



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Water Management in Urban Areas

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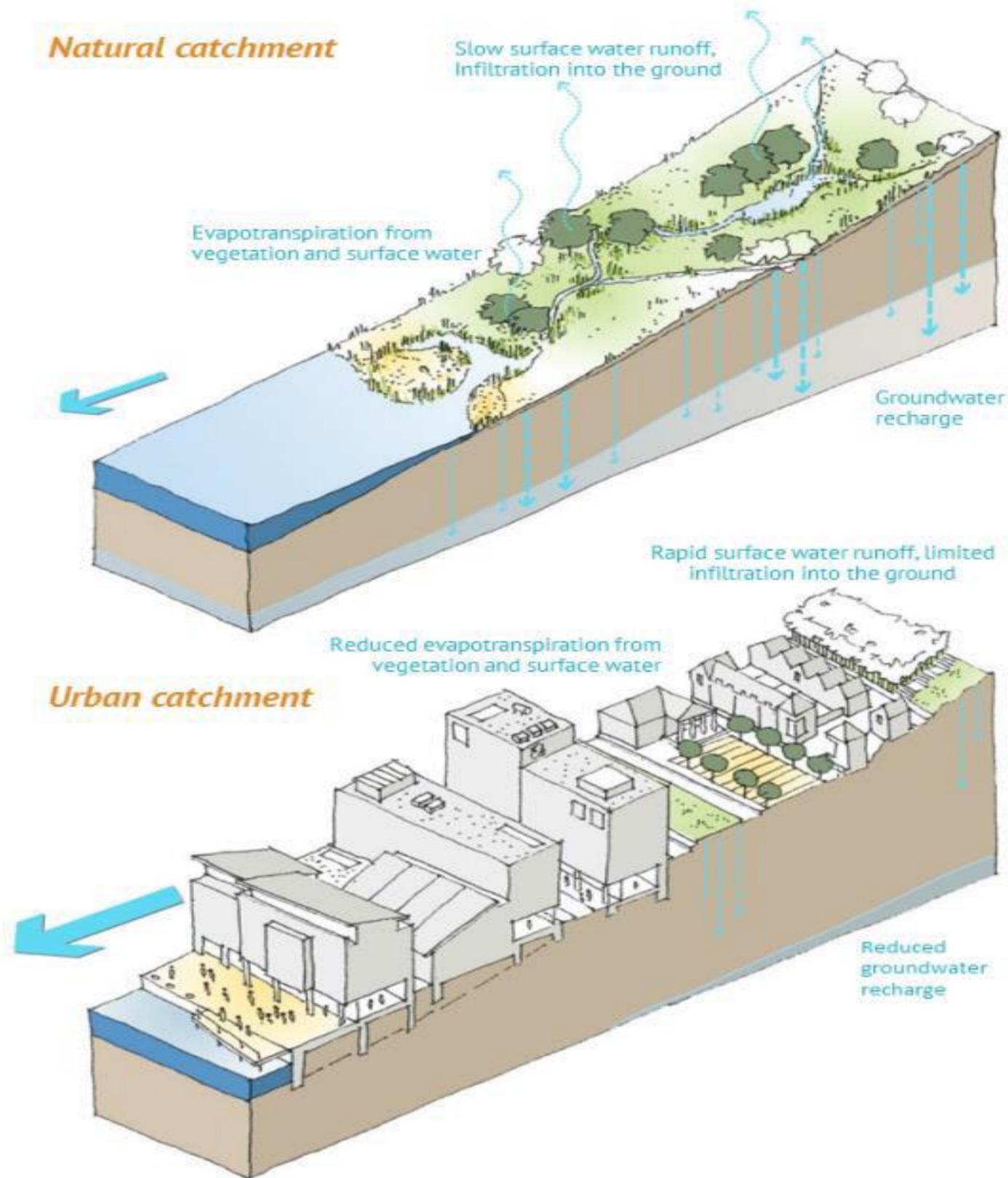
25th of November 2022

What I am going to speak about today:



- Use of Nature-based Solutions for Rainwater and Surface Water Management
- Scoping Study and Guidance Document
- Information Webinars
- Projects after publication of Guidance Document

A Natural Catchment v's an Urban Catchment



Source: Susdrain.org

- Natural water cycle V's Urban water cycle
- Urban Creep and impermeable surfaces
- Runoff collecting pollution
- Channelisation of water bodies
- Flooding risk

Need for NBS Guidance?



Nov 2020 LawPro Webinar – approx. 500 attendees

Feedback from the attendees – Nature-based SuDS would significantly benefit water, climate adaptation, biodiversity, and human well-being objectives.

81% of respondents to poll believed that Nature-based SuDS were not being adequately implemented in Ireland.

Scoping study to determine the components and parameters of a National SuDS Implementation strategy.

To publish a Nature-based Solutions Interim Guidance document



Image: South Dublin County Council, Chris Galvin

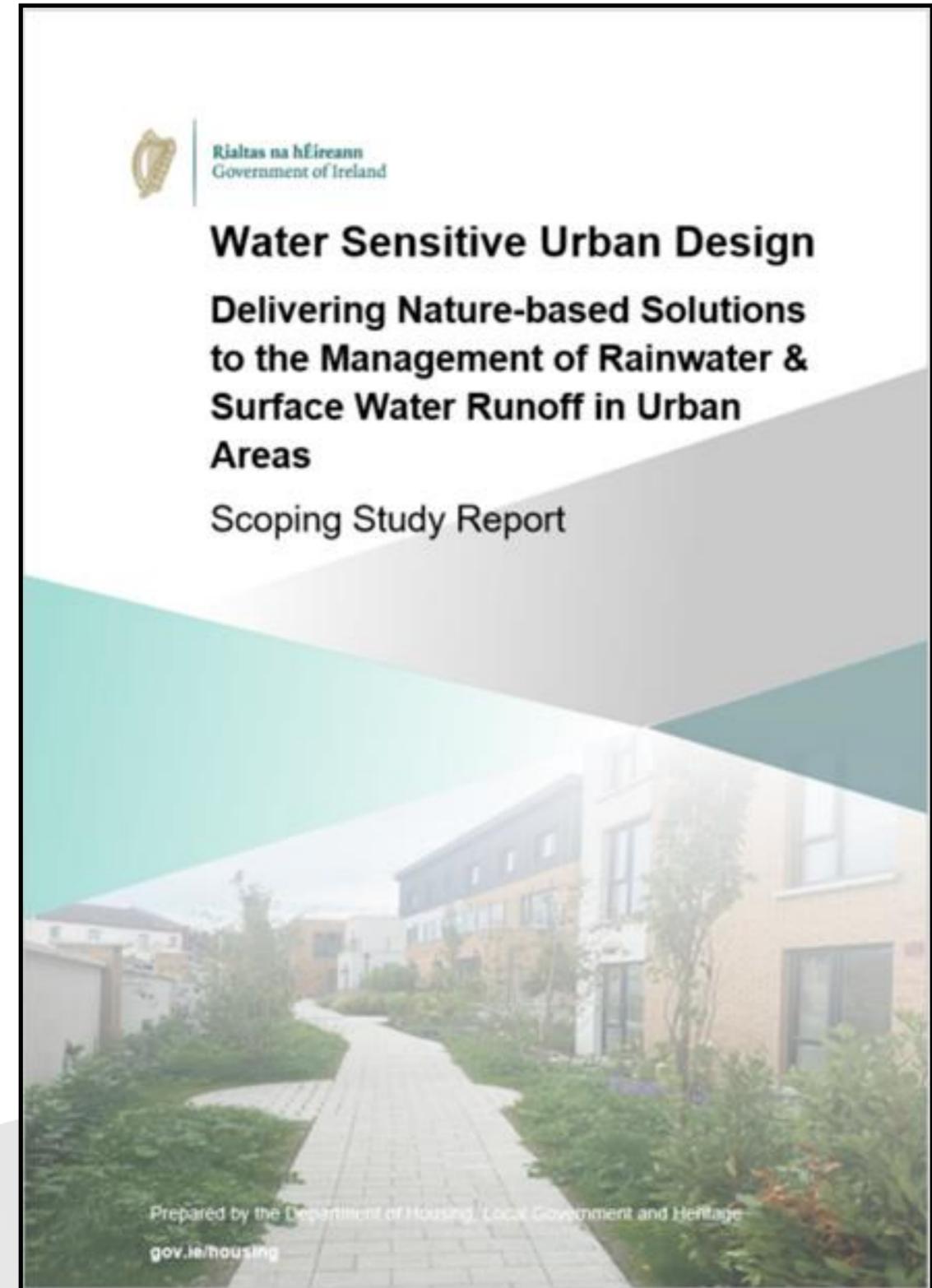
Scoping Study Report

6 month consultation process with all LAs and professional bodies

Local Authority led with support from DHLGH & LAWPRO

Steering group chaired by CCMA with LA membership, planning, architecture & engineering

“Water Sensitive Urban Development is not a set of solutions or measures but a process and philosophy”



Interim Guidance Document



Riailas na hÉireann
Government of Ireland

Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas

Water Sensitive Urban Design

Interim Guidance Document

- Definition and concepts
- Managing Rainfall through Three-Dimensional Planning & Design
- A Plan and Design-Led Multidisciplinary Approach
- Multiple Use of Urban Spaces, Public Realm, Open Spaces, Amenity Areas, Car Parks
- Climate Adaptive and Resilient Urban Design

Published Nov 2021

Prepared by the Department of Housing, Local Government and Heritage

gov.ie/housing

Information Webinars



- Launch of Interim Guidance Document - Nov 2021 Approx. 500 attendees
- Project Managers in **URDF** and **RRDF** schemes – March 2022. Approx. 300 attendees



- **Active Travel** teams – May 2022. Approx. 230 attendees
- CPD presentation for **DHLGH Planners** – May 2022 – approx. 20 attendees

Attendees:

Engineers,
Architects,
Landscape Architects,
Planners
Scientists

Presenters:

Local Authorities,
Consultants,
LAWPRO,
DHLGH

NBS Information Presentations and Webinars



- **Dept. of Rural and Community Development Webinar** – LA and Rural Development Company; operational lead who implement projects on ORIS (Outdoor Recreational Infrastructure Scheme), Town and Villages, CLÁR, RRS – approx. 200 attendees
- **WFD operational and Managements Committees** – approx. 230 and 40 attendees respectively
- **Regional Assembly SEA forum for Planners** – approx. 100 attendees
- **CARO, Training for planners** – 260 Attendees
- **Engineers Ireland webinar** – October 2022 – approx. 500 attendees



Image: University of Sheffield

Projects following publication of Guidance Note and Webinars:



1. Design Manual for Urban Roads and Streets (DMURS) Advice Note – Water Sensitive Streets – to be published Q1 2023

- Expert Group was established in 2021 to devise the DMURS NBS Advice Note
- Liaising with Dept. of Transport and Dept. of Housing, Local Government and Heritage: Planning Section

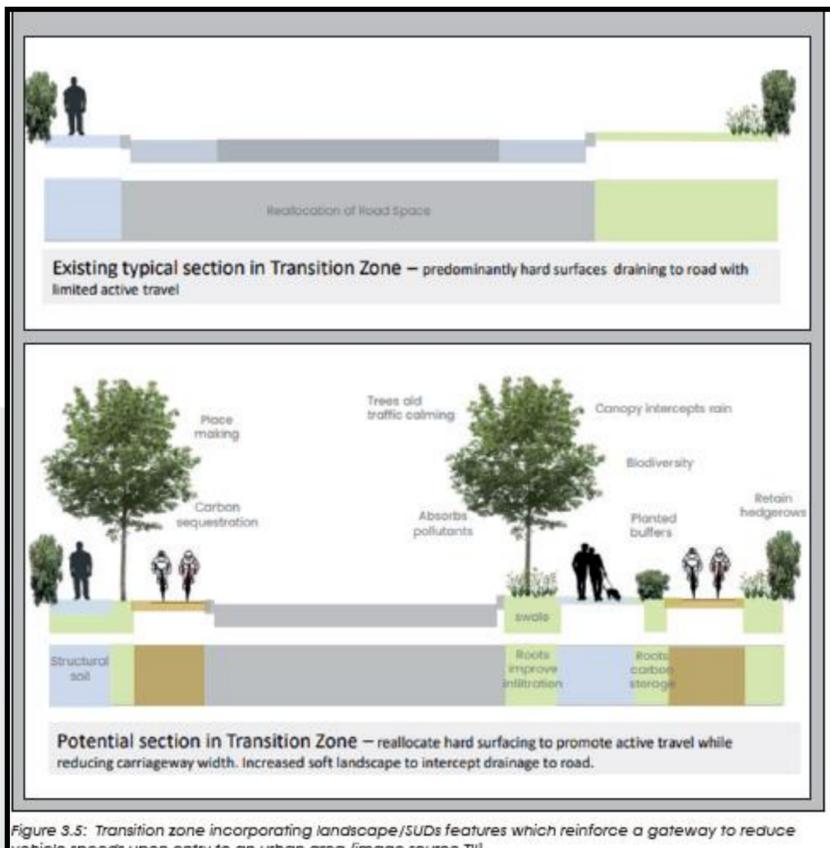


Image: Flowstobay.org

Integration with DMURS



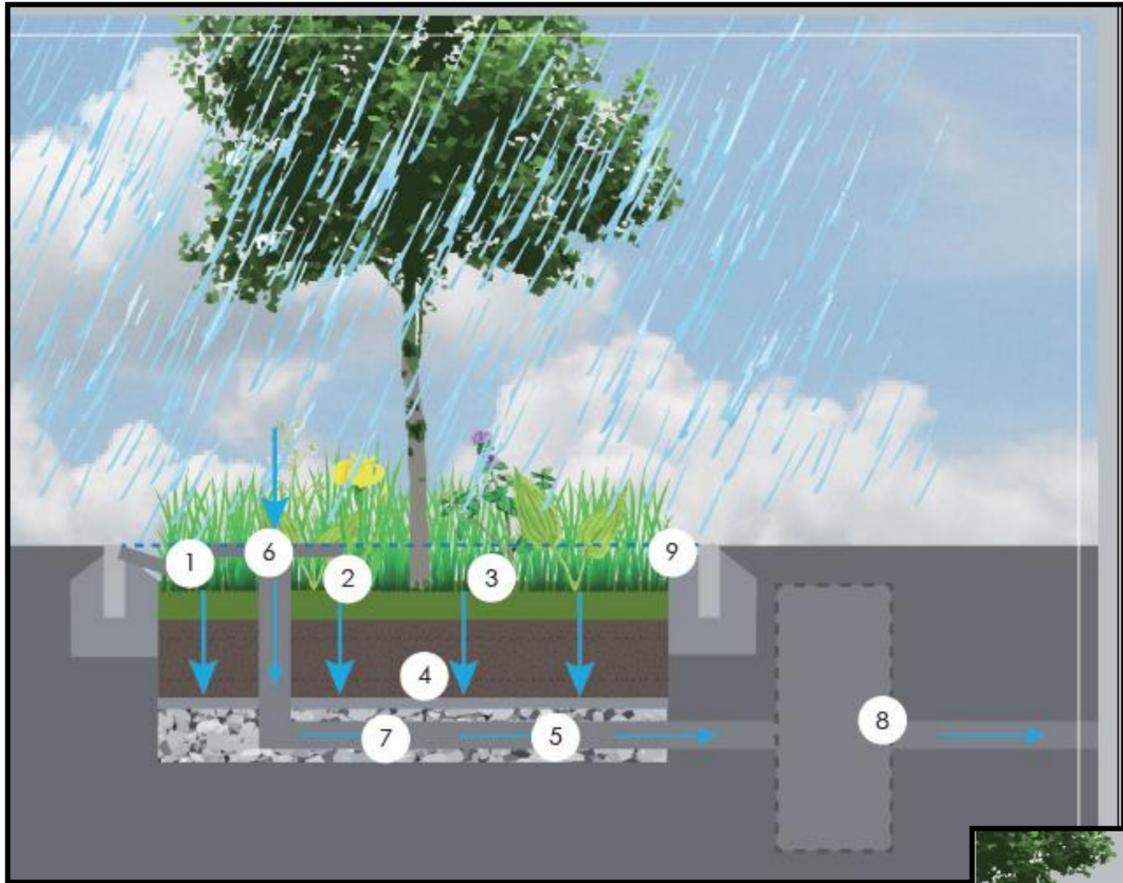
Urban planting and landscaping as part of an overall street design provides an ideal method of re-imagining our urban areas to prioritise pedestrians, cyclists and sustainable transport while also providing sustainable and climate adaptive solutions to rainwater management.



This design approach supplements rather than replaces the existing surface water drainage network

Figure 3.5: Transition zone incorporating landscape/SUDs features which reinforce a gateway to reduce vehicle speeds upon entry to an urban area. (Image source: TII)

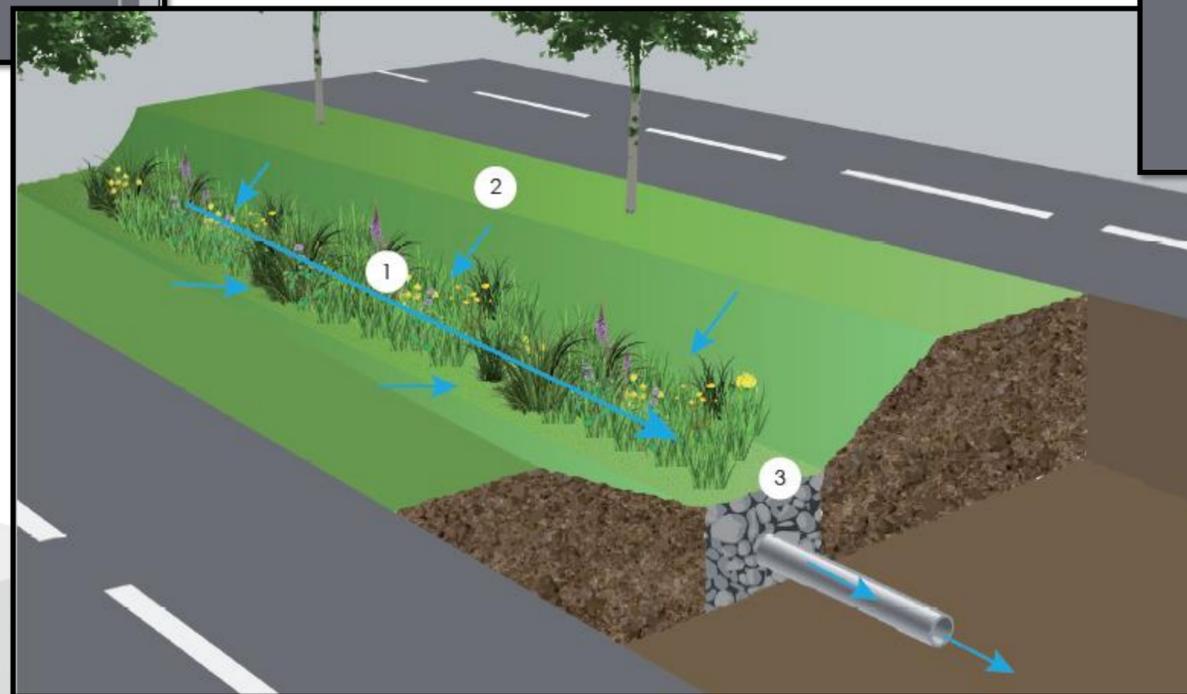
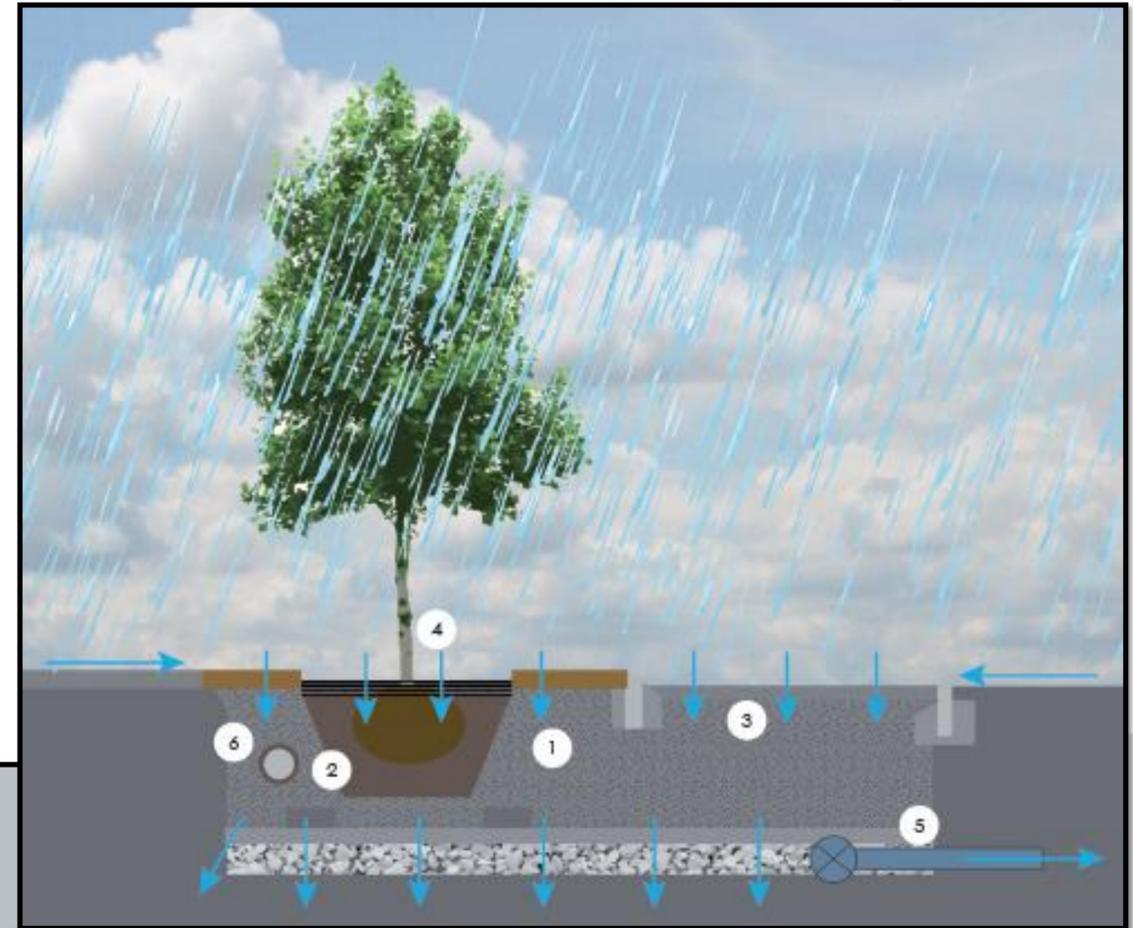
Design Issues in Context of DMURS and DMURS Advice Notes



Rain Gardens

Tree Pits

Swales



Design Issues in Context of DMURS and DMURS Advice Notes



Car parking bays

Open spaces and
amenity areas



Nature-based
solutions and mobility



Care and Maintenance

The design team should include expertise in the area of urban landscaping and nature-based rainwater management function.

Consideration should be given to incorporating a design and build, care and maintenance contract to cover these features for a minimum period of five years following their completion.



DMURS NBS Workshop, Customs House, 8th November 2022



Professions included:

- Engineers (roads, drainage, public realm, water)
- Architects,
- Planners,
- Landscape Architects
- Scientists

Representatives from:

- NTA
- DOT
- LAWPRO
- Irish Water
- TII
- DHLGH
- Local Authorities



Projects following publication of Guidance Note and Webinars



2. Engineers Ireland Training – 1st **NBS training** and a second course booked for the **26th of January 2023**



3. Rainwater Management Plan – Liaising with Cork County Council in Carrigtowhill - 2023

4. NBS research pilot projects looking at urban runoff

Projects following publication of Guidance Note and Webinars



5. Project Inter visibility – Collaboration between URDF, RRDF, IW, Active Travel on potential projects – with a focus on NBS
6. Training with the CAROs in Local Authorities – 2023 training
7. All – Ireland Pollinator Plan – NBS plants



Image: researchgate.net

Thank you

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