

**MAINTENANCE REQUIREMENTS FOR PERMEABLE PAVEMENTS**

**REGULAR MAINTENANCE**  
BRUSHING AND VACUUMING (STANDARD COSMETIC SWEEP OVER WHOLE SURFACE) ONCE A YEAR, AFTER AUTUMN LEAF FALL, OR REDUCED FREQUENCY AS REQUIRED, BASED ON SITE-SPECIFIC OBSERVATIONS OF CLOGGING OR MANUFACTURER'S RECOMMENDATIONS - PAY PARTICULAR ATTENTION TO AREAS WHERE WATER RUNS ONTO PVIOUS SURFACE FROM ADJACENT IMPERMEABLE AREAS AS THIS AREA IS MOST LIKELY TO COLLECT THE MOST SEDIMENT STABILISE AND MOW CONTRIBUTING AND ADJACENT AREAS. FREQUENCY - AS REQUIRED  
REMOVAL OF WEEDS OR MANAGEMENT USING GLYPHOSATE APPLIED DIRECTLY INTO THE WEEDS BY AN APPLICATOR RATHER THAN SPRAYING. FREQUENCY - AS REQUIRED - ONCE PER YEAR ON LESS FREQUENTLY USED PAVEMENTS

**REMEDIAL ACTIONS**  
REMEDiate ANY LANDSCAPING WHICH, THROUGH VEGETATION MAINTENANCE OR SOIL SLIP, HAS BEEN RAISED TO WITHIN 50mm OF THE LEVEL OF THE PAVING. FREQUENCY - AS REQUIRED  
REMEDIAL WORK TO ANY DEPRESSIONS, RUTTING AND CRACKED OR BROKEN BLOCKS CONSIDERED DETRIMENTAL TO THE STRUCTURAL PERFORMANCE OR A HAZARD TO USERS, AND REPLACEMENT OF LOST JOINTING MATERIAL. FREQUENCY - AS REQUIRED  
REHABILITATION OF SURFACE AND UPPER SUBSTRUCTURE BY REMEDIAL SWEEPING. FREQUENCY - EVERY 10 TO 15 YEARS OR AS REQUIRED (IF INFILTRATION PERFORMANCE IS REDUCED DUE TO SIGNIFICANT CLOGGING)

**MONITORING**  
INITIAL INSPECTION: MONTHLY FOR THREE MONTHS AFTER INSTALLATION. INSPECT FOR EVIDENCE OF POOR OPERATION AND/OR WEED GROWTH AND IF REQUIRED, TAKE REMEDIAL ACTION  
THREE-MONTHLY, 48 H AFTER LARGE STORMS. INSPECT SILT ACCUMULATION RATES AND ESTABLISH APPROPRIATE BRUSHING FREQUENCIES.  
MONITOR INSPECTION CHAMBERS ANNUALLY

**MAINTENANCE REQUIREMENTS FOR GREEN ROOFS**

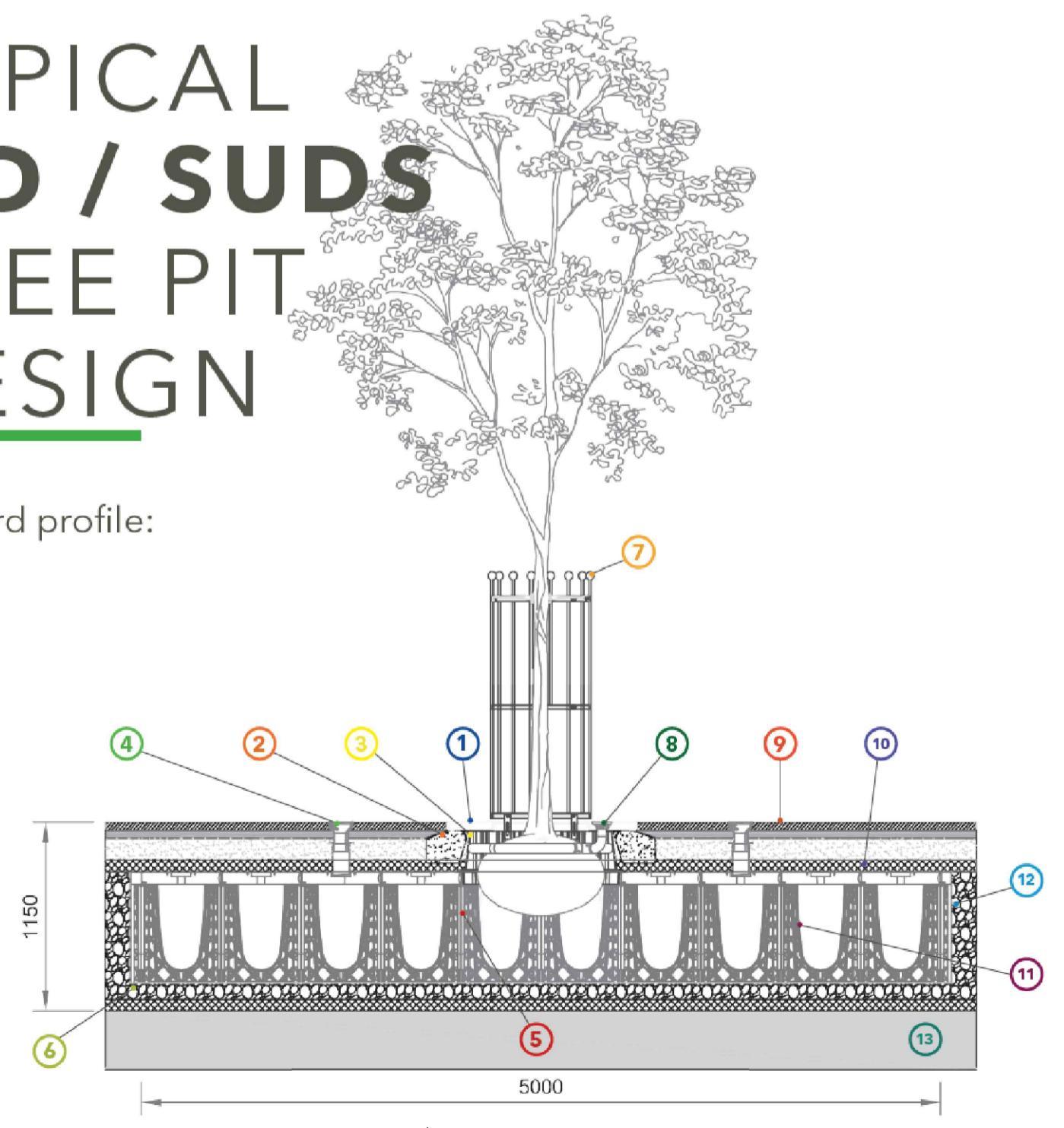
**REGULAR INSPECTIONS, ANNUALLY AND AFTER SEVERE STORMS.** INSPECT ALL COMPONENTS INCLUDING SOIL SUBSTRATE, VEGETATION, DRAINS, IRRIGATION SYSTEMS (IF APPLICABLE), MEMBRANES AND ROOF STRUCTURE FOR PROPER OPERATION, INTEGRITY OF WATERPROOFING AND STRUCTURAL STABILITY. INSPECT SOIL SUBSTRATE FOR EVIDENCE OF EROSION CHANNELS AND IDENTIFY ANY SEDIMENT SOURCES  
INSPECT DRAIN INLETS TO ENSURE UNRESTRICTED RUNOFF FROM THE DRAINAGE LAYER TO THE CONVEYANCE OR ROOF DRAIN SYSTEM  
INSPECT UNDERSIDE OF ROOF FOR EVIDENCE OF LEAKAGE.

**REGULAR MAINTENANCE**  
REMOVE DEBRIS AND LITTER TO PREVENT CLOGGING OF INLET DRAINS AND INTERFERENCE WITH PLANT GROWTH. SIX MONTHLY AND ANNUALLY OR AS REQUIRED  
DURING ESTABLISHMENT (I.E. YEAR ONE), REPLACE DEAD PLANTS AS REQUIRED MONTHLY (BUT USUALLY RESPONSIBILITY OF MANUFACTURER)  
POST ESTABLISHMENT, REPLACE DEAD PLANTS AS REQUIRED (WHERE = 5% OF COVERAGE). ANNUALLY (IN AUTUMN)  
REMOVE FALLEN LEAVES AND DEBRIS FROM DECIDUOUS PLANT FOLIAGE. SIX MONTHLY OR AS REQUIRED  
REMOVE NUISANCE AND INVASIVE VEGETATION, INCLUDING WEEDS SIX MONTHLY OR AS REQUIRED MOW GRASSES, PRUNE SHRUBS AND MANAGE OTHER PLANTING  
(IF APPROPRIATE) AS REQUIRED - CLIPPINGS SHOULD BE REMOVED AND NOT ALLOWED TO ACCUMULATE. SIX MONTHLY OR AS REQUIRED

**REMEDIAL ACTIONS**  
IF EROSION CHANNELS ARE EVIDENT, THESE SHOULD BE STABILISED WITH EXTRA SOIL SUBSTRATE SIMILAR TO THE ORIGINAL MATERIAL, AND SOURCES OF EROSION DAMAGE SHOULD BE IDENTIFIED AND CONTROLLED. FREQUENCY AS REQUIRED.  
IF DRAIN INLET HAS SETTLED, CRACKED OR MOVED, INVESTIGATE AND REPAIR AS APPROPRIATE. FREQUENCY AS REQUIRED.

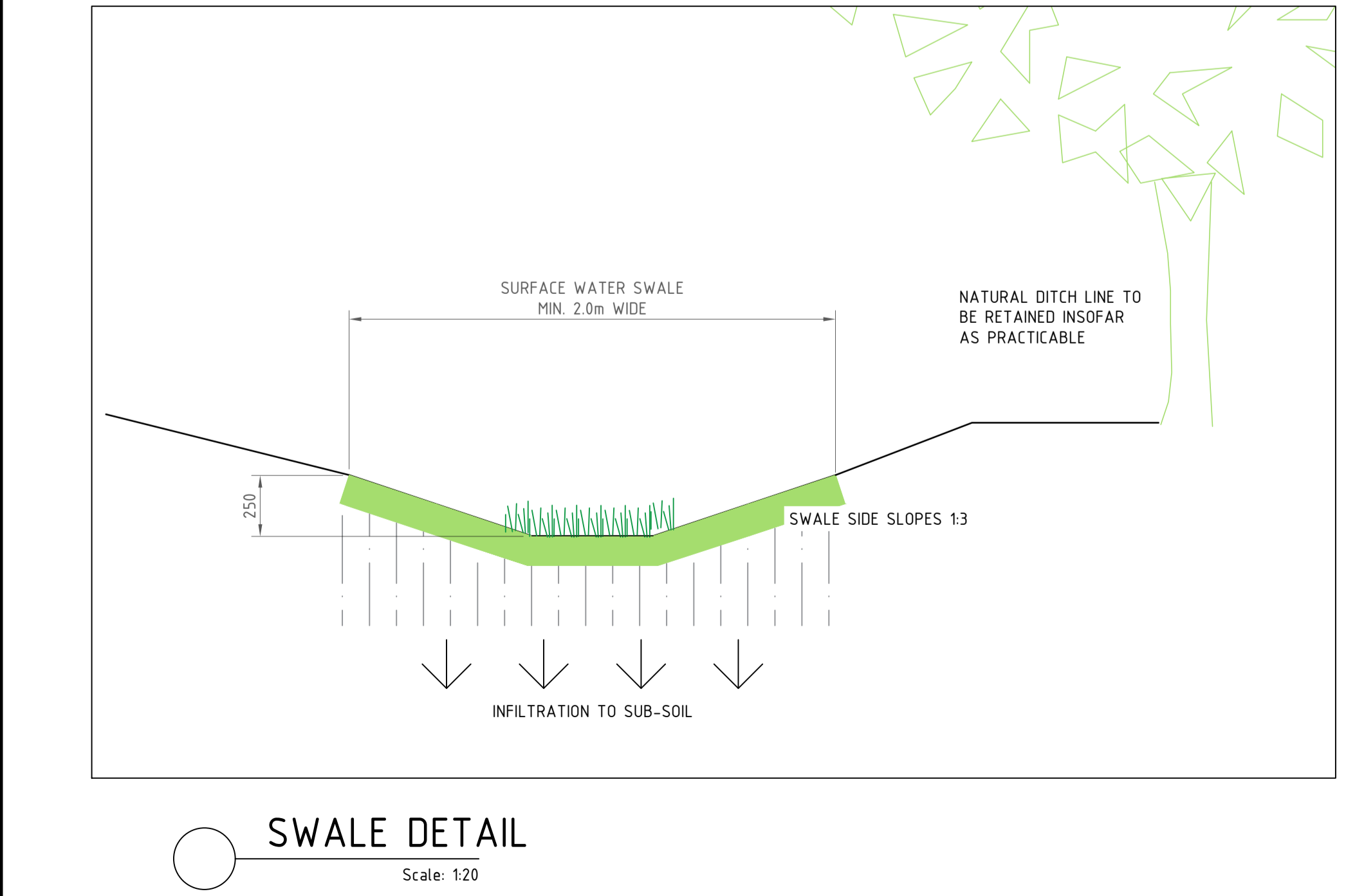
# TYPICAL LID / SUDS TREE PIT DESIGN

Standard profile:



- 1200mm x 1200mm tree grille c/w RootRain Hydrogrille irrigation inlet.
- Galvanised tree grille support frame set on concrete haunch.
- Select RootDirector, medium, modular root barrier system.
- Select and Agreed inlet aeration/irrigation system with cast inlets fitted to RootSpace Airflow inlet.
- Select strapped anchor system c/w ground anchors.
- Drainage layer - 150mm (6") depth of clean angular stone around sides and base of RootSpace structure.
- Optional tree guard 1.8m high x 600mm diameter (6ft x 24") secured to grille.
- RootRain Hydrogrille single inlet aeration/irrigation system with cast inlet.
- Pavement/road construction.
- Select twinwall geonet laid over RootSpace structure.
- RootSpace structure - 1 module deep x 10 modules across x 6 modules wide (1 x 2 x 2 module void below RootDirector) loaded with RootSoil 20 c/w Airflow deck.
- Suitable plastic open reinforcing mesh, 20mm (3/4") aperture laid below and around sides of RootSpace structure.
- Sub-base and drainage installed below RootSpace to structural engineer's/engineer's requirement/detail.

Information taken from TREES AND WATER SENSITIVE URBAN DESIGN by GREENBLUE URBAN



REVISION	DATE	BY	DETAILS
02	09/22	EK	Issued for Further Information (Swale Detail included)
01	04/22	EK	Issued for Planning

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Approved By: **EK**  
Checked By: **EK**  
Date: **April 22**  
Scale: **as indicated**  
Project: **21059 - P - 500**  
Drawing: **Surface Water Details**  
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Midleton, Co. Cork for Havenfalls Ltd.

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