

MANCHESTER SCHOOL OF ARCHITECTURE

Curious Creek

Canon's Valley of Imagination

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MSA
LIVE 25

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The Curious Creek project aims to transform the valley into a child-friendly, hands-on science and environmental learning ground and the existing off-road playground into a new playground area. The school also allowed us to envision some ideas for making the existing prayer corner weather-resistant. Our vision is to clear the area of hardwearing, install safe pathways and create designed learning zones where pupils can explore topics such as biodiversity, ecology, and sustainable practices. This project will produce a series of architectural resources, enabling a seamless blend of classroom learning and practical experience.

Team

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Partners



Curious Creek is a collaboration between Group 25 at MSA and the Canon Burrows Primary School students and staff.

At the heart of the project is the idea of creating more sustainable outdoor areas for the children at Canon Burrows to enjoy. The school embodies its sustainable and inclusive values through the curriculum taught to the students.

The school has an Eco council that allows children to elect councillors to the school's committees where ideas are taken to help inform future ideas at the school. In an attempt to improve the local community, the school is also a part of the project 'Clean Air for Schools' that aims to tackle air pollution with scalable actions.

In 1998, the school was awarded its first Green flag for being an Eco School. Later in 2011 it gained Eco-Schools Ambassador status, setting a high standard to sustain. The school had its 10th Green flag in Autumn 2019 and also campaigns to reduce and eliminate single use plastic to make the school as sustainable as possible.

The values of the school is embedded in the brief given to us to provide ideas for more efficient outdoor areas on the school grounds.

Introduction

Curious Creek Canon's Valley of Imagination

Curious Creek is a transformative project that reimagines The Valley, a currently overgrown, overlooked and neglected area situated beside Canon Burrows Primary School, into a vibrant and engaging outdoor learning hub. This initiative brings together education, ecology and community, creating a space where children are encouraged to step beyond the walls of the classroom and explore the natural world in meaningful and exciting ways. At the heart of this project is a commitment to incorporating structured pathways, carefully planned seating areas and interactive learning environments that inspire curiosity and facilitate direct engagement with nature. The transformation of this space will provide a lively and dynamic setting for future generations of learners.

Since meeting with Canon Burrows collaborators on 4 December 2024, we have spent six months developing this vision. We explored the site and held productive discussions with the headteacher, who outlined plans to expand the playground, transform The Valley, and enhance outdoor learning for pupils and the wider community.

In response to the identified needs of the primary school, we divided the MSA Live team into three focused groups. These were the Prayer Garden group, the Playground group and the Creek group. Each team was given responsibility for a specific zone, with the objective of exploring design possibilities and creating innovative solutions tailored to the character of each area. Over a concentrated two-week period, we embarked on an intensive process of idea generation, collaboration and design development. We use hand-drawn sketches to bring early ideas to life and to visualise the outcomes of our group discussions. These initial drawings served as a springboard for feedback and refinement, allowing each group to evolve their ideas organically through dialogue and exchange.

A second site visit sparked new ideas and deepened our understanding of expectations. This feedback helped us refine our approach and move from concept to concrete action. As the deadline neared, energy in the studio grew. We focused on finalising drawings and aligning every detail with the project's vision. Now, as the final designs take shape, Curious Creek stands as a revitalised landscape and a symbol of what purposeful, community-driven design can achieve.

Canon Burrows Primary School

The Site

Canon Burrows Church of England Primary School is a voluntary-aided primary school located in Ashton-under-Lyne, Greater Manchester, England, with around 450 pupils.



The campus features two playgrounds: a smaller one to the east and a larger one to the west, providing ample space for outdoor activities and recreation. In addition to the main school building, there is a two-storey block to the north, offering extra classrooms and facilities.

To the south of the site is Taunton Brook, a creek owned by the council and bordered by woodland on both sides. Although this area is public, it is maintained by the school, demonstrating its commitment to environmental care and community engagement. The natural surroundings not only enhance the school's setting but also provide opportunities for outdoor learning and exploration, enriching the pupils' educational experience.



Prayer Garden

The school's existing playground can no longer meet the demands of 450 children. To address this, the school plans to expand the playground area by repurpose the natural learning space located in the southwest corner of the site. However, the playground slopes downward from east to west. Ensuring the new layout accommodates this slope while providing sufficient space and functionality for the children will be a key challenge for this area.



Creek / Valley

A key part of the project has been the collaboration between us and the school. Being able to visit the site before and during the action weeks was highly valuable to our project. It gave a clearer understanding to us and the students what was there and what was wanted by the staff and students. Although we didn't get the chance to meet the Eco council, we still had the opinions of numerous members of staff.

The prayer garden is a quiet space surrounded by school buildings and gardens where students often play and spend time. The school has specific requirements for this area, including the additional cover to provide sort of shelter and apparatus for playfulness, ensuring it remains a safe and comfortable environment for all kids.



Playground

The creek area to the south can serve as a space for children to experience nature, but safety must be prioritized. This area is often occupied by teenagers engaging in vandalism or illegal activities, which poses risks. Additionally, the design on the site should focus on minimizing maintenance requirements, as the school has limited staff resources to manage the site effectively.



Prayer Garden

The Prayer Garden is a space for the students at Canon Burrows Primary School to unwind, relax and reflect. The space is located near the east entrance of the school grounds, adjacent to the older years' classroom and a residential road. The expectation from the school was to see proposals for sheltered spaces, different seating and interactive features that make the space a serenity.

Existing Site



Summer 9am

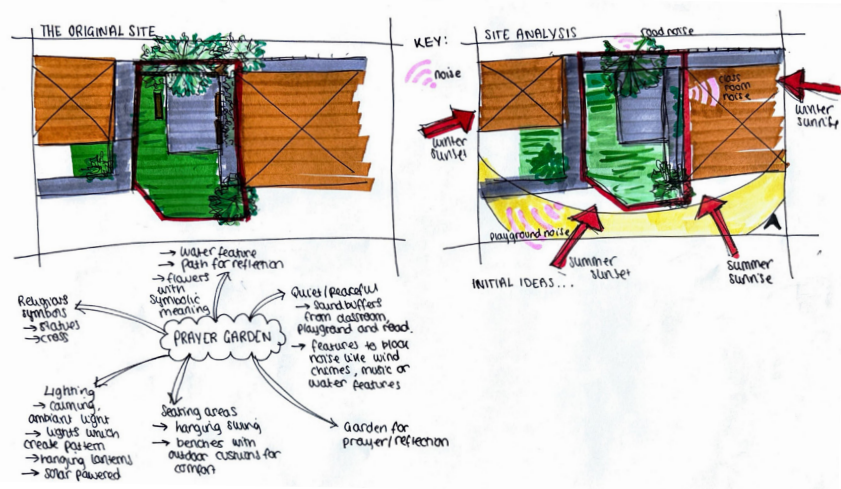


Summer 12pm



Summer 5pm

Main considerations for the garden's environment were the noise implications and the shadows from adjacent buildings. Having completed a quick sun path study with the existing model created, the students began their concept development. The intention of this subgroup was to develop the students SketchUP and Enscape skills.



Concept Development

With considerations of the site's restrictions, the main ideas were to develop a sheltered area for children to read and unwind, varied seating designs e.g swings, and more space to grow with additional planters. Above is a sketch of the existing space.

Once a better understanding of the site had been established, the group began creating concept collages and sketches to bring the ideas to life. At this point, development of the existing model was going well and we felt a bit ahead of schedule in terms of the action plan.

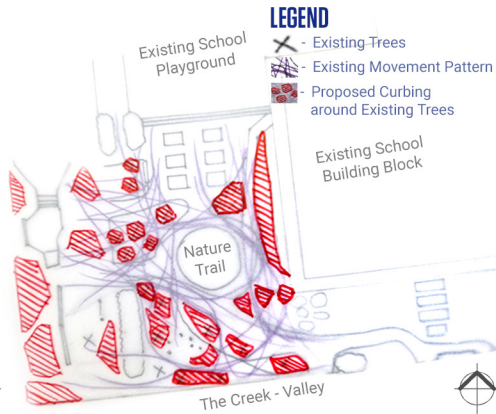
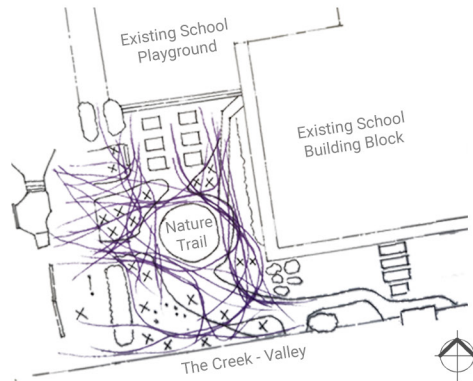


Development of the ideas began before the students had visited the site, which upon reflection would have worked better if the site visit had been sooner.



At our site visit, we were told that the Prayer Garden is be used to reflect in difficult times. The school has lost students in the past and the garden would be a place for children to reflect on their thoughts and feelings. The space is also used during Remembrance Day. With this in mind, areas for children to sit and think are very important in a space like this. The school is an eco school, therefore these proposals would be intended to be built with recycled material.

PLAYGROUND & BEYOND

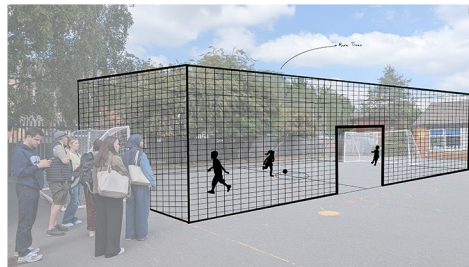


EXISTING LAYOUT AND THE MOVEMENT PATTERNS

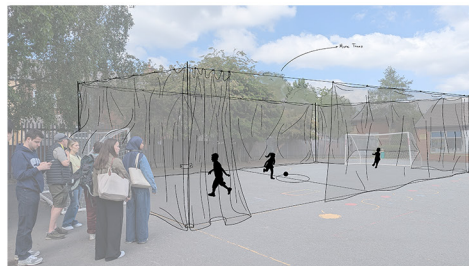
PROPOSED LAYOUT AND THE MOVEMENT PATTERNS

Following the site visit, it became prominent that embracing the nature trail and improving its usability was critical to our strategy. The interventions were carefully planned to blend into the site's natural contours, improving functionality while keeping construction to a minimum. By honouring the existing landscape, the design avoids major alterations and minimizes the damage caused by traditional planning approaches. Reflecting on this, the approach feels deliberate and responsible for producing a sustainable, functional spaces that complements its surroundings.

DESIGN PROPOSALS FOR THE EXISTING SITE



Iteration1: A movable netted cage for football, other ball games would keep the ball within the cage, reducing interruptions, and enhance safety.



Iteration2: A curtain-style football net ensures safety and allows easy installation and removal, making the space adaptable for other uses.



Iteration3: Incorporating a slide along the garden's natural slope offers a fun and safe play option for younger children, reducing the need for ladders and keeping the slide close to ground level throughout. While, placing seating below the existing covered pavilion can create a small stage area, that would be perfect for games or class performances.



Iteration4&5: A natural playground design featuring winding paths, raised planting beds, and seating areas integrated into the woodland. Silhouettes of children engaging with the space highlight an interactive, explorative atmosphere that fosters a strong connection with nature.



Iteration6: A wooden platform around a tree with roof and feeders for birds allowing children to interact.



Iteration 7: Seating forms a playful circuit, promoting running games and offering cozy spots for children to rest and socialize.



Iteration 8: Planters along the paths provide sensory stimulation while guiding paths, encourage children to run, explore, engage.



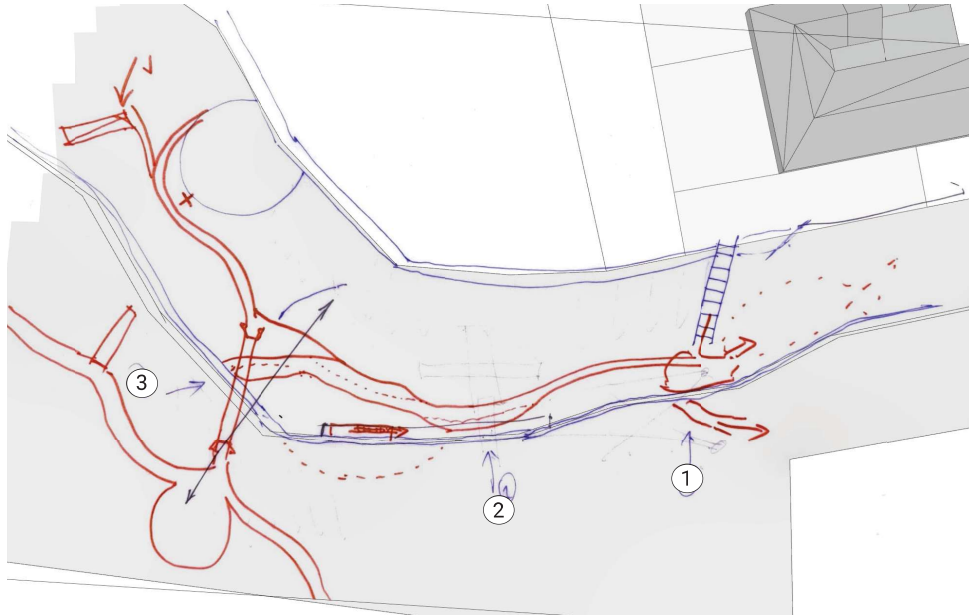
Iteration 9: A raised treehouse platform with activities like the slide and the climbing elements, creating an adventurous and engaging play.

The design proposals uses natural features to create a safe, sustainable playground with winding paths, soft cork flooring, and weather-resistant, non-slip surfaces. Raised borders protect plants, repurposed tyres encouraging children's active play, and inclusive multi-sensory areas engage all children. Social seating and clear pathways promote connection and easy movement.

Reflecting on the two action weeks, the process unfolded smoothly, encouraging collaboration and iterative learning within the group. However, an earlier site visit to the school, ideally in the first week would have deepened the team's understanding to produce informed more precise design decisions.

The Creek Group

Site Analysis

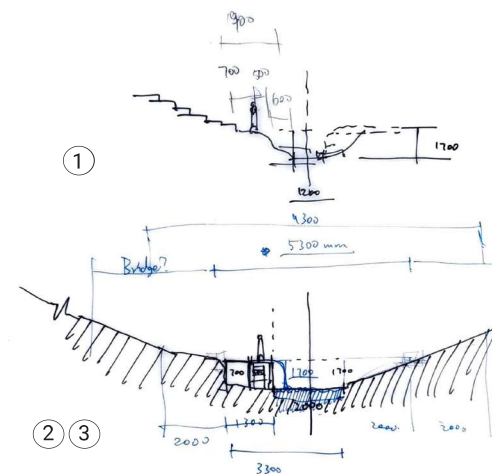
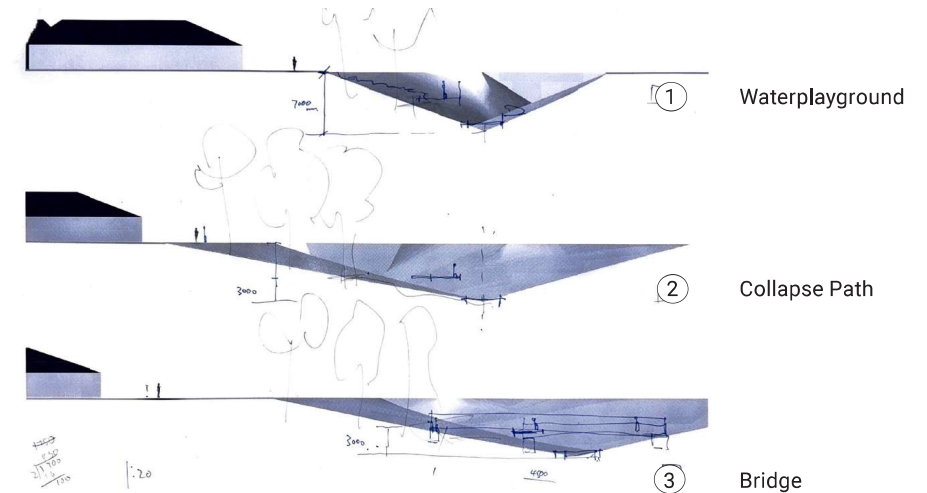


Standard architectural site analysis is crucial in early design phases. BA students were involved in studying site topography, orientation, climate, sun path and existing structure. To further the understanding of site, we organised a site visit.

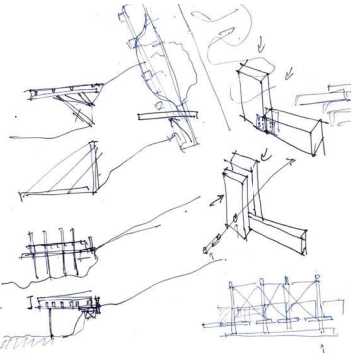
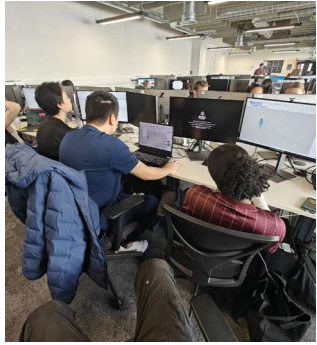
After that, we identified areas (existing staircase lead to a slope along the creek, another existing staircase structure in the creek & a remaining structure for a bridge that is broken years ago) design and relevant activities predetermined by the brief. Each BA students provided their ideas on the selected areas before choosing one to further develop.

Brief Iteration

We took a section cut drawings for all three selected areas to analyse the slope gradient and width across the creek. Understanding the site with drawings will provide us to produce accurate design models. Before designing the models, MA students briefly explain about safety features for design such as retaining walls, weather resilient materials and finishings, building regulations for slope and stairs, and the importance of sustainable design mainly reduction on the carbon footprint and minimizing damage on the local natural habitat.



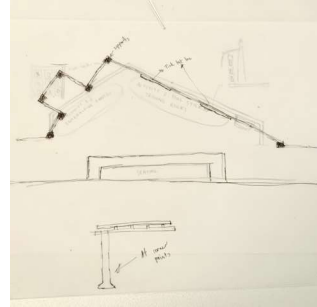
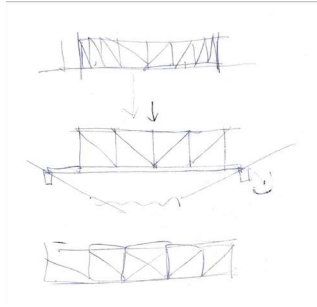
Teaching Session



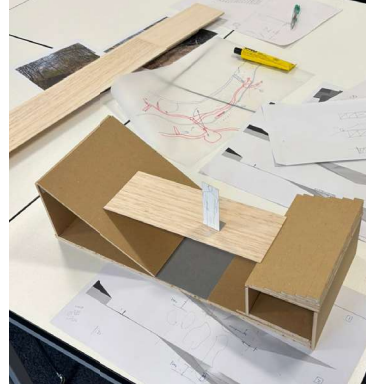
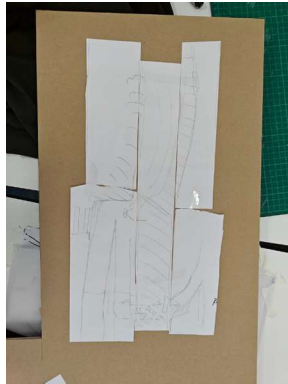
BA students were learning SketchUp 2024 under the guidance of MA students. Through peer-led workshops, MA students shared their techniques, important work flows and practical tips to enhance BA students digital modelling skills and build confidence in using softwares.

Design Development

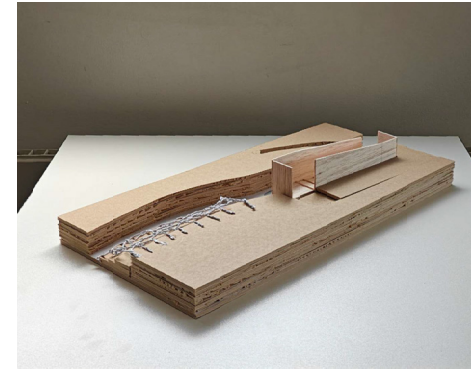
BA students were involved in a structured process that ranged from concept development, architectural drawings, massing models and design iterations. Throughout the process, MA students were providing constructive feedbacks to guide the direction of the design process. Together, we also explored into construction details, user experience, safety requirements and sustainable materials to ensure a coherent, contextually grounded design.



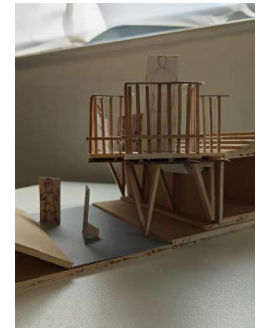
Site Model



Water Playground



Passage platform



Bridges



Reflection

We successfully completed the task during this activity. However, we believe there is room for improvement, especially when working with younger students. For example, it would be more effective to confirm the outcomes of the craft models and drawings earlier to provide clearer direction. Additionally, offering more structured guidance or incorporating divergent interventions could help inspire creativity and accelerate their progress. With these refinements, we are confident that our designs could achieve even better iterations and results.

ABOUT

Each year the MSA LIVE programme unites Masters Architecture year 1 and Masters of Architecture & Adaptive Resuse students with those in BA year 1 and year 2 and Masters Landscape Architecture 1 in mixed-year teams to undertake live projects with external partners to create social impact.

LIVE PROJECTS

All MSA LIVE projects are live. A live project is where an educational organisation and an external partner develop a brief, timescale, and outcome for their mutual benefit.

SOCIAL IMPACT

All MSA LIVE projects are for community benefit or have social impact. Social impact is the effect an organization's actions have on the well-being of a community. Our agendas are set by our external collaborators.

EXTERNAL PARTNERS

MSA LIVE projects work with many organisations: charities, community groups, social enterprises, community interest companies, researchers, practitioners and educators.

STUDENT-LED

Our MSA masters students take the lead in the project conception, brief development, delivery and co-ordination of a small project. Other cohorts joined for an eventful 2 weeks of activities at the end of the academic year.

KNOWLEDGE TRANSFER

Working in teams within and across year groups and courses; MSA students participate in peer to peer learning. In addition, collaborators, participants and students engage in the transfer of tangible and intellectual property, expertise, learning and skills.

LARGE SCALE

This year approximately 650 students from 5 cohorts in MSA have worked on 40 projects with partners.

QUESTIONS

For questions about MSA LIVE please contact the MSA LIVE team:

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BLOG

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