

Landscape Design & Access Statement

Elan Valley Visitor Centre

Re-development

Reference: 303909-ARP-XX-XX-RP-L-0003

August 2024



Introduction

Context

The landscape chapter is a supporting document summarising the landscape concept and design development during RIBA Stage 2. The landscape design has been developed in coordination with the client team and a large consultant group, including civil, transport, ecology, tree consultancy, architecture, geotechnical, and MEP specialists. This collaboration ensures that the design meets the needs of the Visitor Centre while integrating the project into a site-wide vision, drawing inspiration from existing landscape features, sightlines, and the natural and built environment. The design is also aligned with Green Infrastructure policies and Building with Nature standards, and it responds to the Sustainable Drainage Systems (SAB) requirements.

The proposed landscape masterplan will be further developed and detailed in subsequent RIBA stages, adhering to the design principles outlined in this chapter.

Existing site

The existing visitor centre is nestled within a striking topography, surrounded by hills and the main attraction, the Caban Coch dam, with the Elan River flowing alongside the site, providing visitors with a remarkable experience. However, the current landscape around the visitor centre is dominated by asphalt and vehicle areas. Key views are limited and obstructed by various buildings, play areas, and landscape elements that have been added over time, detracting from the site's main purpose: "providing the best experience for visitors in a natural environment."

The landscape should aim to enhance visitors' sensory experiences, directing attention to the natural and built environment, such as views of key landscape and built features, the sounds of the river, and nature-based solutions that include recreational opportunities for families and other visitors etc.

The site also serves as an important meeting point for cyclists and trail enthusiasts, offering several opportunities to start, arrive, or stop by. Therefore, it is essential to create a welcoming and enjoyable space for these visitors as well.



Site Appraisal

Constraints

- ① Lack of windows or active facades on building facing the dam.
- ② Indoor and terrace areas have limited views of the dam and the river.
- ③ The play area obstructs the view of the dam from the picnic area.
- ④ The welcome area is primarily an asphalt car park area, which might be unwelcoming and not reflecting the character of the area.
- ⑤ The bike hub is not easily visible from the car park or welcome area.
- ⑥ Existing Elan Valley trail access are not visible.
- ⑦ Hard fence on existing biodiversity sanctuary is not appealing for visitors.
- ⑧ Views of the river are not utilised effectively.
- ⑨ The roadside landscape is not appealing or welcoming.
- ⑩ Pedestrian paths are unclear or difficult to follow.
- ⑪ Dam maintenance access / pedestrian access to be retained
- ⑫ Retain existing stone walls
- ⑬ Retain as many existing trees as possible within the new car park area
- ⑭ Retain Public Right of Way route
- ⑮ Vehicle and asphalt dominance

-There is a lack of Sustainable Drainage Systems (SuDS) and nature-based solutions to improve the site permeability



Site Appraisal

Constraints

A selection of photos illustrating some of the constraints observed on site.



Wayfinding, accessibility to the Elan Valley trail to be improved



Dam view obstructed with existing play area



Accessibility and wayfinding on river side toward the dam to be improved



Accessible carpark obstructing welcome area and not as per standard



A significant amount of asphalt and unused space is present on the western side of the Visitor Centre.



The asphalt and heavy vehicle presence could be improved to enhance the entrance experience and improve pedestrian and cyclist accessibility to the site



Improve the visibility of the bike hub from the car park and the Visitor Centre



Lack of path connections from the riverside path and bike hub toward the visitor centre and beyond

Site Appraisal

Opportunity

- ① Activate the Visitor Centre's frontage
- ② Enhance views of the Dam from both the Visitor Centre and outdoor areas
- ③ Relocate and integrate the play area
- ④ Explore opportunities to expand the welcome area
- ⑤ Enhance the visibility to the biodiversity sanctuary
- ⑥ Better utilise views towards the river
- ⑦ Mark the threshold to the carpark and welcome area
- ⑧ Increase the use of Sustainable Drainage Systems (SuDS) and nature-based solutions throughout the site
- ⑨ Consider relocating the existing blue turbine and providing an informational board
- ⑩ Improve legibility and wayfinding to Elan Valley trail access
- ⑪ Improve connection and visibility between the Visitor Centre and the bike hub
- ⑫ Consider and embellish the top view from the Elan Valley trail
- ⑬ Reduce asphalt with permeable material and improve green connectivity



Site Appraisal

Opportunity

A few photos highlighting key opportunities on site.



Opportunity to improve sensory experience near this focal view



Retain and enhance views to natural and built landscape and the Dam



Improve the view toward the visitor centre with integrated landscape, screening the carpark area



Opportunity to relocate the hydroelectric turbine



Opportunity to improve visibility to and attractiveness of the biodiversity sanctuary



Opportunity to improve site views with integrated hard material with the surrounding landscape



Opportunity to extend the food and beverage terrace toward the river and its riparian vegetation

Landscape concept

Existing key landscape sight views & characters

The Elan Valley Visitor Centre is situated amidst four key landscape features, which contribute to its popularity among nature and water infrastructure enthusiasts, trail walkers, and cyclists. These features surround the building, with the Elan River to the south, accompanied by riparian planting; the imposing structure of the Caban Coch Dam to the west; and the rocky slope with trail and public right of way (PRoW) access to the north. Together, these landscape components influence and form the foundation of the landscape design.



Afon Elan (River)

The Elan River flows from the dam to the site entrance, providing visitors with opportunities to see, hear, and even feel its presence. Depending on the overflow of the dam, a mist can at times be present, enhancing the sensory experience on the site



Caban Coch (Dam)

Caban Coch, the first dam constructed, is designed to resemble a waterfall when overflowing. This dam is visible from the Visitor Centre and the Elan Valley Trail. It is one of the main attractions of the Elan Valley



Rocky slope

North of the Visitor Centre, this imposing rocky slope, covered with grass, perennials, and pioneer plants, bears witness to the construction of the dam and the top road. Sheep can often be seen on the slope, contributing to the site's character.

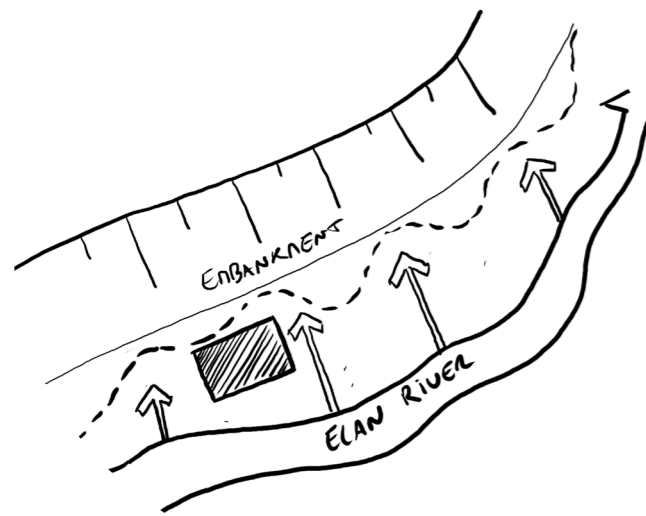


Ripisylve vegetation

The Elan River is accompanied by lush, green vegetation, including trees, shrubs, various perennials, and ferns

Landscape concept
Design development

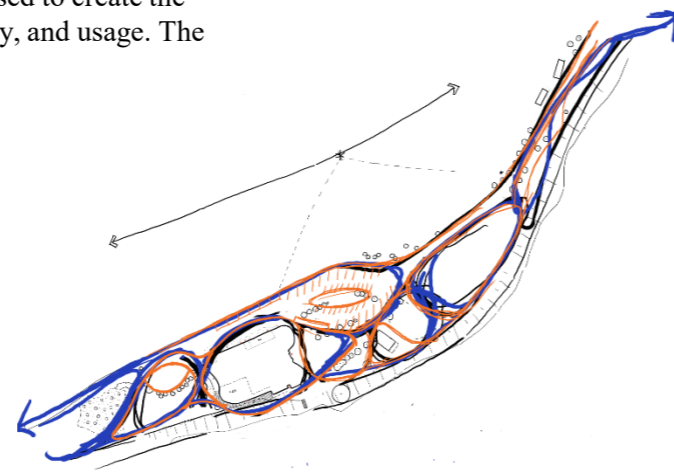
The landscape concept is inspired by the character of the Elan River, with the river's meandering pattern guiding the spatial arrangement around the visitor centre. The following sketches illustrate the design development process used to create the landscape masterplan, addressing its requirements, functionality, and usage. The organic lines in the design reflect the natural flow of water.



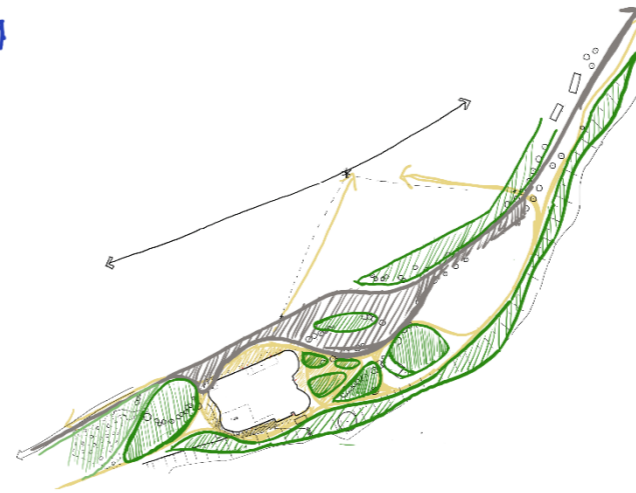
Elan river expansion on the valley



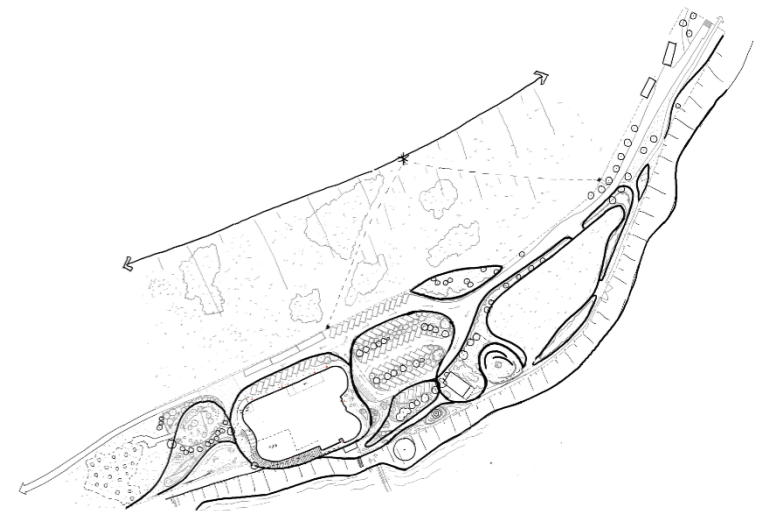
Elan river inspiration



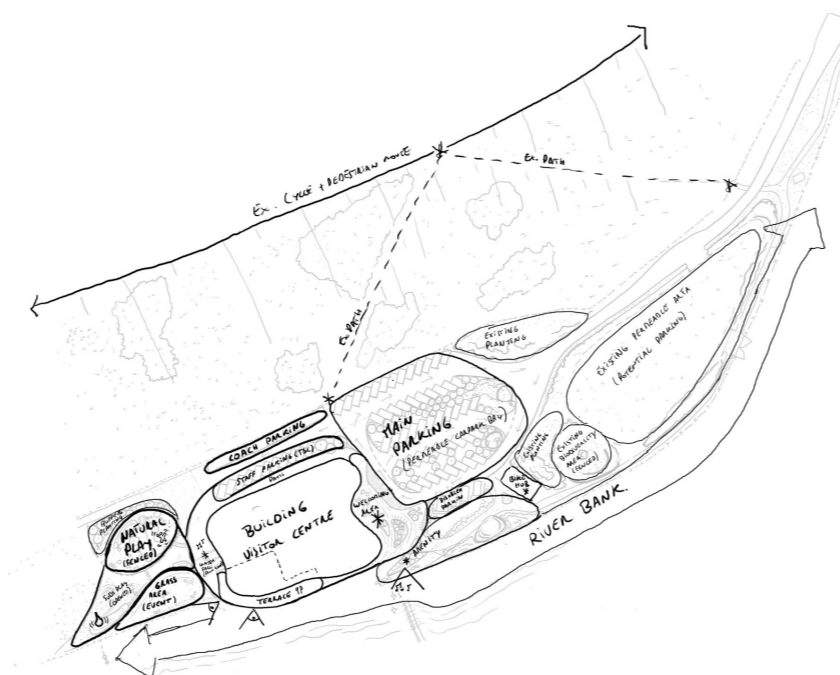
1 Applying meander pattern



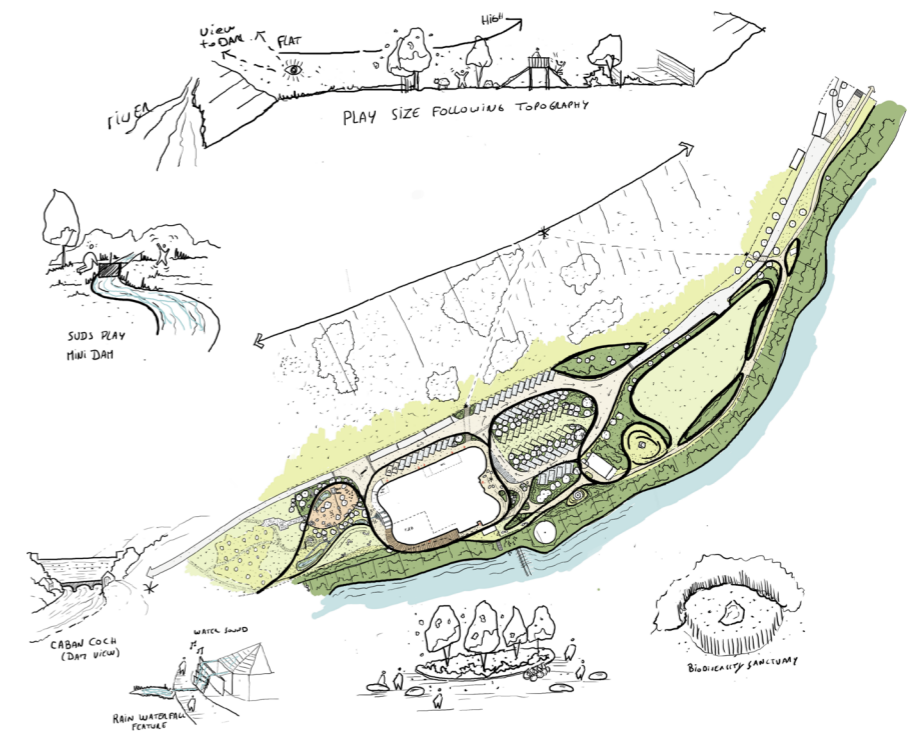
2 Defining spaces



3 Consolidation of the areas



Space arrangement



Concept masterplan

Landscape concept

Space arrangement

Each space has been carefully defined based on the site's context, needs, existing and future use, key views, and, most importantly, the visitor's experience as they move through the site. While this plan presents a site-wide strategy, the regeneration efforts will primarily focus on the improved Visitor Centre area, with minor enhancements planned for the eastern side of the site to further improve the visitor experience.

- ① Formal play area (play equipment & fenced)
- ② Informal play area (natural component & SuDs)
- ③ Enhanced existing biodiverse sanctuary
- ④ Entrance / Welcome area
- ⑤ Parking area designed to enhance the entrance experience
- ⑥ Opportunity to collect rainwater from the roof into various water management systems (informal play, swale, attenuation tank)
- ⑦ Terrace with dam and riverside views
- ⑧ Flexible grass open space for recreation and events
- ⑨ River promenade experience
- ⑩ Elan Valley trail access / PRow access
- ⑪ Upgraded Visitor Centre
- ⑫ Retained existing bike hub
- ⑬ Existing grass/gravel open space area
- ⑭ Route into/ out of site with consideration to the visitor experience



Landscape masterplan “THE WATER JOURNEY”

This sketch masterplan illustrates the various space typologies interconnected by inspiring curved pathways designed for both pedestrians and cyclists. The masterplan features curves, loops, and green islands, drawing inspiration from the river’s character while enhancing accessibility and flexibility throughout the site. Existing trees have been preserved wherever possible, and nature-based solutions including SuDS have been integrated across the site to boost biodiversity and sustainability.

- ① Formal play area (Fenced area with mix of natural aspect play equipment and natural elements)
- ② Playful SuDS with ground-level height elements integrated with Sustainable Drainage Systems (SuDS) and water management features.
- ③ Enhanced existing biodiverse sanctuary
- ④ Entrance / Welcome area
- ⑤ Shared space area with permeable carpark bays (including accessible and EV spaces)
- ⑥ Opportunity to collect rainwater from the roof into various water management systems (play, rain gardens, attenuation tank)
- ⑦ Timber deck with dam and riverside views
- ⑧ Grass area with seatings (amenity and event area)
- ⑨ Seating area to contemplate and listen the river
- ⑩ Elan Valley trail access / PROW
- ⑪ Delivery bay
- ⑫ Drop off bay (taxi, accessible vehicles etc)
- ⑬ Existing bike hub
- ⑭ Riverside path



Main vehicle, cycle and pedestrian access



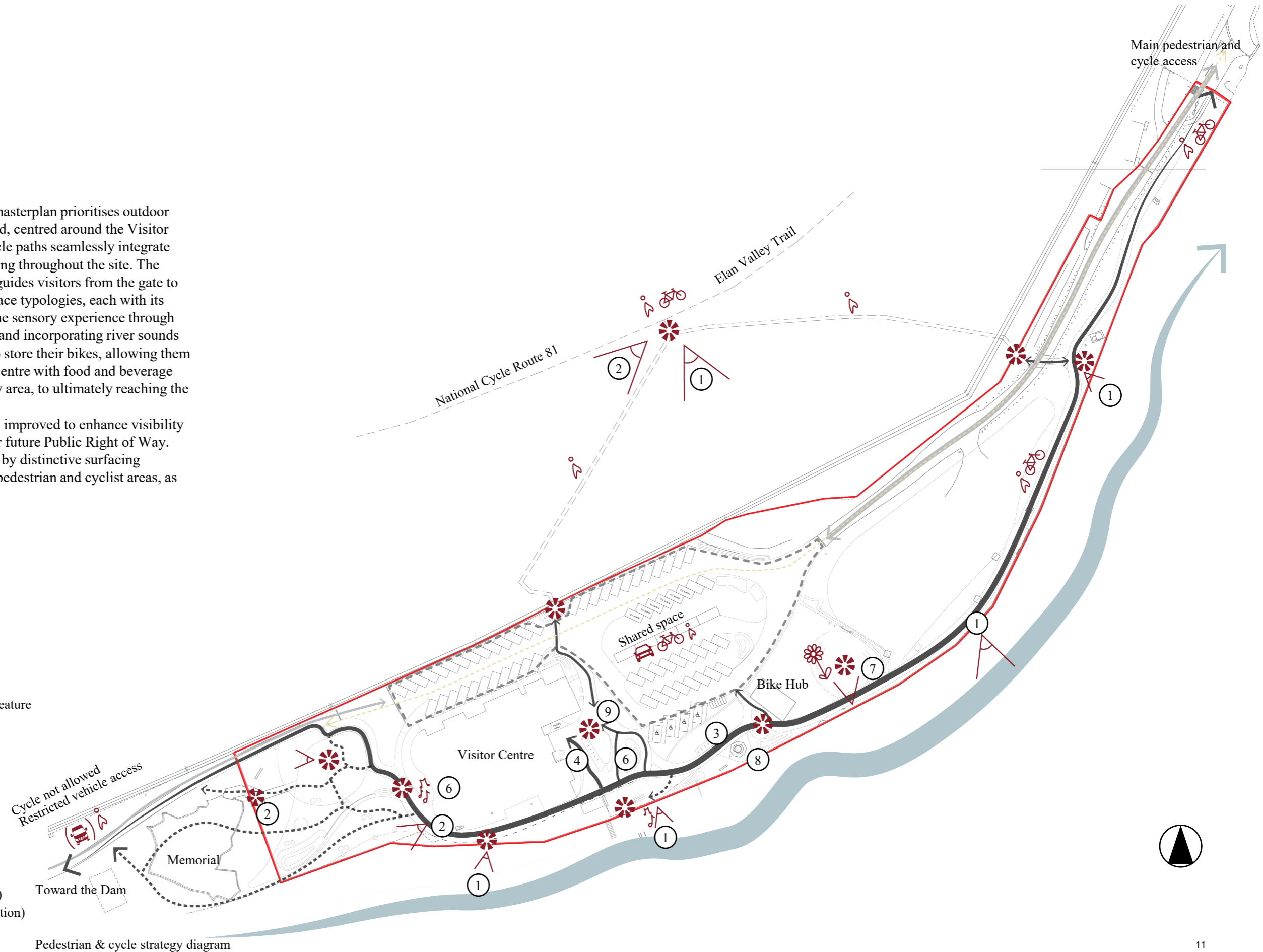
Pedestrian and cycle flow

Experience journey

As detailed in the preceding pages, the masterplan prioritises outdoor visitor experiences from beginning to end, centred around the Visitor Centre. The proposed pedestrian and cycle paths seamlessly integrate with existing routes to enhance wayfinding throughout the site. The primary route, following the river path, guides visitors from the gate to the dam, meandering through diverse space typologies, each with its distinct character. This route enhances the sensory experience through biodiverse planting, framing key views, and incorporating river sounds etc. Facilities are provided for cyclists to store their bikes, allowing them to continue their journey via the visitor centre with food and beverage in/out area and continuing along the play area, to ultimately reaching the dam.

Access to the Elan Valley Trail has been improved to enhance visibility and accessibility, with considerations for future Public Right of Way. Vehicles entering the site will be guided by distinctive surfacing materials, promoting awareness around pedestrian and cyclist areas, as well as the new shared car park.

- ① View of river
- ② View to Dam
- ③ Cycle shelter (6x cycle racks)
- ④ Cycle rack (5x cycle racks)
- ⑤ Listening to the river
- ⑥ Harvested rainwater art and sensory feature
- ⑦ Biodiverse sanctuary
- ⑧ Existing sculpture
- ⑨ Welcome area
- ☼ Focal points
- Main pedestrian and cycle path
- ⋯ Informal pedestrian paths (maintenance strategy, mowing grass)
- ⋯ Existing PRow route (indicative location)
- Vehicle access



Pedestrian & cycle strategy diagram

Flexible open space Recreation and event area

This open space is aligned with the indoor food and beverage area and its timber terrace, providing versatile usage options for visitors depending on the activities and the season:

- **Picnic Area (3):** For most of the year, this grass turf can be used as a picnic area, allowing visitors to enjoy the sights of the dam, listen to the sounds of the river, and watch children engage in nature play.
- **Event Space (3):** This area is also suitable for various events, such as for educational workshops or dark sky observation gatherings.
- **Outdoor Food & Beverage Area (2):** The timber deck area serves as an outdoor food and beverage space throughout the year. Visitors can enjoy the riverside setting while also having a view of the surrounding play areas.



Dark sky event

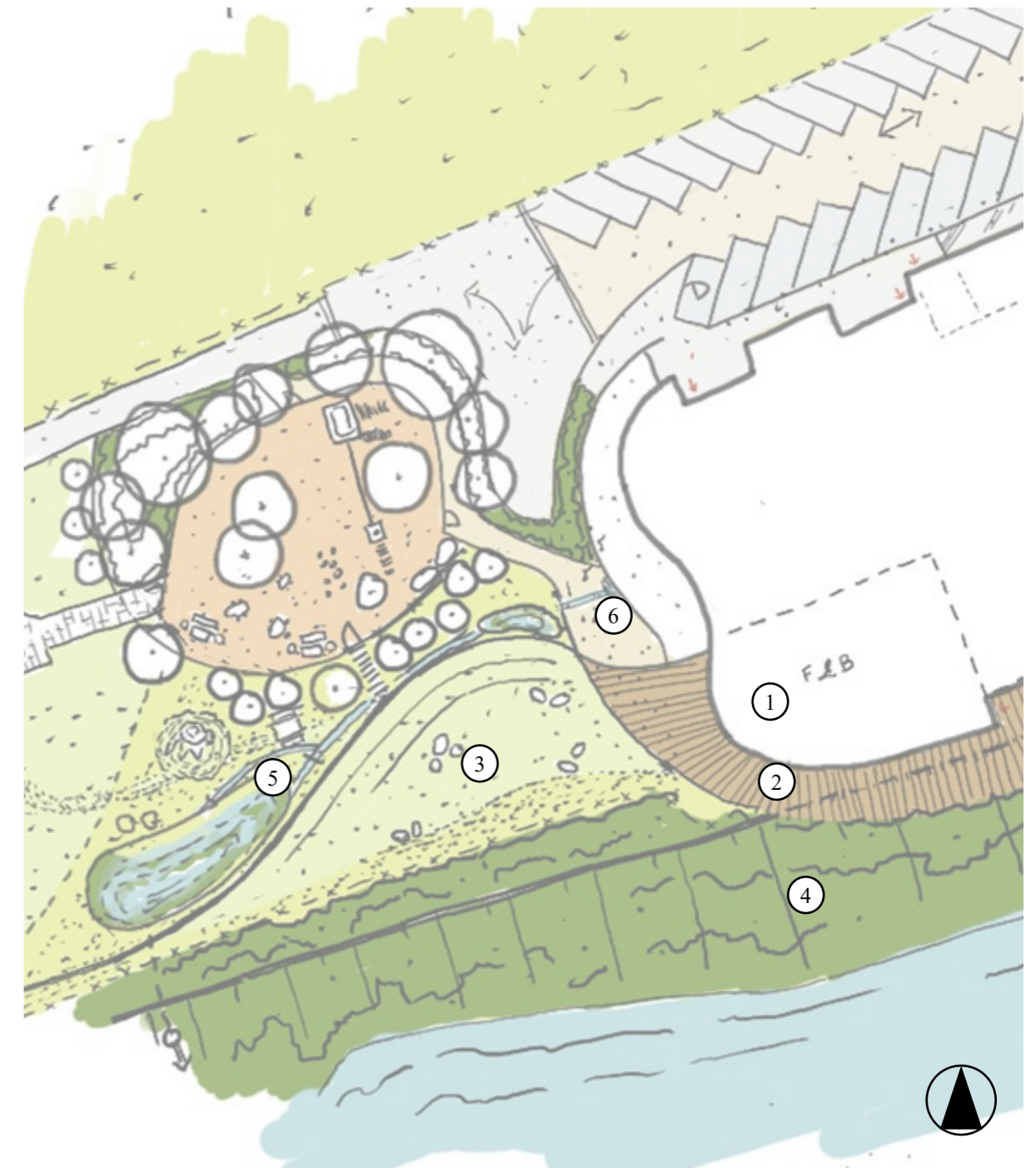
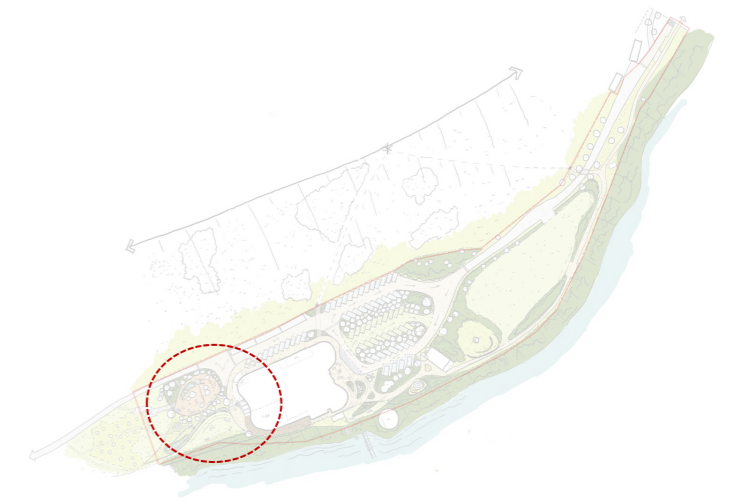


Event area

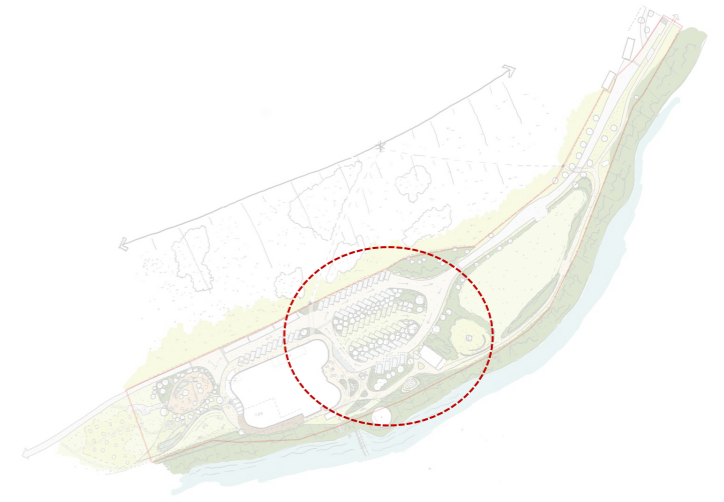


Picnic & seating Area

- ① Indoor food and beverage (F&B) footprint
- ② Outdoor timber decking for F&B
- ③ Flexible grass open space for seating and picnic area and occasionally to host events
- ④ Existing riparian planting with view to the river to be preserved
- ⑤ SuDs including informal play components
- ⑥ Rainwater harvesting feature (artistic down pipe)



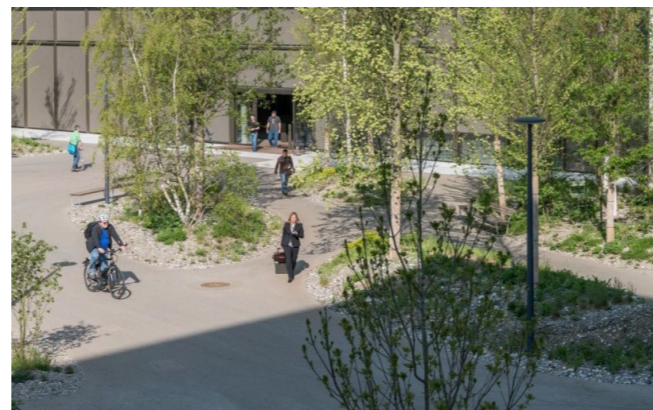
Welcome and Arrivals



The welcome area is an important space for the Visitor Centre, serving as a key meeting location for all visitors, including those arriving by walk, bike, and vehicles. It provides the first impression upon arrival by car or bike. This area is designed to be spacious, incorporating seating and cycle racks within a planted, and riparian character. The parking spaces have been re-arranged to optimise the available space while retaining existing features such as stone walls and trees. Efforts have been made to minimise asphalt surfaces, opting instead for sustainable and permeable surfacing materials.



Autumnal colour planted carpark



Planted arrival



Native planted island

- ① Welcome area with seating and cycle racks
- ② Planted and SuDS islands (including harvested rainwater art)
- ③ Drop-off bay (for taxis, accessible vehicles, etc.)
- ④ Shared space area with specific surfacing material and threshold (for vehicles, cyclists, and pedestrians)
- ⑤ Path connecting the Visitor Centre and Bike Hub
- ⑥ Accessible parking spaces close to the Visitor Centre
- ⑦ Existing statue
- ⑧ Existing sculpture
- ⑨ Riverside seating and contemplation area
- ⑩ Riverside pedestrian path towards the Dam
- ⑪ Path towards Elan Valley trail and PRoW
- ⑫ Relocated existing blue turbine
- ⑬ Access to the Bike Hub



Play Strategy

Formal and informal play

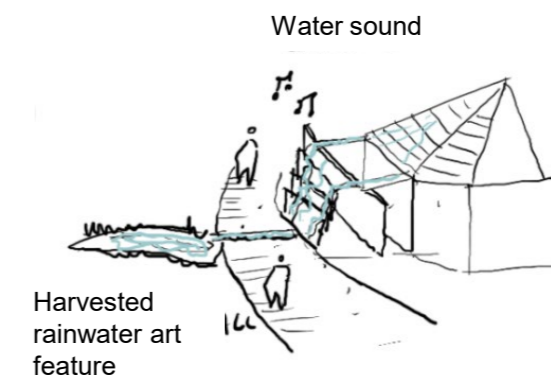
Play design principles:

- **View Weather as an Asset:** Incorporate weather conditions into the design to enhance play experiences and sustainability.
- **Water Management:** Celebrate water through various water and play feature from rainwater harvest art via SuDs and play toward the Elan river.
- **Reclaim Natural Materials:** Incorporate site-specific natural elements such as boulders, timber logs, and pebbles into the play area.
- **Vegetation:** Include a variety of plants, including trees, grass, and perennials, to enhance the play environment.
- **Safety and Surveillance:** Design a secure, fenced play area with passive surveillance to oversee children from surrounding picnic area and pathways.
- **Strategic location:** Position the play area thoughtfully, taking advantage of the site's topography while preserving important views and key site features.
- **Celtic, nature and water theme:** introduce the Welsh character
- **Emphasise sensory experience:** Play components selection will be focus on the sensory experience, sound, visual and touch of water and natural elements
- **Education aspect:** illustrative signage to describe the way rainwater is managed on site.

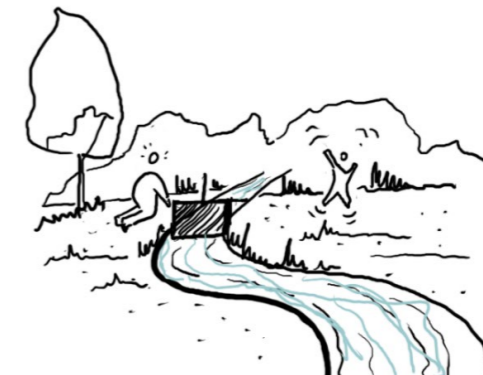
The future play experience will be characterised by two distinct areas:

- **Formal Play Area:** This area will be secured to provide parents with peace of mind and will feature a mix of natural and wooden play structures for young children. Water will be celebrated through various play equipment that utilises harvested rainwater from water tank, minimising waste before it enters the river via SuDs and a series of channels integrated into the informal play area. Water availability will depend on rain provision during the year, and this could part of the educative aspect, to respect water.
- **Informal Playful SuDS Area:** Located near the grass open space, this area will include swales and pebble channels designed to harvest rainwater from the building roof. The water will gradually flow into the Elan river through a series of shallow swales and drainage features, creating an interactive environment where older children can play and engage with the water.

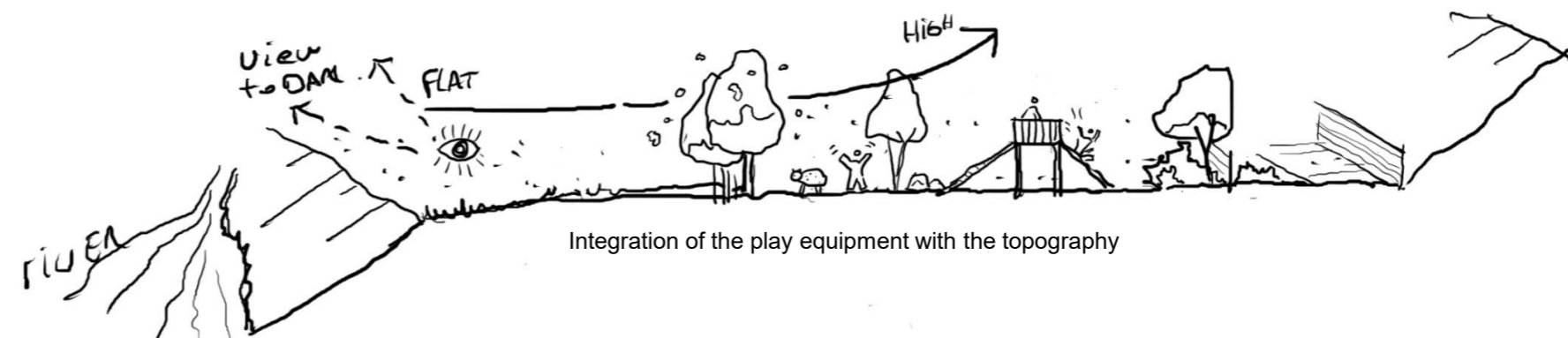
The play design and equipment will be developed and finalised in the next design stage. The following information illustrates the design principles and atmosphere.



Art down pipe illustration



Playful water feature sketch



Illustrative section : play areas concept

Play Strategy

Play experiences around the building



The play experience is primarily located around the Visitor Centre and along the riverside. This play intervention is part of a site-wide play strategy designed to create a play journey from the main pedestrian access to the formal play area via the riverside path. Further development of this strategy can be undertaken at a later stage.

Samples of play typologies are presented on the following page.

- ① Formal play area with wooden equipment, sculpture, water play with treated water cycle (Fenced area)
- ② Informal playful SuDS with rainwater harvest flowing into channels and SuDS
- ③ Wooden sculpture for play and attraction
- ④ Flexible grassland area for picnic and event experience
- ⑤ Accessible pedestrian access from south of Visitor Centre toward the dam
- ⑥ Turning/reversing area for light vehicle and van
- ⑦ Rainwater harvest art from roof (to be developed)
- ⑧ Shallow attenuation swales (including play purpose)
- ⑨ Musical play element (welcome area)
- ⑩ River sensory play



Play Strategy
“THE WATER JOURNEY”

Example of wooden sculpture, inspired by Welsh or Celtic legends, will serve as a focal point and “guardian of the site”, enhancing the recreational experience.



Informal playful SuDs examples



Examples of rainwater harvest sculpture / art



Formal play equipment examples
















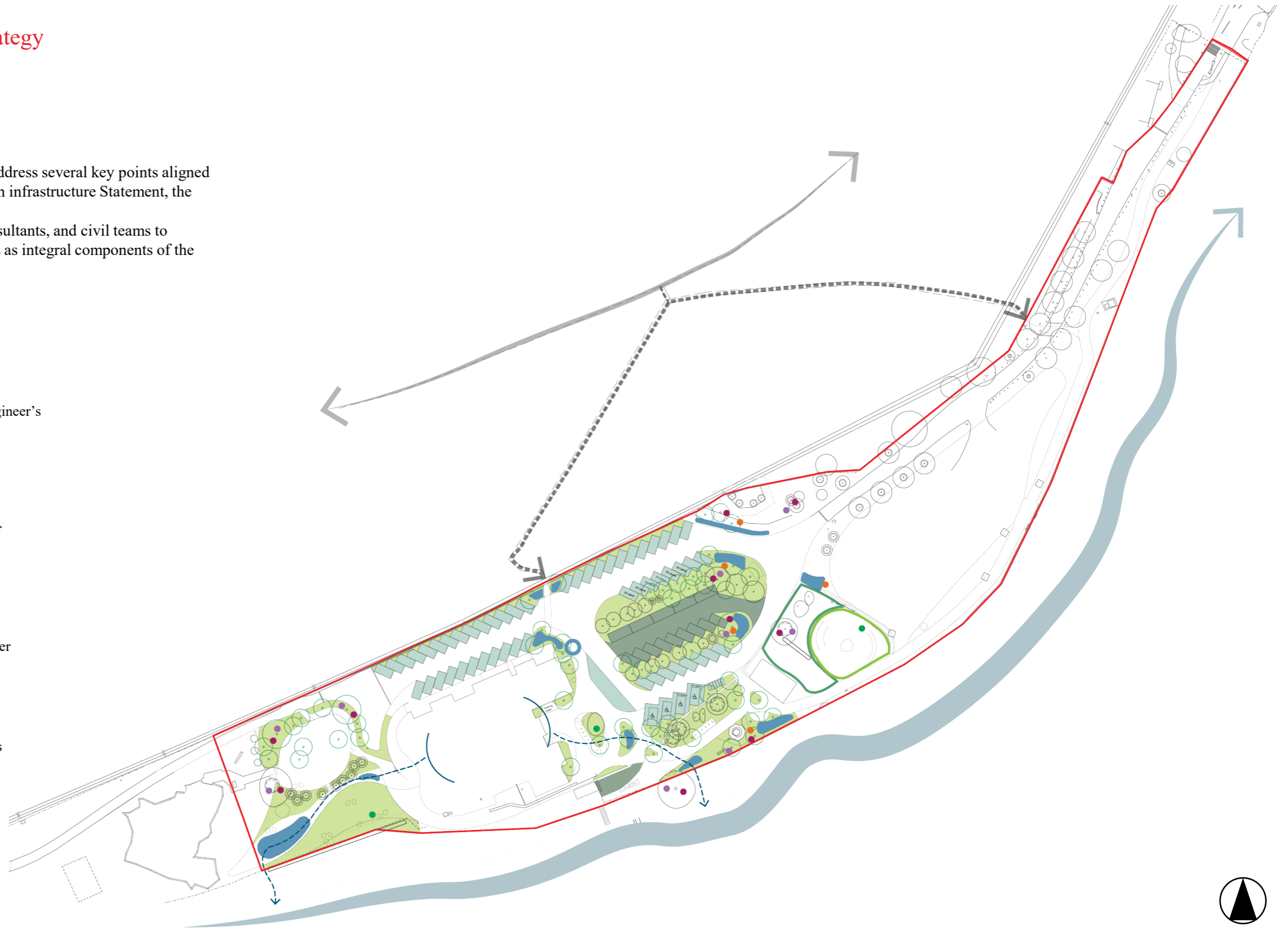
Artistic wheel down pipe

Extended gutter with art down pipe

Ecological and Sustainability Strategy

The landscape proposal has been developed to address several key points aligned with "Building with Nature" standards, the Green infrastructure Statement, the Net Benefit biodiversity and SAB requirements. It has been coordinated with ecologists, tree consultants, and civil teams to enhance the ecological and sustainability aspects as integral components of the scheme.

-  Improved and new planting areas
-  SuDS network (refer to the civil engineer's chapter for more information)
-  Permeable paving (carpark bays)
-  Permeable grasscrete/grassgrid (vehicle bays and driveway)
-  Retained existing planting as part of the green infrastructure network
-  Retained and improved existing biodiverse sanctuary (native mix species, wildflower, perennials etc)
-  Harvested rainwater into SuDS, water tank to be reused for bike washing, WC or water play
-  Indicative location of the water tank
-  150mm water for amphibian habitats
-  Bird boxes (Indicative location)
-  Bat boxes (Indicative location)
-  Hibernacula/Habitat pile (Indicative location)
-  Insect hotel (Indicative location)



Ecological and sustainable diagram

Tree planting Strategy

The trees have been selected to align with the existing species on-site, reinforcing their presence and creating clusters of similar species in certain areas. The chosen tree species are based on those already present, with the aim of promoting biodiversity. To enhance the visitor experience and support pollinators, additional native species that blossom have been selected to complement the existing palette. These new trees will play both a visual and ecological role on-site, providing seasonal colour interest and attracting pollinators. For more information about the retention or removal of existing trees, please refer to the Arboricultural Impact Assessment.



Betula pendula



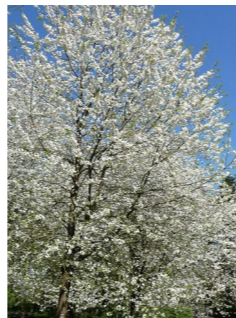
Sorbus aucuparia



Crataegus monogyna



Quercus robur



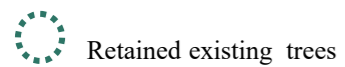
Prunus avium



Tilia cordata



Salix caprea








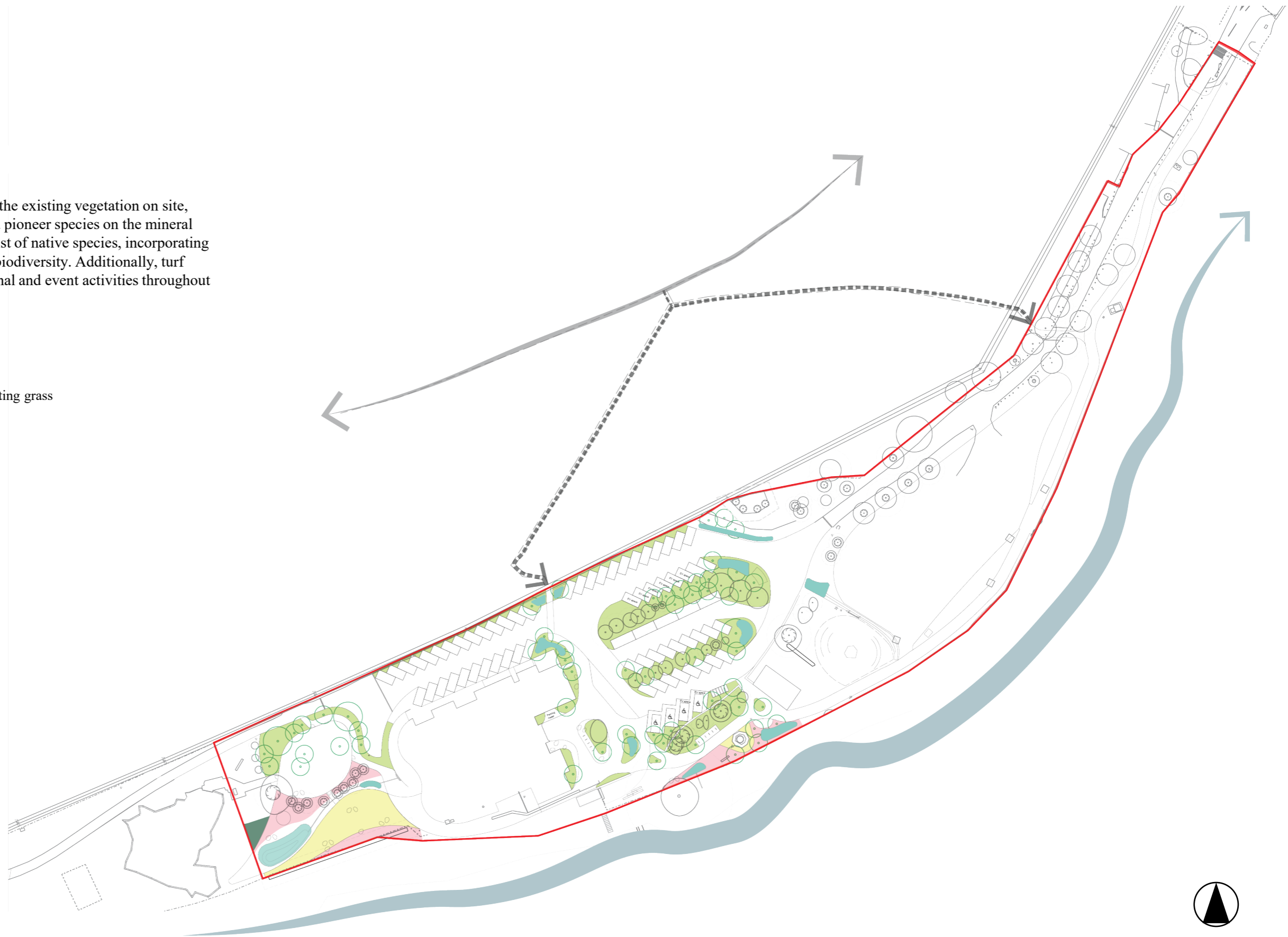
Tree planting diagram



Planting Strategy

The planting typology is primarily inspired by the existing vegetation on site, including riparian plantings along the river and pioneer species on the mineral slope. The proposed planting will mainly consist of native species, incorporating a mix of pollinator-friendly plants to enhance biodiversity. Additionally, turf grass will be implemented to support recreational and event activities throughout the year.

-  Amenity grass to match with existing grass
-  Native mix wildflower/meadow
-  Mix native planting (Shrubs, perennials and grass)
-  SuDs mix native planting
-  Turf grass



Planting typology diagram

Planting Palette

The following planting palette is an example of the different proposed planting communities to be developed during the next design stages

SuDs Planting



Tufted Hair Grass
Deschampsia cespitosa



Lady Fern
Athyrium filix-femina



European Speedwell/
Brooklime
Veronica beccabunga



Branched Bur Reed
Sparganium erectum



Floating Sweet-grass
Glyceria fluitans



Purple Loosestrife
Lythrum salicaria



Yellow Iris
Iris pseudocorus



Soft Rush
Juncus effusus

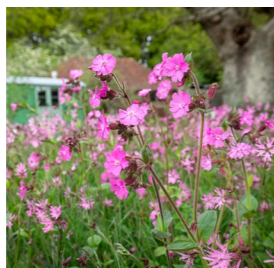


Hard Rush
Juncus inflexus

Mix native planting (Shrubs, perennials and grass)



European blueberry
Vaccinium myrtillus



Red campion
Silene dioica



Wild privet
Ligustrum vulgare



Gorse
Ulex europaeus



Hazel
Corylus avellana



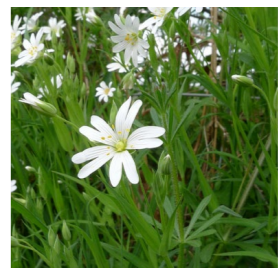
Wild raspberry
Rubus idaeus



Royal Fern
Osmunda regalis



Dogwood
Cornus sanguinea



Greater stitchwort
Stellaria holostea

Native seed mix wildflower



“Wales wildflower meadow seed mix”



Material Strategy

The material palette has been selected to integrate with the retained existing surfacing material and to improve sustainability and drainage by proposing permeable materials where possible, ensuring accessibility where feasible, and considering the type of use and the maintenance.



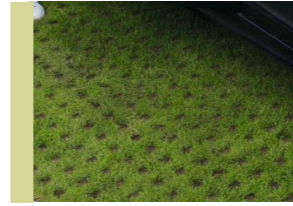
Resin bound gravel
Location: Welcome area



Asphalt with chippings
Location: Shared carpark area, crossing and site access



River pebble area
Location: information play and bike cleaning areas



Grasscrete
Location: Central carpark



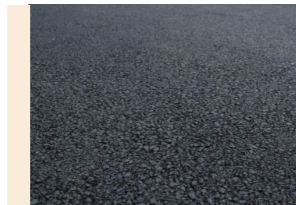
Grassgrid
Location: Maintenance access for van



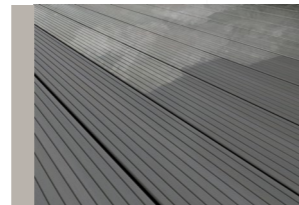
Self binding gravel
(existing and proposed)
Location: Footpath



Proposed stone paving slab
Location: memorial path



Proposed asphalt
Location: driveway



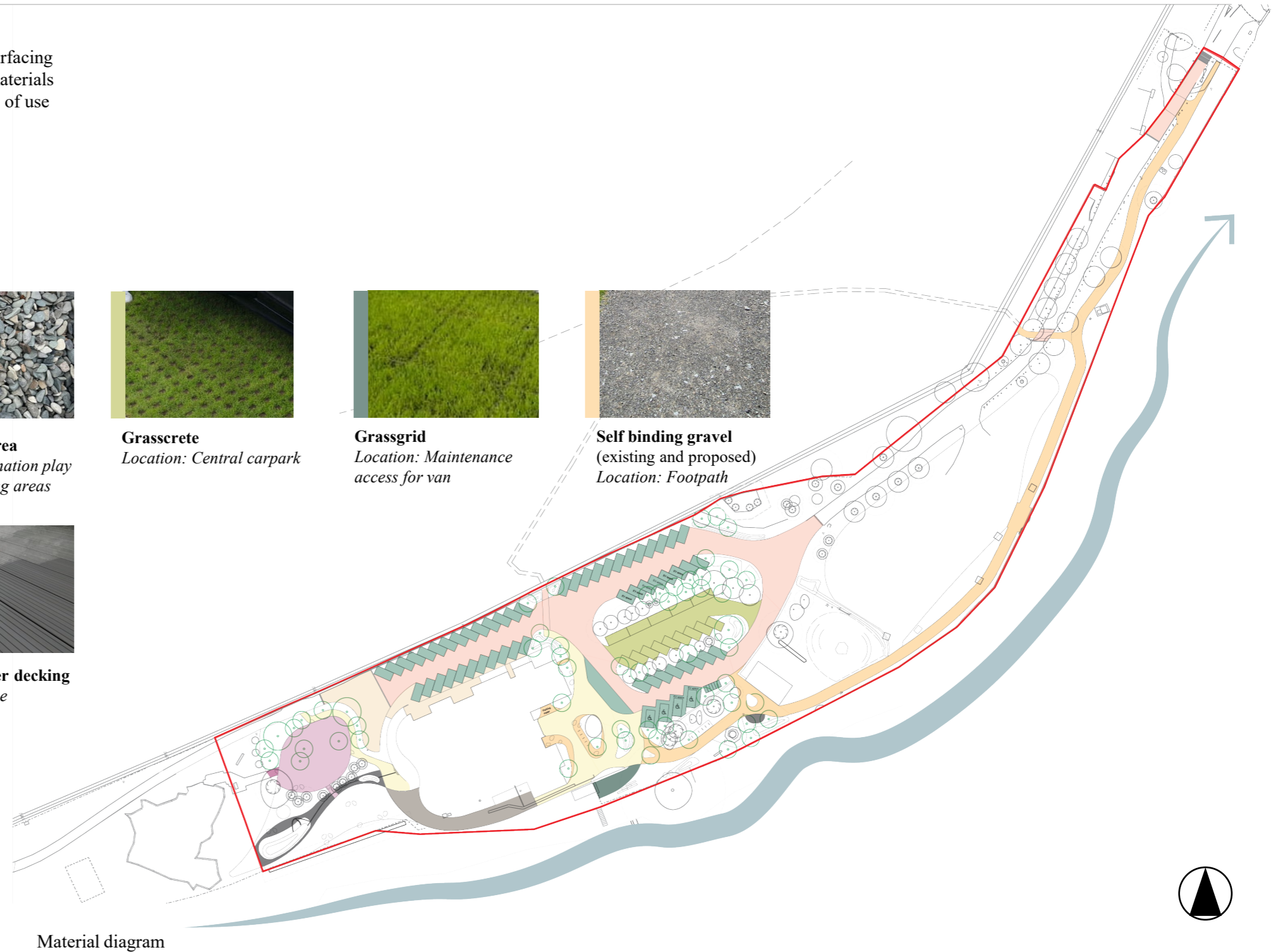
Proposed timber decking
Location: terrace



Proposed woodchip & rubber mulch
Location: formal play area



Permeable block paving
Location: carpark space

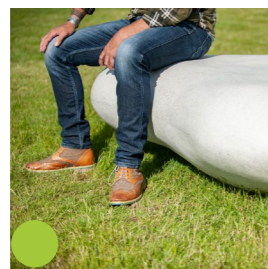


Furniture Strategy

The furniture strategy has been inspired by the key characteristics of the site, including the river, nature, and the industrial elements of the dam and electrical generator. The selected furniture will incorporate materials such as wood, metal, and pebbles to reflect these themes. The furniture will be well integrated into the site and the surrounding landscape, ensuring both durability and comfort for visitors and workers. Signage will need to be reviewed to ensure efficient wayfinding for everyone



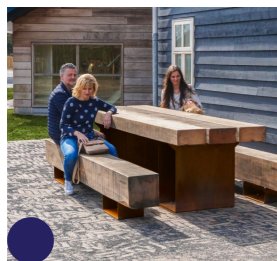
Cycle shelter



Pebble seating



Wooden seating to contemplate in group



Picnic table
(indicative location)



Wooden bench with
back rest



Recycling and litter bins
as per existing ones
(location to be confirmed)



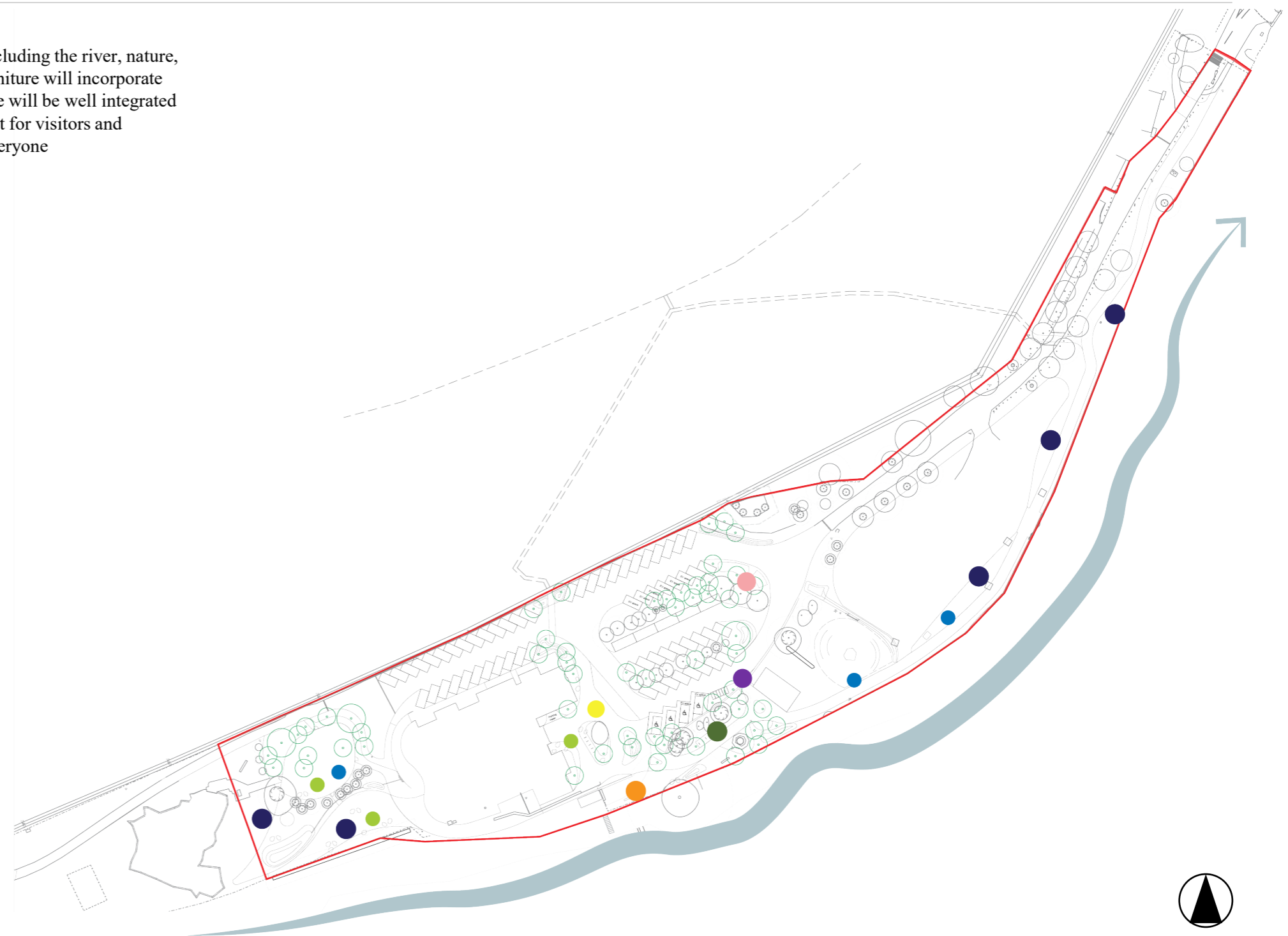
Relocated existing blue
hydroelectric turbine



Existing statue



Relocated existing
information board



Furniture diagram (Indicative location)

Conclusion

The landscape chapter has provided a comprehensive overview of the landscape concept and design development achieved during RIBA Stage 2.

The design thoughtfully draws inspiration from existing landscape features, sightlines, and the surrounding natural and built environments, fostering a harmonious integration with the site's unique character. Furthermore, the landscape design adheres to Green Infrastructure policies and Building with Nature standards, highlighting a strong commitment to sustainability and ecological sensitivity. It also addresses the Sustainable Drainage Systems (SAB) requirements, ensuring that the project is aligned with drainage standards and best practices.

As the project progresses into subsequent RIBA stages, the landscape masterplan will continue to evolve, incorporating more detailed specifications and refinements. The guiding principles established in this chapter will remain central to the ongoing development, ensuring a cohesive and sustainable landscape design that supports the vision for the Visitor Centre and the broader site.

Overall, this chapter serves as a foundation for future landscape development, laying the groundwork for a thoughtful, well-integrated, and environmentally responsible design that enhances both the visitor experience and the site's natural and built environment.

