

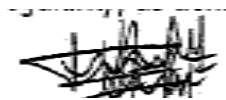
Surface Water Management Plan
for
Mitigation Measures During Construction and Use of The
Development
at
Kyng's Golf & Country Club, Station Road, Nuneaton CV13 0NP

for:
Statue Homes Ltd, 1 The Courtyard
Goldsmith Way,
Eliot Business Park,
Nuneaton
CV10 7RJ

Date	Issued	Revision
09 March 2023	Planning	A

Reference: 82659-02

Prepared by:



Nene Nanor
MSc BSc
Graduate Civil Engineer

Approved by:



Dan Edwards
MEng CEng MICE
Director

CONTENTS

1.	INTRODUCTION	3
2.	INFILTRATION TESTING OF SITE GEOLOGY	4
3.	PROTECTION OF EXISTING SURFACE WATERCOURSES	5
4.	DISPOSAL OF SEEPAGE, WASTEWATER AND GROUNDWATER	6
5.	FLOODING	7
6.	SPILL AND LEAK PROTECTION	9
7.	LONG TERM MAINTENANCE PLAN FOR SURFACE WATER DRAINAGE	10
8.	LIST OF APPENDICES	11

1. INTRODUCTION

- 1.1. This Surface Water Management Plan has been prepared on the instruction of Statue Homes Ltd to address the surface water management and flood mitigation measures to be adopted during construction, for the proposed development at Kyng's Golf & Country Club, Station Road, Nuneaton.
- 1.2. All site operatives must adhere to the following general effective working methods to protect surface and groundwater from pollution and other adverse impacts including changes to water levels, flows and general water quality, and to protect against flooding. It must be noted that the following are guidelines and certain site activities will require further planning or assessment by the contractor and/or project manager. Site operatives should be briefed on the surface water management plan.

2. INFILTRATION TESTING OF SITE GEOLOGY

- 2.1. Three infiltration tests were undertaken in line with BRE 365 guidelines to assess the suitability of prevailing ground conditions for the construction of soakaways to deal with surface water drainage. In summary, due to the negligible fall in water levels, the strata encountered can be classified as practically impermeable.
- 2.2. Reference should be made to the infiltration tests conducted by PRP UK Ltd for the details of the permeability and ground conditions encountered. Please see Appendix 1 for results.

3. PROTECTION OF EXISTING SURFACE WATERCOURSES

- 3.1. The contractor must protect site operatives and members of the public from hazards associated with deep water. This may require suitable fencing to temporary or permanent silt trap, attenuation or pond features.
- 3.2. Appropriate measures must be taken to protect the existing attenuation pond and ditch from contamination during construction. This may be done by:
 - 3.2.1. Using vegetated buffer zones located between the construction site and watercourse to prevent silt laden runoff from entering surface water sewers or watercourses. These zones should remain as natural as possible and free from the movement of plant and storage of construction materials.
 - 3.2.2. Using temporary settlement ponds and swales to settle out silt from surface water prior to it entering surface water sewers, ditches or watercourses. Once the silt content has settled, this water can then be discharged into the ditch, providing it is not contaminated.
 - 3.2.3. Using hay bales to assist in directing and filtering surface water flows.
 - 3.2.4. Minimising open cut and exposed ground at each stage of construction to reduce silt runoff.
 - 3.2.5. Using short-, medium-, and long-range weather forecasts and alerts to plan construction activities to minimise pollution risks associated with heavy rainfall events. This may include the postponement of planned actions such as concrete pours or similar activities if a heavy rain event is forecast, and preparing suitable contingency measures to mitigate the impacts of a heavy rainfall event should one occur during construction. Site operatives are to be briefed on these measures.
 - 3.2.6. Spill kits and drip trays should be available for use.

4. DISPOSAL OF SEEPAGE, WASTEWATER AND GROUNDWATER

- 4.1. Whenever possible, the contractor must seek to minimise the amounts of wastewater (water, other than foul effluent, which has been used during the construction process) that needs to be discharged, and find alternative means of disposal. Discharge of uncontaminated surface water, i.e. runoff from roofs and paving areas, do not require a permit. These can be allowed to drain freely into the ditch to the west of the site in line with section 3 guidance. Any other forms of wastewater, e.g. water used for cooling etc., will require an Environment Agency permit before discharge to any surface watercourse or groundwater. Alternatively, it may be pumped into waste water containers and transported to an appropriate waste site.
- 4.2. The contractor must also comply with BS6031: 2009 Code of Practice for Earthworks, regarding the general control of site drainage.
- 4.3. The contractor must ensure that any water that has come into contact with contaminated materials is disposed of in accordance with the Water Industries Act 1991 (if discharged to sewer) and the Water Industries Act (if discharged to controlled waters), and all other related regulations, to the satisfaction of the Environment Agency and Severn Trent Water.
- 4.4. The following consents and approvals must be applied for by the contractor, as necessary:
- A consignment note system must be applied to all liquid wastes that are removed by a licensed waste carrier in a road tanker in accordance with all relevant waste management legislation and duty of care obligations.
 - For any discharge of wastewater into a sewer, a Trade Effluent Consent must be sought, if required, from Severn Trent Water.
- 4.5. The contractor must make adequate provisions ensuring all hazardous substances, including oil drums or containers on site, are controlled in accordance with the Control of Substances Hazardous to Health Regulations. Appropriate labelling of such containers is essential, as is having a suitable secondary containment system (SCS) in place, and that no oil or other contaminants are allowed to reach water courses or groundwater.
- 4.6. Foul water and sewage effluents produced by the construction workforce on site must be contained in temporary foul drainage facilities that are to be installed and subsequently disposed of off-site by a licensed waste contractor. Alternatively for welfare, the contractor may agree use of existing on-site facilities where appropriate.

5. FLOODING

- 5.1. The relevant Flood Risk Assessment by Farrow Walsh dated February 2020 has shown that the site is situated within flood zone 1 and, therefore, is located within a floodplain but is considered to be at a low risk of pluvial and fluvial flooding. There are no significant sources of flooding highlighted within the FRA. However, the contractor should use a suitable long- and short-range weather forecast and alert system such that they can plan for and react in good time to significant rainfall events. It is recommended that the contractor subscribes to the EA flood warning system. In the unlikely event that a flood alert is advised by the EA, plant and building supplies should be moved to elevated ground to prevent the potential contamination of flood water, damage to plant and building supplies, and the introduction of construction debris to waterways. During an EA flood warning, site works must stop to protect construction workers. Site works must only continue once the EA flood warning is removed or the risk of the site flooding is deemed to be low. Given the scale of the proposed works and that there is no recorded risk of surface water flooding on site, construction is unlikely to increase fluvial flood risk. Refer to Appendix 2 for EA flood maps.
- 5.2. During site works, all reasonable effort must be made to ensure that the topography of the site is unaltered, in areas not required, to prevent potential surface water and overland flooding pathways.
- 5.3. The contractor should consider the use of importing clean granular fill and creating suitable haul roads in areas of heavy plant trafficking to prevent the deterioration of the ground and the pooling of surface water. Creating migration pathways to the nearby watercourse is also recommended.
- 5.4. Potential flow paths within the site which could become active in the event of extreme rainfall should be considered. Overland flow paths will be determined by site topography and suitable mitigation measures need to be put in place ahead of time. These may include locating vulnerable operations within elevated parts of the site away from potential flow paths, the use of settlement ponds and swales, and hay bales or other suitable filter system or flow diverter on standby. In the event that overland flooding becomes an issue, every effort should be made to avoid silt entering nearby watercourses.

- 5.5. In the event that significant flooding occurs on site due to the site works, the contractor may be required to construct bunds or excavate trenches downstream to catch flood water, preventing it from reaching the watercourse. This waste water should then be pumped out and discarded from site appropriately. It should be noted that the likelihood of this occurrence is very low, provided all of the above is implemented.
- 5.6. Over the course of construction, the site manager should review the weather forecast on a daily basis. Contingency plans should be made for periods of heavy rain, to prevent surface water build up and overland flooding. High risk activities such as excavations and concrete pours should be postponed during periods of heavy rain. Preparations should be made in advance to ensure excavated material is not stockpiled on site during periods of heavy rain. Ideally, excavated soils should be removed from site the same day of excavation.

6. SPILL AND LEAK PROTECTION

- 6.1. The contractor must ensure that both a universal spill kit and an oil only spill kit are available on site.
- 6.2. An appropriate number of spill kits should be provided with this being assessed by the contractor based on the schedule and location of works taking place on the site. In addition, plant must be inspected regularly for damage and leaks.
- 6.3. Typical contents of a universal spill kit will include:
- Gloves
 - Absorbent socks
 - Absorbent pads
 - Disposable bags and ties
- 6.4. In the event that significant ground and/or water contamination occurs, the local authority and EA must be notified immediately.

7. LONG TERM MAINTENANCE PLAN FOR SURFACE WATER DRAINAGE

- 7.1. It is recognised that the existing and proposed surface water drainage system has to be maintained going forward. In this context, a management structure must be in place to cover various communal aspects of the development which will include the drainage requirements as set out in the drainage strategy drawing FW1219-D-401 by Farrow Walsh (refer to Appendix 3). The maintenance regime should conform to the requirements set out within the CIRIA C753 SuDS Manual.
- 7.2. A sustainable drainage operation and maintenance plan specific to the site has been appended to this report (refer to Appendix 4). This will be included in the O & M manuals and the health and safety file for the development.

8. LIST OF APPENDICES

8.1. Appendix 1 (Infiltration Test Results)

SOIL INFILTRATION REPORT

Project No:

82659

Project:

Kyngs Golf Course

Prepared by:

DL

Checked by:

DE

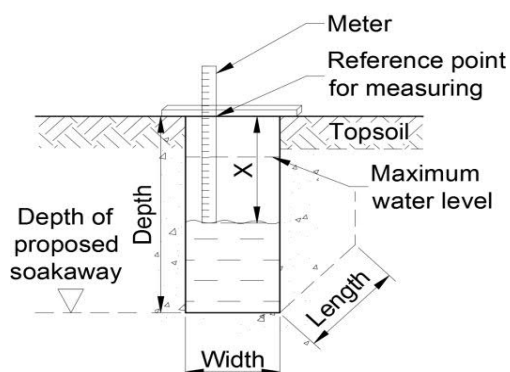
Sheet:

01

Permeability Test SA1

Location / Grid Reference	
Soil type	Clay
Ground Water Level (m below GL)	Not encountered

Borehole Size		
Length (m)	Width (m)	Depth (m)
3.00	0.65	1.50



		Site Readings	
No	Time (mins)	Time (hh:mm)	X - Ground to Water Level distance (m)
1	0		0.65
2	1		0.65
3	2		0.65
4	3		0.65
5	4		0.65
6	5		0.65
7	10		0.65
8	15		0.65
9	20		0.65
10	25		0.65
11	30		0.66
12	40		0.66
13	50		0.66
14	60		0.66
15	70		0.66
16	80		0.66
17	90		0.66
18	100		0.66
19	110		0.67
20	120		0.67
21	130		0.67
22	140		0.67
23	150		0.67
24	180		0.67
25	210		0.67
26	240		0.67
27			

Negligible fall in water. Strata classified as practically impermeable



PRP
consulting civil & structural engineers

Leicester
0116
275 1710

Northampton
01604
889870

Huntingdon
01832
710959

SOIL INFILTRATION REPORT

Project No:

82659

Project:

Kyngs Golf Course

Prepared by:

DL

0

Checked by:

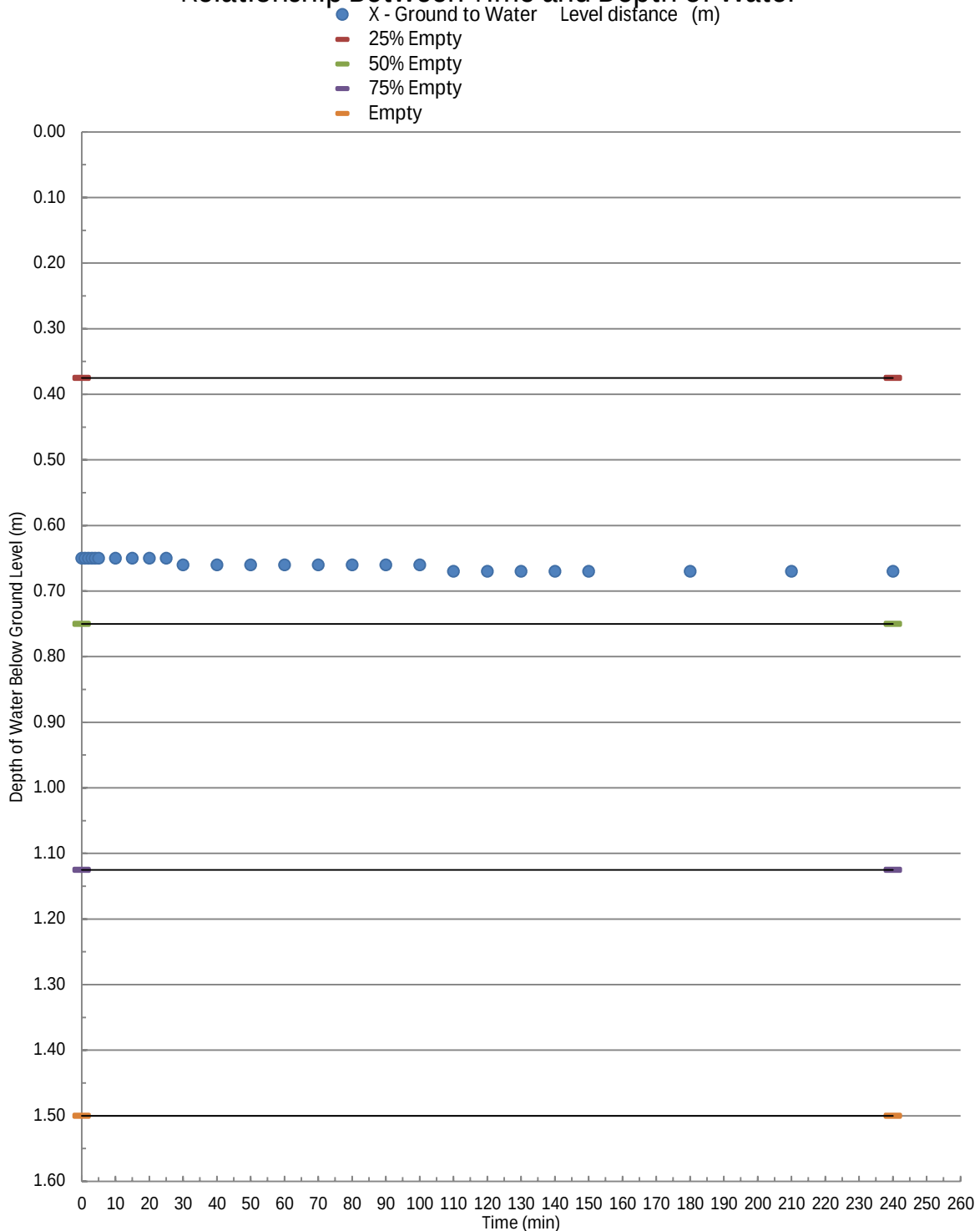
DE

Sheet:

02

Permeability Test SA1

Relationship Between Time and Depth of Water





PRP
consulting civil & structural engineers

Leicester
0116
275 1710

Northampton
01604
889870

Huntingdon
01832
710959

SOIL INFILTRATION REPORT

Project No:

82659

Project:

Kyngs Golf Course

Prepared by:

DL

Checked by:

DE

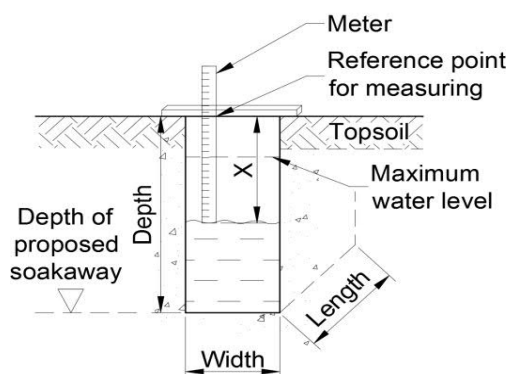
Sheet:

01

Permeability Test SA2

Location / Grid Reference	
Soil type	Clay
Ground Water Level (m below GL)	Not encountered

Borehole Size		
Length (m)	Width (m)	Depth (m)
2.89	0.63	1.80



		Site Readings	
No	Time (mins)	Time (hh:mm)	X - Ground to Water Level distance (m)
1	0		0.70
2	1		0.70
3	2		0.70
4	3		0.70
5	4		0.71
6	5		0.71
7	10		0.71
8	15		0.71
9	20		0.71
10	25		0.71
11	30		0.71
12	40		0.71
13	50		0.72
14	60		0.72
15	70		0.72
16	80		0.72
17	90		0.72
18	100		0.73
19	110		0.73
20	120		0.73
21	130		0.73
22	140		0.73
23	150		0.73
24	180		0.73
25	210		0.73
26	240		0.73
27			

Negligible fall in water. Strata classified as practically impermeable



PRP
consulting civil & structural engineers

Leicester
0116
275 1710

Northampton
01604
889870

Huntingdon
01832
710959

SOIL INFILTRATION REPORT

Project No:

82659

Project:

Kyngs Golf Course

Prepared by:

DL

0

Checked by:

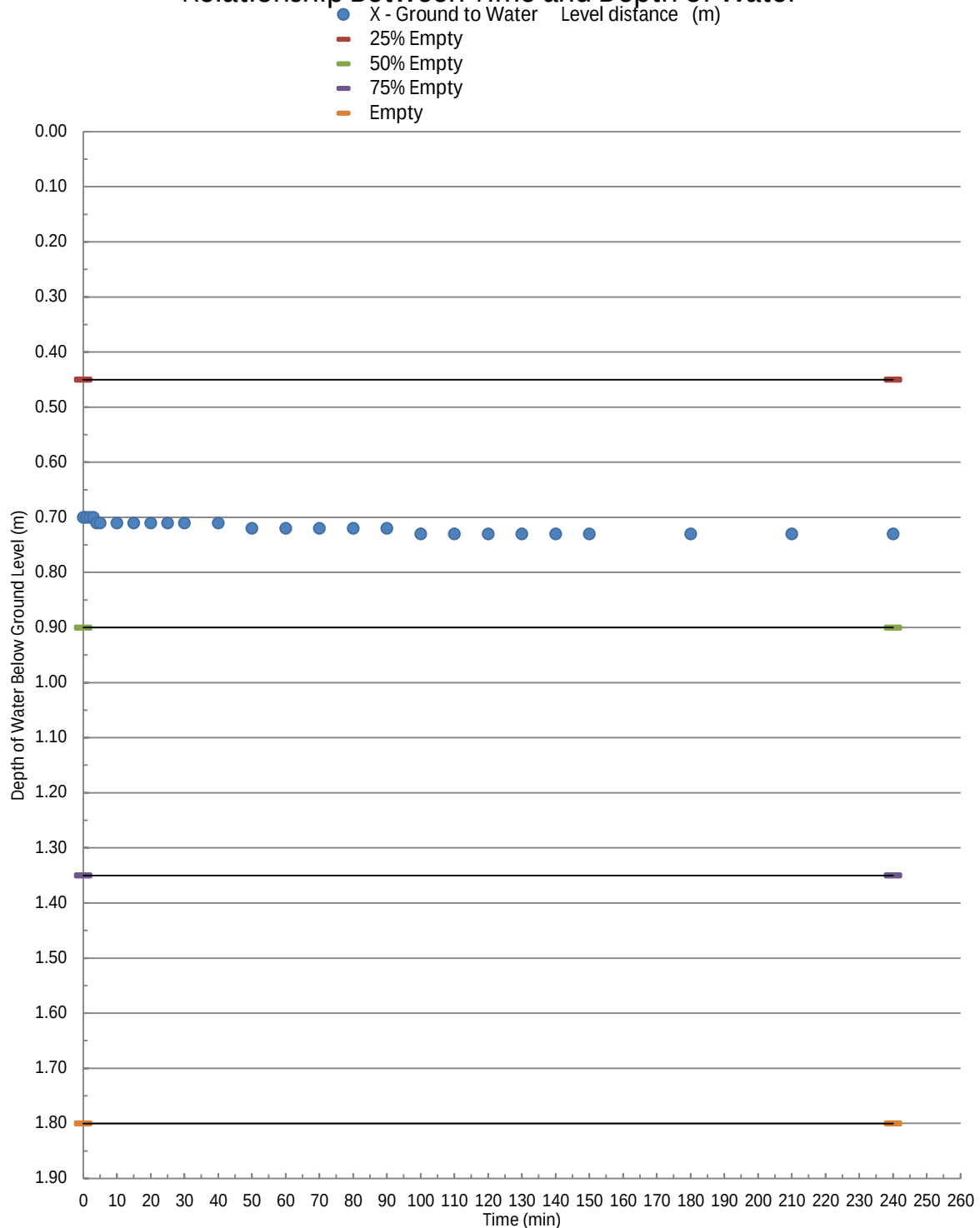
DE

Sheet:

02

Permeability Test SA2

Relationship Between Time and Depth of Water





PRP

consulting civil & structural engineers

Leicester
0116
275 1710

Northampton
01604
889870

Huntingdon
01832
710959

SOIL INFILTRATION REPORT

Project No:

82659

Project:

Kyngs Golf Course

Prepared by:

DL

Checked by:

DE

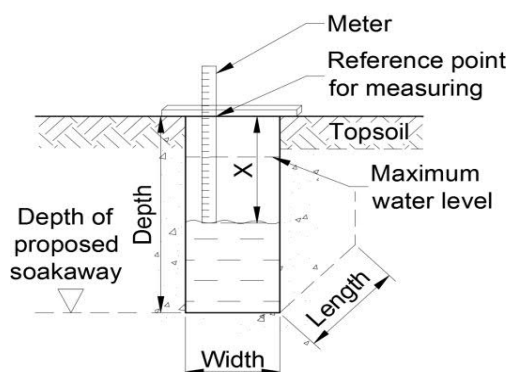
Sheet:

01

Permeability Test SA3

Location / Grid Reference	
Soil type	Clay
Ground Water Level (m below GL)	Not encountered

Borehole Size		
Length (m)	Width (m)	Depth (m)
3.15	0.72	2.00



		Site Readings		
No	Time (mins)	Time (hh:mm)	X - Ground to Water distance (m)	Level
1	0		0.97	
2	1		0.97	
3	2		0.97	
4	3		0.97	
5	4		0.97	
6	5		0.98	
7	10		0.98	
8	15		0.98	
9	20		0.99	
10	25		0.99	
11	30		0.99	
12	40		0.99	
13	50		0.99	
14	60		0.99	
15	70		0.99	
16	80		0.99	
17	90		0.99	
18	100		0.99	
19	110		0.99	
20	120		0.99	
21	130		0.99	
22	140		0.99	
23	150		0.99	
24	180		0.99	
25	210		1.00	
26	240		1.00	
27				

Negligible fall in water. Strata classified as practically impermeable



PRP
consulting civil & structural engineers

Leicester
0116
275 1710

Northampton
01604
889870

Huntingdon
01832
710959

SOIL INFILTRATION REPORT

Project No:

82659

Project:

Kyngs Golf Course

Prepared by:

DL

0

Checked by:

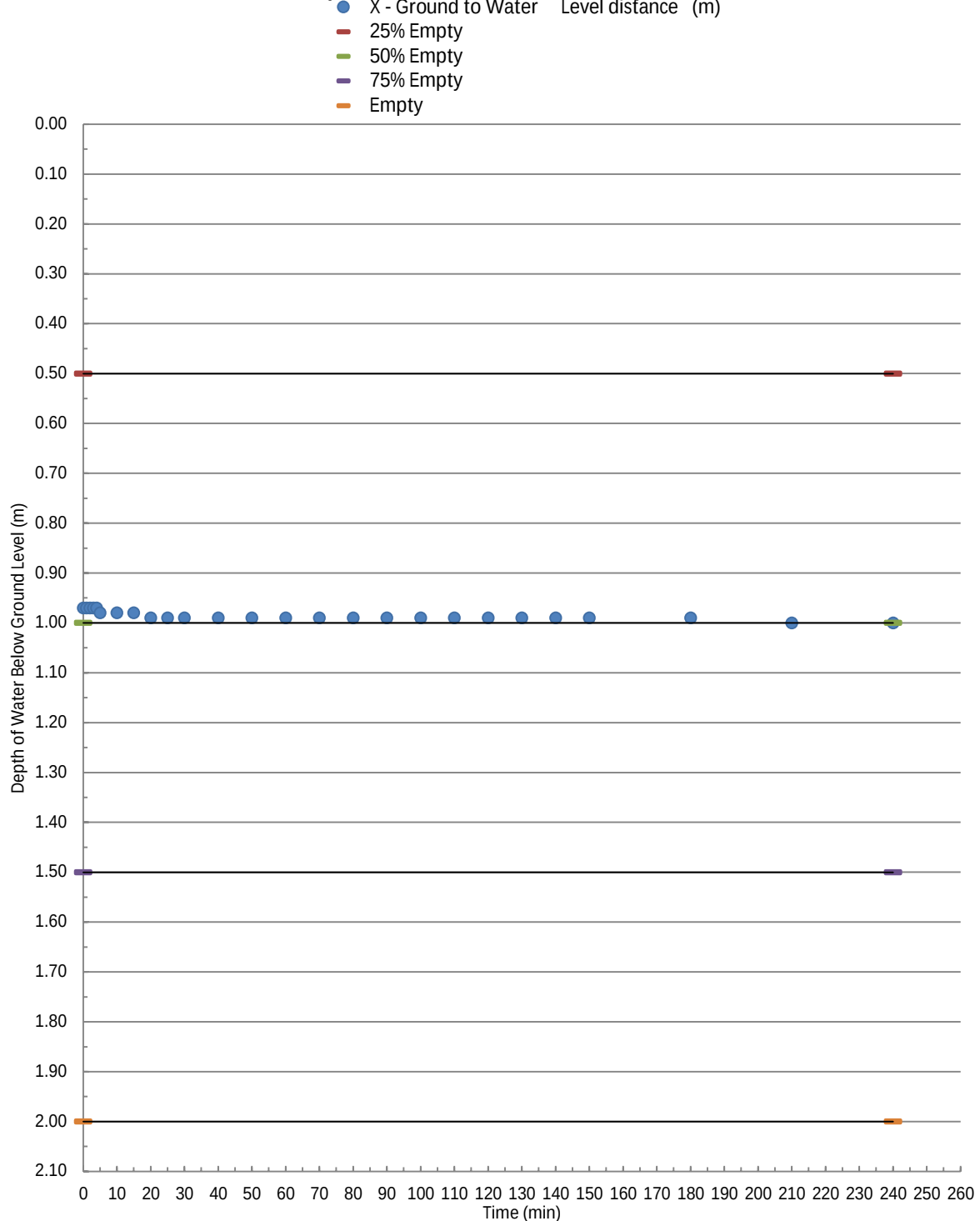
DE

Sheet:

02

Permeability Test SA3

Relationship Between Time and Depth of Water



8.2. Appendix 2 (EA Flood Maps)

Flood map for planning

Your reference
Kyngs Golf

Location (easting/northing)
439582/303316

Created
9 Mar 2023 13:25

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference

Kyngs Golf

Location (easting/northing)

439582/303316

Scale

1:10000

Created

9 Mar 2023 13:25

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area



Flood risk

Location

Extent of flooding

CV13 0NP



Extent of flooding from rivers or the sea

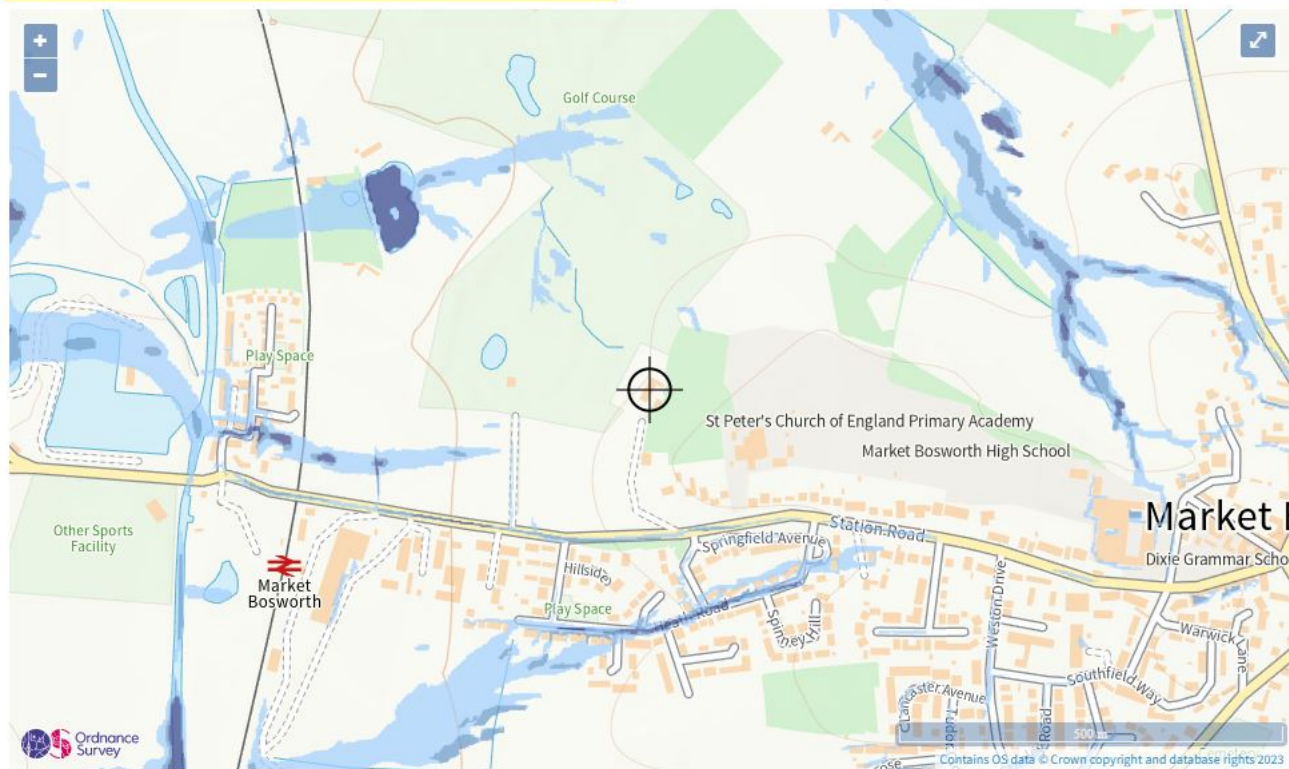
High Medium Low Very low Location you selected

Flood risk

Location

Extent of flooding

CV13 0NP



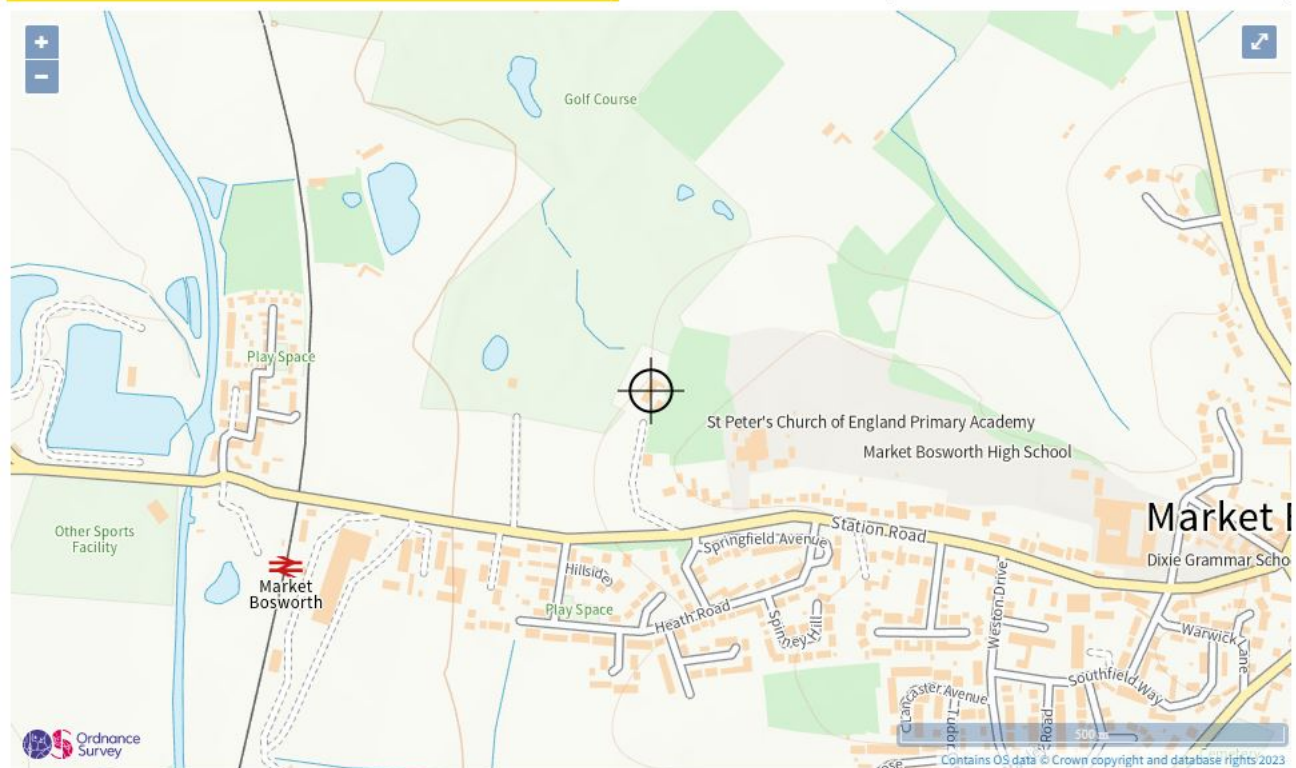
Extent of flooding from surface water

High Medium Low Very low Location you selected

Extent of flooding



CV13 0NP



Maximum extent of flooding from reservoirs:

 when river levels are normal  when there is also flooding from rivers  Location you selected

8.3. Appendix 3 (Farrow Walsh Drainage Strategy FW1219-D-40)

Site Details

26,317m² / 2.632ha : Development area

7,210m² / 0.721ha : Proposed impermeable area

5.0 l/s : Proposed Q100+40% climate change storm discharge rate to sewer (49% Betterment)

Storage Areas:

Area 1 (Club House & Units 1-6 - Attenuation Pond 1) : 225m³

Area 2 (Permeable Paving with 500mm deep Voided Stone) : 225m³

Development impermeable areas to be drained into the ordinary watercourse via attenuation ponds and voided stone with minimum SUDs treatment to Cria753, via gravity and pumped sewers.

All drainage to be constructed in accordance with Sewers for Adoption 6th Edition and Building Regulations Part H.

Layout subject to detailed level and FFL design.

A CCTV survey of the as-built drainage is to be undertaken by the Contractor and provided to the Engineer for final approval

Sewer details shown are taken from STW sewer records and are to be confirmed by Contractor prior to commencement of the works

Minimum pipe cover to soffits to be as per The Building Regulations 2010 Part H for thermoplastic pipes:

• 0.6m in pedestrian or landscaped areas

• 0.9m in vehicle accessible areas

Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround

Internal foul drain pipe minimum gradients:

• 1:80 from SVP & WC to IC

• 1:40 from Basin & Sink to IC

Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

1 Mesh Screens

Mesh screen to be placed over the outlet pipe of chamber during site construction works and removed immediately prior to the first occupancy of the dwellings served by the sewers

2 Proposed Outfall

Proposed storm outfall to ditch subject to LLFA and Environmental Agency approval

3 Existing Attenuation Basin

Online basin to store surface water runoff on site prior to discharge

4 Discharge Rate

Storm discharge from site restricted to 5.0l/s. for a 1in100 year +40% climate change storm event, using a flow control chamber. Subject to approval with LLFA.

5 Discharge Conditions

Drainage discharge rate, water quality criteria and surface water ditch headwall construction subject to the Approval of the Environment Agency prior to commencement of the works.

6 Existing Watercourse Connection

Connection subject to Ordinary watercourse consent and discharge is subject to LLFA Approval.

7 Hydro-Brake Flow Control Chamber

Proposed manhole Ø1200 fitted with a Hydro-Brake and 500mm sump (silt trap) to restrict private surface water discharge.

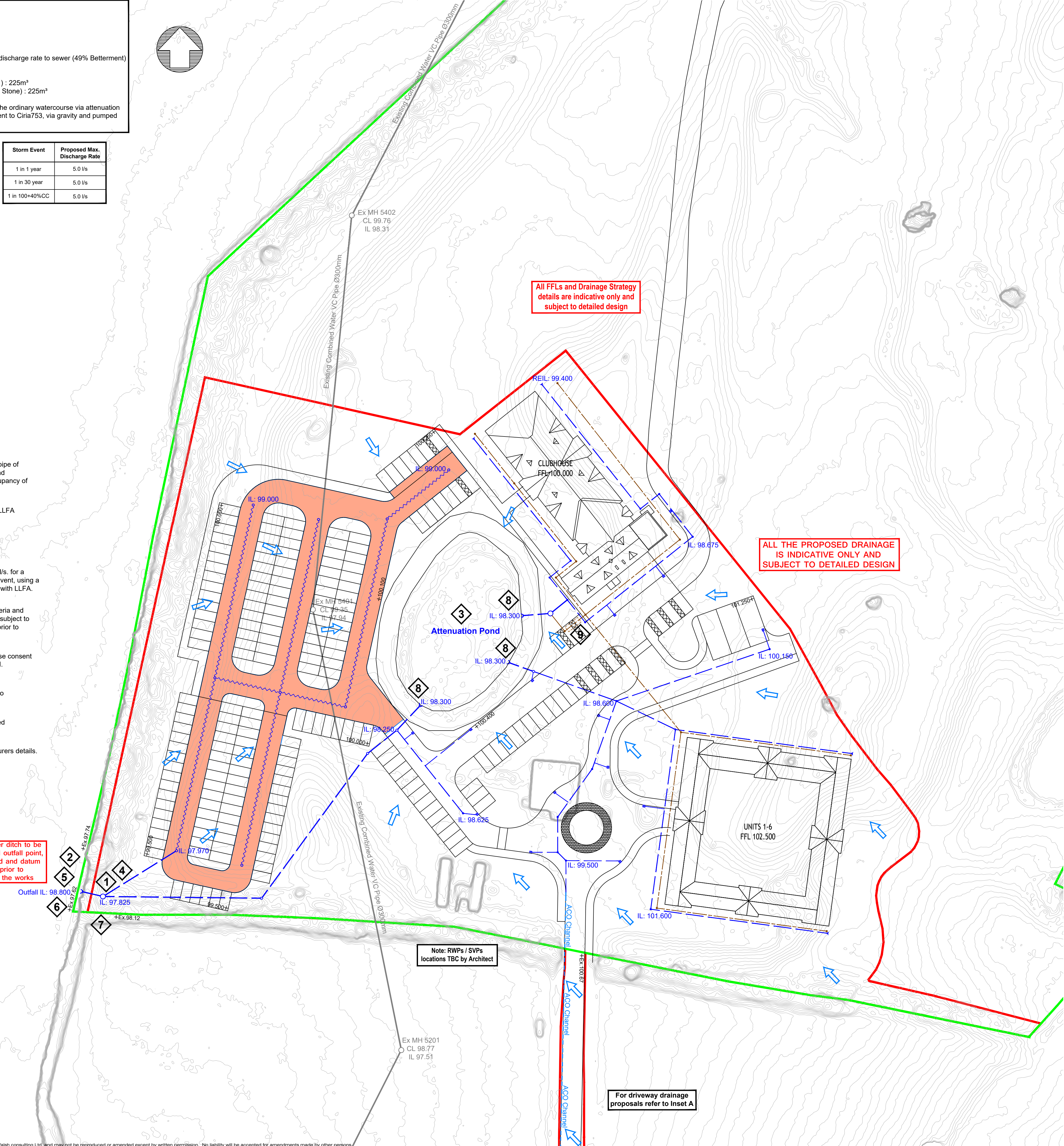
8 Concrete Headwalls

New precast concrete headwall constructed within the attenuation pond.

9 Proposed Foul Treatment Tank

Proposed foul treatment tank to manufacturers details.

Existing surface water ditch to be surveyed at proposed outfall point, using same local grid and datum as site survey, prior to commencement of the works



All drainage to be constructed in accordance with Sewers for Adoption 6th Edition and Building Regulations Part H.

Layout subject to detailed level and FFL design.

A CCTV survey of the as-built drainage is to be undertaken by the Contractor and provided to the Engineer for final approval

Sewer details shown are taken from STW sewer records and are to be confirmed by Contractor prior to commencement of the works

Minimum pipe cover to soffits to be as per The Building Regulations 2010 Part H for thermoplastic pipes:

• 0.6m in pedestrian or landscaped areas

• 0.9m in vehicle accessible areas

Any pipes with cover to soffit less than those stated above are to have a Class Z concrete pipe bed & surround

Internal foul drain pipe minimum gradients:

• 1:80 from SVP & WC to IC

• 1:40 from Basin & Sink to IC

Refer to Architect's/M&E drawings for pipe sizes and setting-out information.

Inset A

Legend

Site Boundary

Application Boundary

1200mm dia. IC

450mm dia. IC Max Depth 3.0m

Surface Water 150mm dia. Pipe

Foul Water 100mm dia. Pipe

Existing 300mm dia. Pipe

Rodding eye (storm only)

Perforated Pipe

Voided stone to provide treatment for the private access

Exceedance flow direction

Yard Gully

General Notes

1. DO NOT SCALE.

2. This drawing is to be read in conjunction with all other relevant drawings and details.

3. Should there be any conflict between the details indicated on this drawing and those on other drawings the Engineer should be informed PRIOR to construction on site.

4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the Contractor commence site work prior to such approval being given it is entirely at their own risk.

5. Sketch proposals are for illustrative purposes only and as such are subject to detailed site investigation including ground conditions / contaminants, drainage, design and planning / density negotiations.

6. All dimensions are in millimetres unless otherwise stated.

7. The Farrow Walsh Consulting Designers Risk Assessments for this project must be reviewed PRIOR to the commencement of any works on site.

NOTES

1. This drawing is for Planning purposes only and is not to be used for Construction.

2. This drawing to be read in conjunction with all other relevant Engineers and Architect's details.

3. All work is to be carried out in accordance with the current British Standards, codes of practice, building regulations and with Sewers for Adoption 6th Edition guidance.

4. The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the Engineer prior to commencement of works.

5. All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.

6. All connections to road gullies and channels shall be 150mm nominal bore pipework.

7. All pipework to be U-PVC type in accordance with WIS 4-35-01 unless otherwise noted.

8. All pipes connecting to adopted manholes up to and including 300mm dia. to be Wavin Ultrarb or similar approved.

9. All pipes connecting to adopted manholes greater than 300mm dia. to be Concrete or approved U-PVC.

10. All pipework entering and exiting manholes to be connected with pipe soffits level.

11. All works are to be to the satisfaction of the Engineer, Building Officer, Severn Trent Water, local authority Highway & Flood Planning Officer.

12. All insitu services and drainage networks are to be located and protected as necessary by the Contractor prior to the commencement of the works.

LEGEND

Site Boundary

Application Boundary

1200mm dia. IC

450mm dia. IC Max Depth 3.0m

Surface Water 150mm dia. Pipe

Foul Water 100mm dia. Pipe

Existing 300mm dia. Pipe

Rodding eye (storm only)

Perforated Pipe

Voided stone to provide treatment for the private access

Exceedance flow direction

Yard Gully

P4

Drainage Strategy updated to suit comments received from LLFA dated 13.03.2020, which include amended outfall, ILs and outline level proposals.

BM

OP

JD

23.03.20

P3

Site layout and respective drainage strategy updated to suit updated application boundary, which no longer includes eastern section.

BM

CB

JD

04.02.20

P2

Site boundary amended to reflect Land Title Plan, SV pump added to eastern region and overland flood arrows added as requested by LLFA 02.10.2018.

BM

CB

JD

11.10.18

P1

Issued for Planning.

BM

CB

JD

06.09.18

Rev

Description of updates

Drawn

Checked

Approved

Date

Revision Schedule

farrow walsh

62 Highcross Street, Leicester LE1 4NN

321 Bradford Street, Birmingham B5 6ET

0330 100 0363

www.farrowwalsh.com

FOR PLANNING

Client:

Statue Homes

Project:

Market Bosworth Golf Leisure and Country Retreat, Market Bosworth

Title:

Drainage Strategy

Drawn:

Checked:

Approved:

Date:

Scale:

BM

CB

JD

September 2018

1:500 @ A1

Drawing No.

FW1219-D-401

Revision:

P4

8.4. Appendix 4 (Surface Water Maintenance Schedule)

Maintenance Schedule - All Maintenance to be carried out in accordance with CIRIA 753

Cellular Attenuation		
Monitoring	Survey inside of tank for sediment build-up and remove is necessary	Every 5 years or as required
	Inspect/check all inlets, outlets , vents and overflows to ensure that they are in good condition and operating as designed.	Annually
Occasional maintenance	Repair/rehabilitate inlets, outlets, overflows and vents.	As required
	Remove sediment from road gullies and catchpit chambers	Annually or as required
Regular maintenance	Remove debris from catchment surface	Monthly
	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually
Permeable Paving		
Monitoring	Monitor insection chambers	Annually
	Inspect silt accumulation rates and establish appropriate brushing frequencies	Annually
	Inspect for evidence of poor operation and/ or weed growth - if required, take remedial action	Three monthly, 48 hours after large storms in first six months
	Initial inspection	Monthly for three months after installation
Remedial action	Rehabilitation of surface and upper substructure by remedial sweeping.	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging)
	Remedial works to any depressions, rutting and cracked or broken blocks considered detrimental to the structural performance or a hazard to users and replace lost jointing material.	As required
	Remediate and landscaping which through vegetation maintenance or soil slip has raised to within 50mm of the level of the paving	As required
Occasional maintenance	Stabilise and mow contributing adjacent areas	As required
	Removal of weed or management using glyphosate applied directly into the weeds by an applicator rather than spraying	As required - once per year on less frequently used 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 manufacturers recommendations - pay particular attention to areas where water runs onto pervious surface from adjacent impermeable areas as this area is most likely to collect most sediment
Manhole and Rodding Eye		
Monitoring	Lift pumping station cover and inspect to determine condition of chamber and pump. Remove debris	Monthly during first half year of operation, then every six months
Routine maintenance	Inspect manholes and remove any silt or debris from base and ensure that they are clean.	Six monthly
	Jet pipework to remove debris/silt from rodding eye	As required
Attenuation Pond		
Remedial action	Repair erosion or other damage by reseeding and re-turfing	As required
	Realignment of rip-rap	As required
	Repair/rehabilitation of inlets, outlets and overflows	As required
	Relevel uneven surfaces and reinstate design levels	As required
Occasional maintenance	Reseed areas of poor vegetation growth	As required
	Prune and trim any trees and remove cuttings	Every 2 years, or as required
	Remove sediment from inlets, outlets, forebay and main basin when required	Every 5 years, or as required
Regular maintenance	Remove litter and debris	Monthly
	Cut grass - for spillways and access routes	Monthly (during growing season), or as required.
	Cut grass - meadow grass in and around basin	Half yearly (spring- beofre nesting season, and autumn)
	Manage other vegetation and remove nuisance plants	Monthly at start, then as required
	Inspect inlets, outelts and overflows for blockages, and clear if required	Monthly
	Inspect bankside, structures, pipeworrk etc for evidence of physical damage	Monthly
	Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies	Monthly for first year, then annually or as required.
	Tidy all dead growth before start of growing season	Annually
	Remove sediment from inlets, outlets and forebay	Annually or as required
	Manage wetland plants in outlet pools - where provided	Annually
Soft landscaping		
Regular maintenance	Replace any plants, to mainain planting density	As required
	Remove litter and surface debris and weeds	Quarterly
Regular inspections	Assess plants for disease infection, poor growth, invasive species etc and replace as necessary	Quarterly
Other		
Monitoring	Lift flow contol chamber cover and inspect to determine condition of chamber and flow control device. Remove debris	Monthly during first half year of operation, then every six months
Routine maintenance	Inspect manholes and remove any silt or debris from base and ensure that they are clean.	Six monthly
Routine maintenance	Jet pipework to remove debris/silt	As required