



**Northern Ireland  
Assembly**

**Committee for Education  
Room 428  
Parliament Buildings**

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**To: Michael Potter, Clerk to the Committee for Infrastructure**

**From: Aoibhinn Treanor, Clerk to the Committee for Education**

**Date: 19 December 2025**

**Subject: Response from the Education Authority regarding sustainable Drainage Systems**

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At its meeting on Wednesday 10 December, the Committee considered a response from the Education Authority with regard to sustainable drainage systems.

The Committee agreed to copy the correspondence to the Committee for Infrastructure in light of the fact it is currently considering the Water, Sustainable Drainage and Flood Management Bill.

I enclose a copy of the correspondence for your information.

If you require further information or explanation regarding the above, please do not hesitate to contact me.

**Aoibhinn Treanor  
Clerk to the Committee for Education  
Enc.**

2 December 2025

Ref: 2025.489

**Issued by email:** [committee.education@niassembly.gov.uk](mailto:committee.education@niassembly.gov.uk)

Dear Aoibhinn

### **Sustainable Drainage Systems**

Thank you for your letter dated 17 November 2025. As Chief Officer for Operations, I am responding on behalf of the Chief Executive. At present, we do not have any explicit Sustainable Drainage Systems schemes included in our delivery programmes. However, Clandeboye Primary School is the only scheme of this nature that has been identified.

My officers and the Department of Education (DE) attended a Department for Infrastructure led meeting in May 2023 where the problems being faced by the Department for Infrastructure were outlined. The Department for Infrastructure and NI Water were keen to partner up with the EA and DE to see what solutions to flooding/ drainage/ etc. could be achieved by working collaboratively.

The Catchment Delivery Plan Manager for the Department for Infrastructure Living with Water Programme provided us with a copy of the presentation provided by Atkins and this has been included for your information. In this presentation Bloomfield Collegiate was identified as a potential location for a Sustainable Drainage Systems scheme with some relatively advanced proposals identified, and following initial information provided, we have not received confirmation to progress with this scheme.

I acknowledge that the presentation and details of the Department for Infrastructure 'Living with Water' programme was prior to more recently publicised issues that NI Water and the wider NI construction sector is facing. It may also have been the case that Department for Infrastructure or NI Water or their representatives, (such as Atkins), may have made direct contact with some schools to discuss or implement localised drainage measures. We have not been made aware of any associated works that have been progressed.

It is worth mentioning that if Sustainable Drainage Systems or other alternative site-specific drainage solutions are recommended and accepted by NI Water during statutory consultations for specific planning applications, and through the planning approval process (often applied via site-specific planning conditions set by the relevant council), these measures will be carried out as required.

Yours sincerely



**DALE HANNA**  
**CHIEF OPERATIONS OFFICER**

**"To inspire, support and challenge all our Children and Young People to be the best that they can be."**

**Education Authority**

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# SuDS for Schools

A photograph showing a group of children in a school garden. In the foreground, a child's hands wearing a red and white patterned sleeve are using a small trowel to dig into dark, mulched soil. Other children are visible in the background, some wearing blue uniforms. A metal fence and a colorful striped structure are in the background.

**ATKINS**

Member of the SNC-Lavalin Group

Opportunities for learning

# Background

# What are SuDS?

Sustainable Drainage is an approach to managing surface water

Instead of channelling water to rivers and sewers as quickly as possible, we mimic the natural environment by:

- catching and slowing the flow of rain water to streams and rivers, and
- filtering it to remove pollution along the way.



# SuDS in a school environment:

**Help Develop** whole school understanding related to environmental conservation and sustainability

## Learn outdoors

Can provide amenity benefits and as a wildlife habitat may also be used as a teaching resource – particularly in STEM subjects



# Introduction

## Problem

Surface Water Management and SuDS retrofit is considered as the preferred approach for the management of urban drainage systems to deal with the challenges associated with flooding, pollution, growth and climate change.

## Part of the Solution

Due to their large roof areas, Schools offer tremendous potential for Surface Water Management and SuDS retrofit. However, Retrofitting of SuDS is often regarded as a challenge as much as an opportunity to Water Companies.



# What is 'SuDS for Schools'?

## A Programme of retrofit schemes across school sites.

The aim is to provide high quality, blue-green SuDS features within school environments that provide water quality, quantity, amenity, biodiversity, and educational improvements to a number of schools.

## Different to 'typical drainage design'.

Schools are sensitive locations, and space is at a premium. A non-standard approach to design and implementation is required. We do not want to hide water below the ground in tanks, but showcase the runoff on the surface to prove the educational experience

## Opportunity to attain multi-benefit use through effective stormwater management.

SuDS features proposed help to reduce peak runoff rates from the Site and therefore provide a betterment against the existing case. However, they will not make the school grounds "flood-proof", surface water flooding (pluvial) and river flooding (fluvial) incidents may still occur on Site. Many sites have noticed a clear improvement locally.



Rain Garden - Christchurch School, Southport, UK

# Why SuDS?

## Traditional Benefits:

- Reduction in likelihood of CSOs spilling into waterways.
- Flood risk reduction

## Additional Benefits

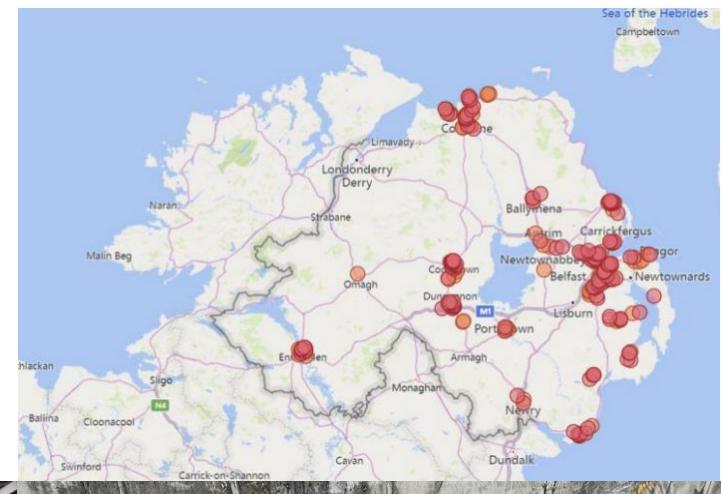
- Amenity, Biodiversity, Quality
- Good engagement with a younger audience.
- Educational/social value benefits.

 Christ the King RC Primary School  
@ctkrcps

Year 1 supervising proceedings.



2:47 PM · Oct 21, 2021 · Twitter Web App



## Our Approach

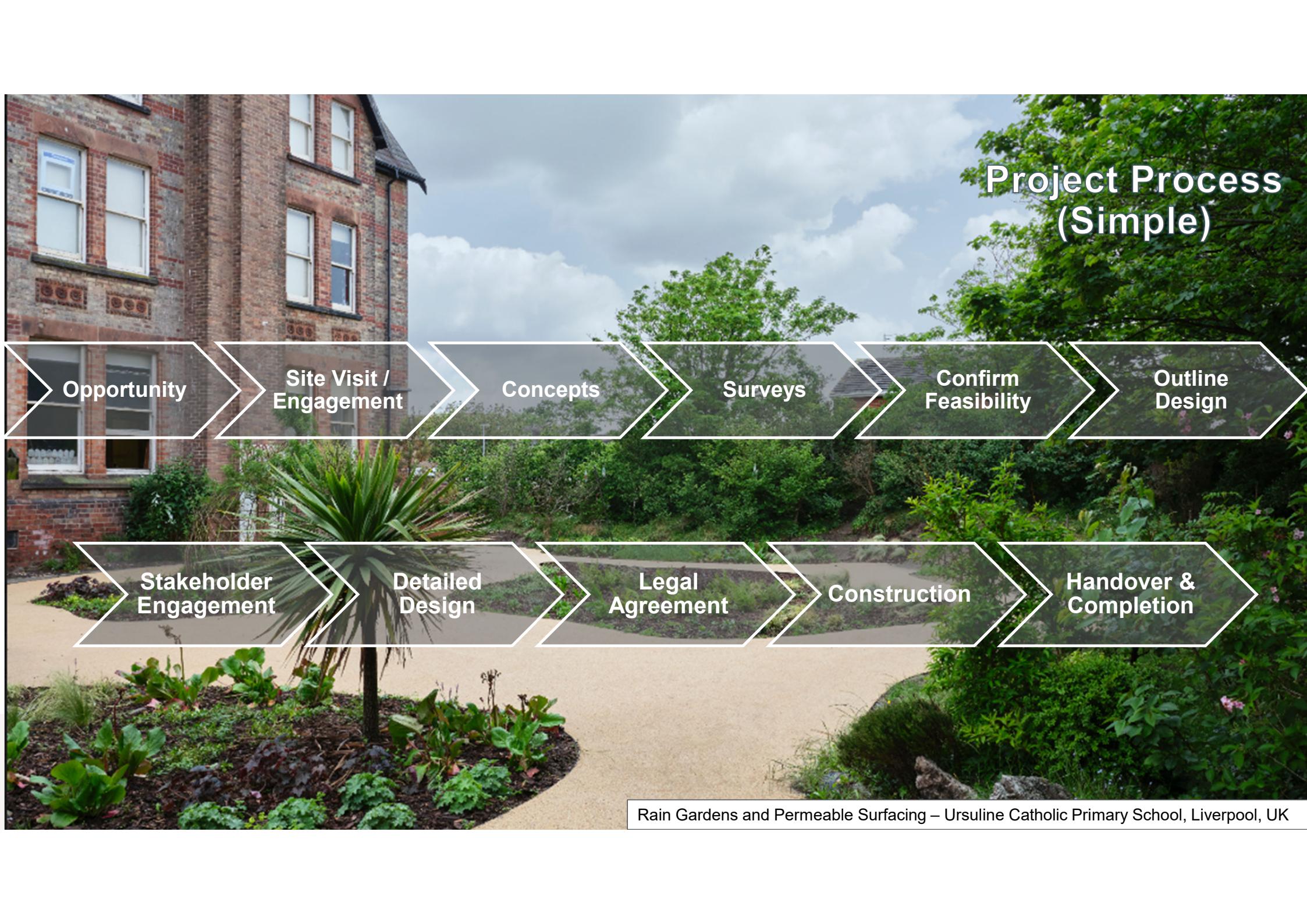
- Atkins is leading in delivering SuDS for Schools Programmes of work with clients across the UK
- Record of successfully delivered full programmes. Our clients have re-appointed us to continue to deliver with them.
- Unique innovative approach to multiple benefits and engagement – bespoke ‘Fun SuDS’



Planters – All Saints Primary School, Newmarket, UK

- Delivered locally with collaboration from our national network of industry leading experts
- Led by Technical Specialists with the ability to use a standardised automated approach
- An experienced Atkins team dealing with engagement, liaison and facilitation of multiple stakeholders





## Project Process (Simple)

Opportunity

Site Visit / Engagement

Concepts

Surveys

Confirm Feasibility

Outline Design

Stakeholder Engagement

Detailed Design

Legal Agreement

Construction

Handover & Completion

## Typical Interventions



## Existing conditions



## Raingarden proposal



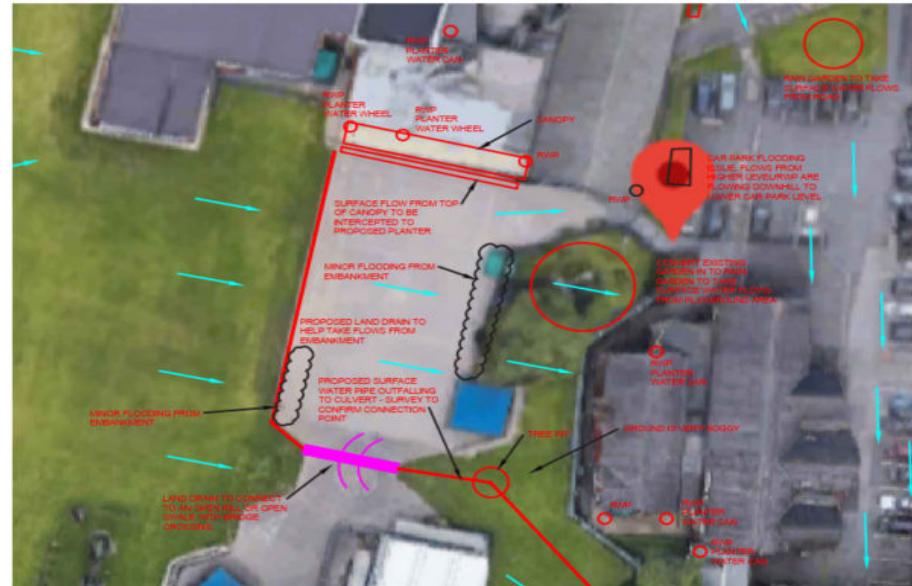
## Playful downpipes with rain garden planters



## Swales with water tolerant planting



Play beams across rain gardens



## Concept plan



## Outdoor classroom with green roof



### Willow dome



Pond formed in water-logged areas for pond dipping

# Recent success – All Saints Primary School, Newmarket



all saints ceva • Follow

all saints ceva We were privileged to have a visit from Anglian Water this week and we learned more about all the hard work they've been doing in our school grounds over the holidays. The children found it fascinating to find out about water use and sustainable drainage. Have you seen the beautiful garden at the front of school?



Anglian Water @AnglianWater · Apr 23

Work is progressing well to create a rainwater garden and outdoor classroom at All Saints School in Newmarket. We hope it will be a great way to teach youngsters about sustainable water use!



twitter

Anglian Water



@AnglianWater



 **SNC-LAVALIN**

**ATKINS**

Member of the SNC-Lavalin Group

## Recent success – United Utilities SuDS for Schools Programme



# Highly Commended

## SuDS for Schools programme, North West England

### Regeneration and retrofit – large scale



**Neil Kirsopp**  
Associate Engineer – Technical Lead  
Atkins



**ATKINS**  
Member of the SNC-Lavalin Group

**United Utilities**  
Water for the North West

**horticon ltd**

**Landscape**  
ENGINEERING LTD

The community for sustainable drainage

@sudsulike | #SuDSAwards #SuDSChampions



## Video Links -

<https://vimeo.com/725976262/24ab7d69cb>



Dealing with flooding at Cam Hopton primary school

[Dealing with flooding at Cam Hopton primary school - YouTube](https://www.youtube.com/watch?v=24ab7d69cb)



# United Utilities SuDS for Schools Programme Pictures



# Added Value

Our experienced Landscape Architecture Team assist in developing concepts and provide visualisations for engagement activities.



Existing Site



A visualisation of our proposals

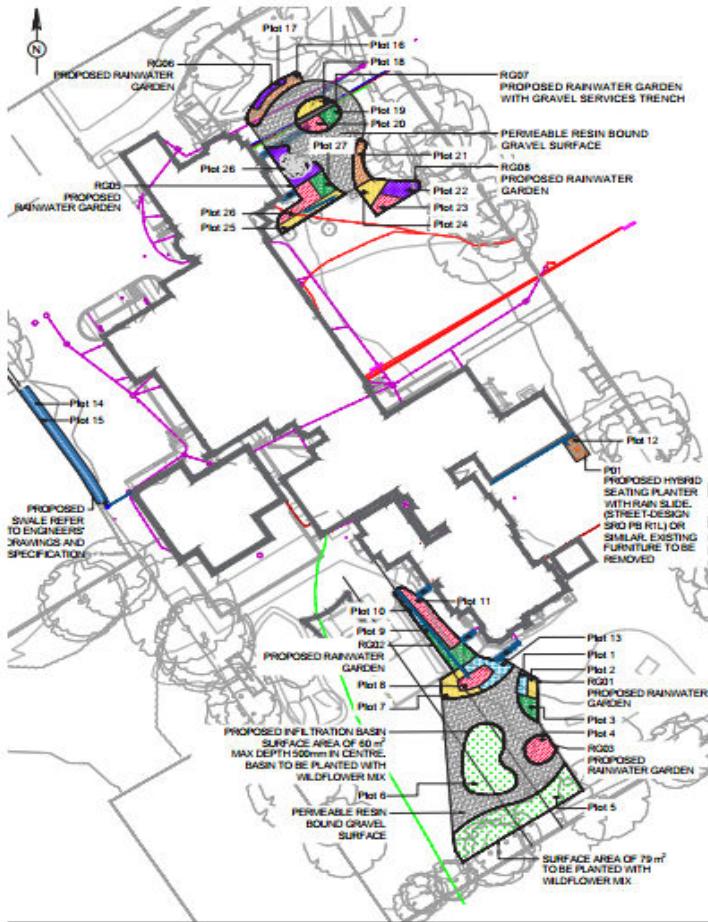


Photograph following completion

Brookburn Primary School, Manchester, UK



# Added Value



## PLANTING SCHEDULES:

### Planting Mix 1

Species	% Min	Coordinate/Plot size	Height (cm)	Density	Plot 11	Plot 23	Plot 28	Total
<i>Acacia xanthophloea</i>					0	11	11	32
<i>Acacia farnesiana</i>					0	17	23	46
<i>Acacia farnesiana</i> Purple	30	C (30)	15-30	5cm <sup>2</sup>	6	17	23	46
<i>Acacia xanthophloea</i>	30	C (30)	30-40	5cm <sup>2</sup>	6	18	14	38
<i>Acacia farnesiana</i>	30	C (30)	30-40	5cm <sup>2</sup>	6	18	14	38
<i>Acacia farnesiana</i> Purple	40	C (30)	15-30	5cm <sup>2</sup>	10	18	18	32

### Planting Mix 2

Species	% Site	Constituent/Plot size	Height [cm]	Generality	Plot T	Plot B	Plot I	Plot 21	Total
<i>Urtica dioica</i>	40	C (38%)	20-30	7m <sup>2</sup>	85	22	42	31	134
<i>Carex chrysostachys</i>	30	C (29%)	15-20	4m <sup>2</sup>	47	18	35	52	98
<i>Polygonatum multiflorum</i>	30	C (28%)	30-40	5m <sup>2</sup>	13	7	16	30	66

### Planting Mix 3

Species	To Wt	Condition/Pot size	Height (cm)	Density	Plot 1	Plot 10	Plot 12	Total
White Oak	10	100%	15-20	4/cm <sup>2</sup>	0	2	16	18
Amur Hornbeam, Oregon	20	C (3/16)	15-20	4/cm <sup>2</sup>	0	2	16	18
Cressona macrocarpa	20	C (3/16)	20-30	5/cm <sup>2</sup>	6	8	20	36
Lilac-leaved	20	C (3/16)	18-20	4/cm <sup>2</sup>	5	7	16	28

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### Planting Mix 3

Species	% Min	Geostrophic Periods	Height (m)	Density	Port 2	Port 18	Port 24	Port 25	Total
<i>Phycis blennoides</i>	10	C (0.5L)	20-30	σ <sub>θ</sub> <sup>2</sup>	0	0	0	0	0
<i>Aulopus macrurus</i>	90	C (0.5L)	20-30	σ <sub>θ</sub> <sup>2</sup>	0	0	0	0	0
<i>Argentinasilus</i>	10	C (0.5L)	20-30	σ <sub>θ</sub> <sup>2</sup>	0	0	0	0	0
<i>Caranx ignobilis</i>	20	C (0.5L)	10-20	σ <sub>θ</sub> <sup>2</sup>	0	18	12	16	48
<i>Caranx ignobilis</i>	20	C (0.5L)	10-20	σ <sub>θ</sub> <sup>2</sup>	0	18	12	16	48
<i>Parapercis tetracantha</i>	20	C (0.5L)	20-30	σ <sub>θ</sub> <sup>2</sup>	4	8	8	10	28
<i>Parapercis tetracantha</i>	20	C (0.5L)	20-30	σ <sub>θ</sub> <sup>2</sup>	4	8	8	10	28
<i>Parapercis tetracantha</i>	20	C (0.5L)	10-20	σ <sub>θ</sub> <sup>2</sup>	0	18	12	16	48
<i>Vivipara microps</i>	20	C (0.5L)	10-20	σ <sub>θ</sub> <sup>2</sup>	0	18	12	16	48
<i>Vivipara microps</i>	20	C (0.5L)	20-30	σ <sub>θ</sub> <sup>2</sup>	0	18	12	16	48
			100						

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#### Group Membership

Microbe species to be confirmed prior to reading - Please list to be replaced with Smooth Blue Aque					
Sample Mistakes	Type	Booking Rate	Plat CS	Plat SE	Total
WAT-018-Cryptosporidium, Giardia and Cryptosporidium (by Giardia) Sample	Read	5.00 <sup>2</sup>	10 <sup>2</sup>	-	10 <sup>2</sup>
WAT-018-Cryptosporidium Sample	Read	5.00 <sup>2</sup>	10 <sup>2</sup>	-	10 <sup>2</sup>

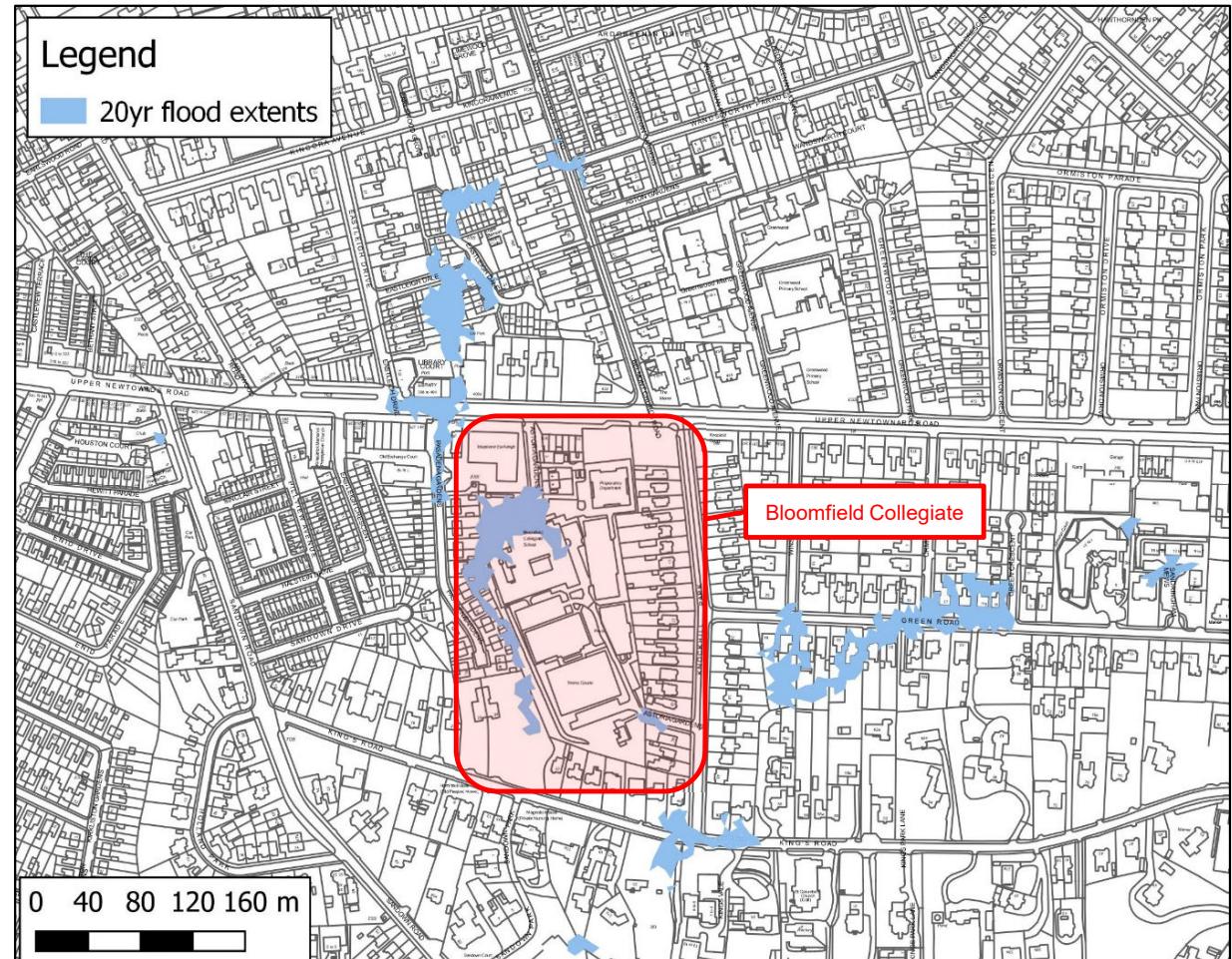


The Landscape Architects who form part of the Team also provide the Planting Plan, Schedules and Specification.

# Bloomfield Collegiate Proposal

## Related Flooding drivers

- › Originally part of wider scheme to address flooding in the Eastleigh Dale area
- › Extent of 20yr flooding in the area shown right
- › Flooding driven by hydraulic incapacity
- › The network is completely combined
- › Opportunities to remove or attenuate flow from the combined network will help mitigate flooding. As part of the wider scheme they can help resolve it
- › Storm separation was considered for the whole area, but few opportunities exist
- › SuDS in Bloomfield Collegiate presented an opportunity, and brings additional benefits



# Bloomfield College Early Concepts



Member of the SNC-Lavalin Group

# Bloomfield College Concepts



**VIEW 1:** Existing conditions



**VIEW 1:** SuDS Proposed Raingarden

# Bloomfield College Concepts



**VIEW 2:** SuDS Proposed Water-Pipe and Raised Planter



**VIEW 2:** Existing conditions

# Questions and Discussion



**Northern Ireland  
Assembly**

Mr Richard Pengelly  
Chief Executive  
Children and Young Peoples Services  
Education Authority  
40 Academy Street  
Belfast  
BT1 2NQ

Date 17 November 2025

**Our Ref:**2025.489

**Sent by Email:** [christopher.mcnickle@eani.org.uk](mailto:christopher.mcnickle@eani.org.uk)

**Sustainable Drainage Systems**

Dear Richard,

At its meeting on 5 November 2025 the Committee discussed correspondence in relation to the Water, Sustainable Drainage and Flood Management Bill.

The Committee agreed to write to the Education Authority seeking information on the use of Sustainable Drainage Systems (SuDS) on the school estate.

I would be grateful for a response by 28 November 2025.

Yours sincerely,

*Aoibhinn Treanor*

**Aoibhinn Treanor**

**Clerk  
Committee for Education**