

HK Hydrology Ltd.

Boundary Lakes Golf Course

SuDS Maintenance Plan



On behalf of **Utilita Bowl**

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1. Introduction

1.1 Background

Utilita Bowl was granted planning permission for landscaping/enhancement works in the southern part of the Boundary Lakes Golf Course, known as Thorney Down (the Site) in April 2025. Condition 25 of the decision notice sets out the requirements for a maintenance plan for the surface water drainage network. The wording of this condition has been reiterated below for convenience.

"Within 3 months of the date of this permission, details of the long term maintenance arrangements for all elements of the surface water drainage system, shall be submitted to and approved in writing by the Local Planning Authority. This shall include adherence to the measures set out in the submitted 'Eastern Outfall & Ongoing Monitoring' Statement dated 29/01/25. The drainage system shall thereafter be maintained in accordance with the approved details."

The purpose of this SuDS Maintenance Plan is to set out the principles for the long-term maintenance and management of the drainage system and to provide Utilita Bowl with a robust inspection and maintenance programme. The Plan will ensure the optimum operation of the proposed drainage elements throughout the operational lifetime of the Site, preventing an increased risk of flooding both on and off-site.

This document brings together proposals for maintenance included within the original 2024 sustainable drainage report as well as subsequent material submitted to the Hampshire LLFA over 2024 and 2025 outlining the maintenance arrangements for the eastern outfall and western drainage channel. This document should be read in conjunction with the sustainable drainage report (HK Hydrology Ltd., 2024).

2. Maintenance Plans

2.1 Plan details

The implementation of an adequate maintenance strategy is important for the long-term functionality of a sustainable drainage scheme. This section gives an overview of the maintenance requirements for the SuDS scheme, with a plan for upkeep and contact details for the responsible person. The schedule is not exhaustive and should be reviewed periodically and updated/adapted to suit the requirements of the constructed drainage system.

Maintenance requirements for the included SuDS features have been set out based upon the recommendations of the CIRIA SuDS manual and are included within Table 2.1 below.

In addition to the maintenance schedules below, Utilita Bowl requires site managers to inspect drainage systems after storm events, particularly around the basins, southern boundary and outfalls to ensure that the drainage system is functioning as designed. Additional monitoring and maintenance requirements in specific areas of the Site are outlined in the following Sections.

Table 2.1 Maintenance requirements

Maintenance		
Activity	Required Action	Typical Frequency
Channels, pipes, inlets and outlets		
Monitoring	Inspect for evidence of poor operation – particularly around southern carrier drains	Monthly.
Regular maintenance	Remove silt and debris.	Bi-monthly or as required.
Remedial actions	Clear blockages, replace damaged or failed pipes or manholes.	As required (if issue is noted during inspections).
Filter drains		
Monitoring	Inspect for evidence of poor operation and vegetation growth	Monthly.
Regular maintenance	Remove litter and debris from trench surface	As required.
Remedial actions	Replace sacrificial gravel top layer.	Annually or as required.
	Remove any tree roots where they are encroaching the side of the features.	As required.

Maintenance		
Activity	Required Action	Typical Frequency
Ponds and basins		
Regular maintenance	Rubbish and litter removal	As required.
	Inlet/outlet clearing	Quarterly or as required (depending on observed build up of sediment).
	Vegetation management (including reseeding areas of poor growth on occasion)	As required.
Remedial actions	Desilting	Once a year or as required.
	Bank repairs if any slippage or erosion has occurred	As required.

2.2 Specific requirements for monitoring in southern part of the Site.

Monitoring of performance and ground conditions around the southern carrier drains, and newly installed highway drain along the A344 (Charles watt Way) / southern boundary will be of particular importance, with proposals for alterations will be considered should any issues be identified (e.g. ponding, boggy ground, or blockages etc.).

Inspection of the area will be undertaken weekly and recorded on a standard checklist as part of routine maintenance operations. Should persistent/repetitive boggy/waterlogged conditions be noted, inspection of the drains will be undertaken via the inspection chambers and the pipework cleaned out if required.

2.3 Specific requirements for monitoring the Eastern Outfall and downstream channel

Monitoring arrangements for flows and ground conditions associated with the Eastern Outfall were submitted in January 2025 and subsequently agreed with the Hampshire LLFA.

Surface water discharging from the outfall flows northwards along a small channel, merging with outflows from the northern lagoon sequence. A member of the course management team will inspect the outfall and the overland flow path weekly, and following significant rainfall events. Observations will be recorded on a standard checklist as part of routine maintenance operations.

The inspections will confirm the absence of blockages, alterations to the overland flow route, persistent ponding (lasting more than one week) beneath tree canopies, and any visible

indicators of pollution (e.g. iridescent sheen or fine sediment deposition). If abnormal conditions are identified, a suitably qualified ecologist or drainage engineer will be consulted.

In addition, quarterly ecological inspections will be undertaken by an experienced ecologist to assess the health of trees and associated habitats, including the understorey. If any deterioration in woodland condition is noted, appropriate engineering and habitat restoration measures will be implemented within four weeks—or at the earliest ecologically suitable opportunity—to prevent further decline and promote recovery.

2.4 Access arrangements for western drainage channel

The LLFA previously expressed concerns around the practicality of maintenance to the western drainage channel. This was summarised in the following statement:

“Consideration will also need to be given as to how maintenance can be undertaken as the embankment slopes are prohibitively steep.”

This western part of the Site (i.e. the western drainage channel area) will be allowed to rewild over time, with minimal routine maintenance being undertaken on the western drainage channel itself. This will increase channel roughness, reducing the velocity of surface water conveyance along the channel and to the downstream network. This is not thought to pose a flood risk as the feature is at the top of the network (i.e. it has a small catchment area and relatively low inflows), has a large capacity and is not surrounded by flood risk receptors. A delayed concentration time to the downstream parts of the network may provide a net benefit overall with regards to on-site water management.

Occasional landscaping work can be undertaken on the feature (to re-profile or remove sediment for example) if required, with access to the channel being available via the southern bank. The base of the channel was accessed as part of the landscaping works (to reprofile the channel bed) in 2023. The access route is illustrated in Figure 2.1. Routine maintenance will be undertaken around the outlet orifices on the downstream (northern) end of the feature (as per the arrangements for the remainder of the drainage network). Maintenance personnel will access the outlets on-foot from the access road to the northwest (illustrated in Figure 2.1). This route provides a shallow gradient for safe access.

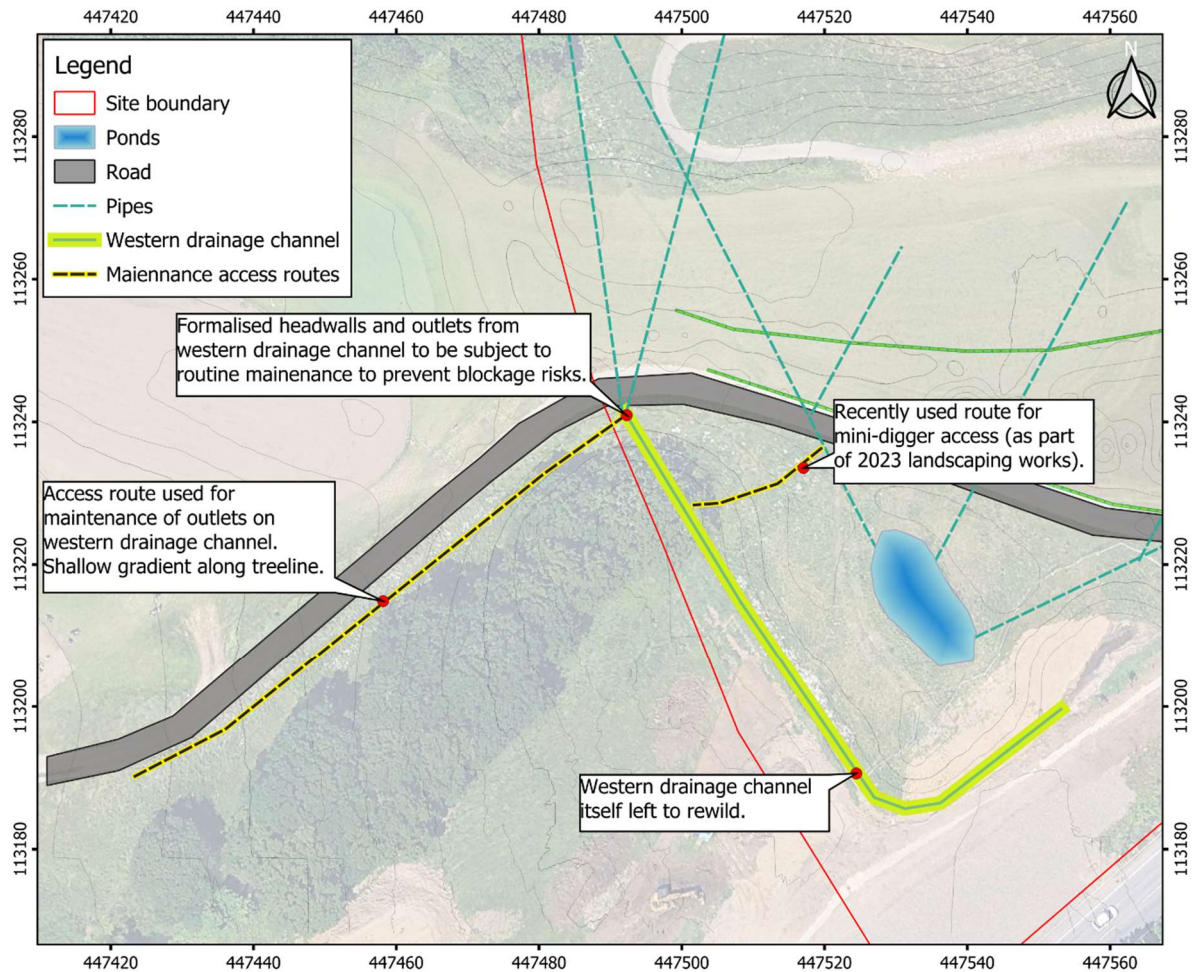


Figure 2.1 Maintenance arrangements in west of Site

2.5 Maintenance responsibilities

The responsibility for maintaining the on-Site drainage infrastructure will lie with the Boundary Lakes Golf Course management (Course Grounds Manager).

The club have a maintenance team which routinely undertake vegetation management and landscaping works around the course and will be well suited to the long term maintenance of the sustainable drainage infrastructure.

References

CIRIA. (2015). *The SuDS Manual V2. C753* .

HK Hydrology Ltd. (2024). *2306 R1 - Boundary Lakes Golf Course - Detailed Sustainable Drainage Report*.