat is available to wildlife and cut back early spring to promote strong new growth.	Weekly monitoring and dealt with as needed. Main prune late summer. Spring cut back.
03	Canopy planting	Climbers will green the canopy structure eg Hop, Wisteria, grapevine and evergreen Trachelospermum, as well as annuals eg climbing nasturtium and edible gourds.	Regular trimming to train climbers onto structure and promote good coverage. Evergreen climbers trimmed regularly. Perennial climbers eg hop cut back in autumn. Vine pruned late autumn	Weekly monitoring and dealt with as needed. Nov - Dec pruning for vines, hops
04	Fruit trees and bushes	Small step over apples, pears etc in planters plus currants, blueberry etc	Regular monitoring and removal of damaged branches. Seasonal pruning to promote fruit bearing shoots	Late summer / Late winter depending on species
	Edible planting	Lettuce, squash, tomatoes, chard, kale etc	Weeding, feeding every other week, harvest and pest control.	Weekly
05	Willow dome	Spring bulbs, ornamental grasses, bee and butterfly mix of wildflower species including Clover, Clary, Teasel, Yarrow, Ox eye daisy plus some evergreens eg ferns and woodland grasses eg Melica.	Regular tying in of leafy branches and removal of excess wood. Manage underplanting as per perennials - cut back early spring to promote new growth.	Late autumn - thinning and removal of dead wood.
	Rooftop planting	Allium spp, grasses including Stipa tenuissima / gigantea, perennials including Salvia spp including tender and perennial species eg S. nemorosa, S. Caradona, S. guaranitica, S. jamensis. Other perennial species will include varieties of Burnet, Agastache, Chicory, Verbascum, Digitalis, Geranium, Helleborus and evergreen shrubs including Lavandula, Hyssopus, Santolina and Helichrysum.	Monitor on a regular basis to manage excess growth of dominant weeds and wildflowers. Regular feed if needed throughout the growing season. Removal of dead and decaying matter to avoid build up of nutrients in soil. Light mulch where needed to conserve moisture.	Monthly

plant maintenance

06

07

Hanging planters	Edibles and pollinator plants suspended in hanging planters. These will change seasonally and be aerial potagers full of mixed species eg Strawberry, Nasturtium, Lettuce, Fennel, Tomatoes and a range of herbs.	Weeding, feeding every other week, regular harvest and pest control.	Weekly
Floating islands	<p>Biometrix 3D system pre planted with native marginal species including Butomus umbellatus, Galium palustre, Filipendula ulmaria, Aruncus dioicus, Iris pseudacorus, Lychnis flos cuculi, Scirpus, Lythrum salicaria, Persicaria bistorta, Potentilla palustris etc.</p> <p>Once planting is established the islands will be accessible to wildfowl and other species to nest and feed.</p>	Regular monitoring for pests and litter. Removal of dead plant material	Weekly Quarterly

Maintenance Year Plan

[illegible]

view from
canal path



operation + programming

Global Generation is an educational charity so all activities have an educational focus. They work together with local children and young people, residents and families in and around King's Cross to create healthy, integrated and environmentally responsible communities. When working with schools some of their work is curriculum focused, but much of it enhances the curriculum and offers the opportunity for children and young people to achieve and gain confidence in new areas, developing social, emotional and practical skills to make a difference in the world.

Since 2009, Global Generation have engaged over 4,500 young people, created over 40,000 opportunities for local children and young people, 350 young people have graduated from our Youth Leadership Generator programme and 120 young people have achieved a Horticulture and Businesses BTEC through their programme in King's Cross. They now employ three ex-generators and one of their Trustees came through their generator programme.

Ecology, education and enterprise are at the heart of everything they do, and they have developed a wide range of educational programmes, all of which are underpinned by their methodology which is based around the three territories of 'I, We and the Planet'. This approach provides space for people to increase awareness of self, to connect to each other and to connect to the natural world. Whilst their activities are practical and hands-on, bringing raw nature, elemental forces and a sense of adventure to the city, the work is grounded in values and widening of perspective to help establish a fertile foundation for growing a less consumerist and a more creative future.

The Story Garden at the British Library, as well as community outreach and development projects, bring together local school children and families living in the area and local volunteers. All of this helps to nurture a close-knit and collaborative community, which cares about its environment - and about the planet as a whole.

The Garden Barge will provide a space from which to run programmes and activities, through the processes mentioned above. These include:

- The Generator - Youth Leadership Programme
- Global Generation Ambassadors - linked to specific projects
- Creative programme for young refugees and asylum seekers
- Youth Social Action Programme
- Work experience for young people particularly those with additional learning and social needs
- Engagement and support GG graduates on their own initiatives
- Family Volunteering
- Twilight Gardening with local residents and business employees
- Nature Explorers for local primary school children
- Horticulture training
- Enrichment, Business and Sustainability experiences for secondary school pupils
- Sustainability workshops and training sessions for local community groups and local businesses

The Garden Barge will be staffed and open between 9am - 6pm, 5 days a week, with very occasional evening use until 8pm. Expected visitor numbers will be around 150 people/week. The usage will be a mix of schools, youth and community groups engaging with Global Generation co-designed activities. The facility will also be offered to local community groups who want to use the barge for training, networking or meetings. There is a small kitchen that can be used for hot and cold beverages and snacks. No alcohol will be served on the barge. Both the space and the access to drinks will be free of charge, although donations will be accepted.

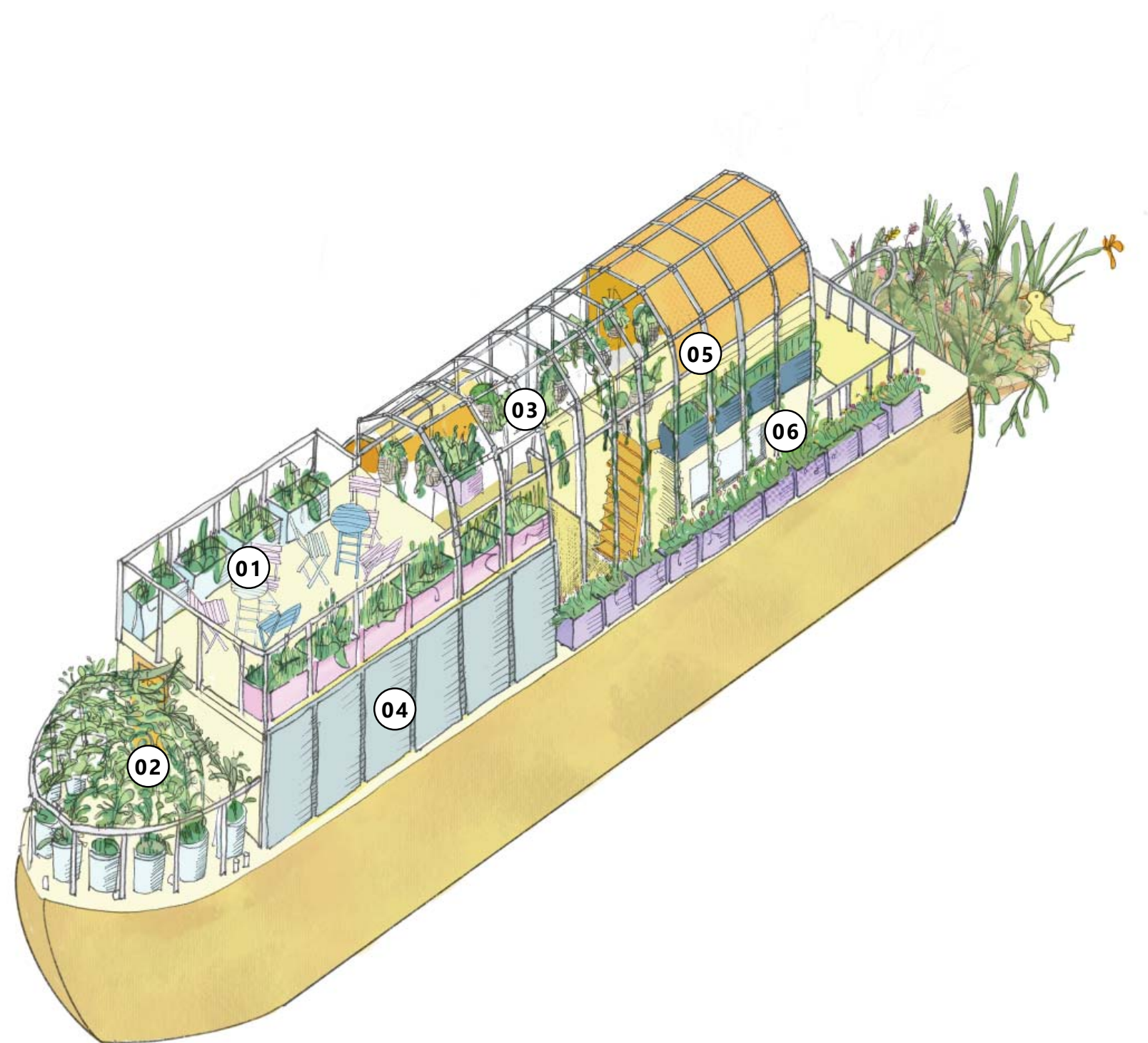
Global Generation already have close links with most of the local primary schools and many community organisations on both sides of Kings Cross and know that they are keen to use the new spaces.

Programming as well as regular maintenance and upkeep are funded through Global Generation's mixed funding model which includes funds from corporate donations and project specific funding. Wherever possible, planting and care of the garden are built into the educational program.

activities on the barge

There are 6 discreet spaces on the barge that accommodate a range of group sizes and activities from 2 to 15 people.

- 01 Main deck** (groups of 8): Ecology workshops with local children and community groups, gardening/planting, making sessions, clay, art, meditation, storytelling, performance, wellbeing workshops in collaboration with Killick Street and Caversham GP practices etc.
- 02 Front Deck & Willow Dome** (groups of 6): Story telling, meditation, small group discussions, mentoring sessions, meetings, quiet reflective space etc.
- 03 Central Deck/Entrance** (small groups, wheelchair accessible): Accessible outdoor gardening tasks, greeting space, passing out food/drinks (access to small kitchenette through service hatch), waiting space for young people attending sessions etc.
- 04 Classroom** (groups of 15, wheelchair accessible): Main indoor space: main session/workshop space in adverse weather or for larger groups incl: Indoor gardening, volunteer gatherings for Global Generation and Canal and River Trust volunteers, cooking classes, art classes, film screening, performance, exhibitions ie. HLF funded Voices of the Water exhibitions etc.
- 05 Rear deck** (groups of 3): Growing space for produce used in cooking sessions, propagation, seed sowing, harvesting etc.
- 06 Office and Kitchenette** (2 staff): Administrative tasks relating to barge and outreach program, small kitchenette for drinks and snacks preparation etc.



growing the barge together

Global Generation's Skip Garden, the Story Garden and the Paper Garden are built incrementally. Staged project implementation opens the built process up to communities, giving them agency in the shaping of their environment. It provides participants with the opportunity to acquire skills. We have learned that working together also forges strong social bonds and establishes a connection with the site helping to secure the legacy of the project.

We have established a 5-staged built strategy for the barge which ensures that safety critical work elements are undertaken by skilled professionals and that accessible work processes are opened up to communities to serve Global Generation's core purpose. The following stages are planned for the built program:

Phase 1 (already completed, see co-design section above): Co-design program for initial garden barge ideas. This phase gave us the initial design ideas which have since been adapted by Jan Kattein Architects to work with the existing boat.

Phase 2 (September - December 2021): Generators program - learning through doing
Weekly sessions with local young people aged 10-15 exploring practical designing, making and gardening techniques including:

- Seed sowing
- Harvesting
- Ceramics
- Wood carving
- Carpentry
- Printing
- Drawing etc.

These sessions will enable the young people to try out different methods of making and greening from which they can then choose to take forward to create final



Incremental building process at the Story Garden: 1. professionals installing critical building components; 2. community built workshops; 3. community planting + gardening

elements to complete the barge after it is on site from April 2022.

Phase 3 (January - April 2022): Inspiration from the water, Voices of the Water program

Between February and April 2022 the boat will be at the boatyard to undergo the hot metal works needed to make it fit for purpose. This will include reinforcing the roofs to make them suitable for decking and planting, fitting a disabled access lift, as well as painting the outside of the barge.

During this time we will work with a range of young people and community groups to explore the heritage of the waterways around St. Pancras and our deeper historical and cultural connections to the water. This project will include:

- Wellbeing walks
- Discussions
- Story telling and story making
- Visual map making and nature oriented arts activities
- Performance
- Canalside Gardening

The Voices of the Water project sessions will continue to run in parallel to other co-build sessions. Once the barge is in place it will become a key site for these workshops and this project will help activate the barge as a key community space from the beginning.

Phase 4 (April - July 2022): Inhabiting the barge - Growing together

Once we have the barge back in St Pancras we will be able to start greening and inhabiting the space. Involving the local young people and community groups in this process is key to how the space will develop. The 'greening' of the barge will be overseen by Global Generation's garden team and will be a phased process developing each key area at a time (see planting plan for details).

Continuing the weekly after school sessions, alongside weekend drop-ins, local young people will be an integral part of this process and will be involved in:

- Designing and making planters
- Designing and making visual elements ie. tiles, windchimes, sculptures, signs
- Designing and making furniture including tables and seating
- Planting up the different spaces etc

These sessions will be overseen by experienced professionals who will ensure all elements are made to a high standard. Small planting and craft sessions will be held on the barge on either the top deck or in the classroom, whilst larger making/carpentry sessions will be held at the Story Garden on Ossulston Street with pieces made transported to the barge when finished.

Phase 5 (July - September 2022): Summer Holiday workshops

The summer holidays will enable the co-build program to open up to more local residents with a series of drop-in workshops available and open to families of all ages. The activities offered will include the same as mentioned above.



young people cooking together at the Skip Garden