

Our Ref: J-11713-01-HG
31 August 2017



Michael Catterall
A&M Architectural Partnership LLP

RE: Demolition of 6,111 square metres of redundant chalets and facilities buildings, use of land for the siting of 204 holiday caravans including 5 caravans for use as staff accommodation, refurbishment of retained single and two storey holiday chalets to form 87 units of holiday accommodation, retain managers bungalow, sales area for 5 caravans, refurbishment of remainder of central facilities building, CCTV cameras, provision of new pedestrian concourse with terraces, splash and dry play areas, multi-games court, adventure golf course and outdoor theatre and new landscaping. Retaining existing pitch and putt golf course to the east of the site at Mill Rythe Holiday Village, 16 Havant Road, Hayling Island, PO11 0PB

Away Resorts have been granted planning permission for the proposed re-development of Mill Rythe Holiday Park. As part of the permission a number of conditions have been imposed. Condition 14 of this permission relates to the drainage of the site. This statement aims to address the surface water element of condition 14. The condition reads as:

No development shall commence on site until details of a scheme for foul and surface water drainage has been submitted to and approved in writing by the Local Planning Authority. Such details should include provision for all surface water drainage from parking areas and areas of hardstanding. Where a SUDS scheme is to be implemented, the drainage details submitted to the Local Planning Authority should:

- i) Specify the responsibilities of each part for the implementation of the SUDS scheme*
- ii) Specify a timetable for implementation*
- iii) Provide a management and maintenance plan for the lifetime of the development. This should include the arrangements for adoption by any public authority or statutory undertaker and any other arrangements to secure the operation of the scheme throughout its lifetime*

The proposal is for the re-development of the existing holiday park. It is noted that the overall impermeable area across the site will decrease once the site has been re-developed. Therefore the run-off post-development will be lower than the pre-development runoff.

The site at present is low lying and surrounded by tidal flood defences, as such, water falling on to the site runs directly into the drainage ditch to the north. The discharge is to coastal water as such there is no increased flood risk to third parties or the site itself. The filter drain/conveyance trench will provide additional storage and filtration over and above that currently in place on site. It is noted that this was an appropriate method for the surface water drainage related planning condition for part of the site under planning reference APP/11/01080.

Due to the low lying nature of the site, it is likely that the groundwater is close to the surface. Surface ponding has been noted on previous visits to site (Feb 2011) and in addition to this, according to the Cranfield University National Soil Map the site is described as "loamy and clayey soils of coastal flats with naturally high groundwater", thus providing low permeability. It is not recommended to use a soakaway based system due to the inability for the runoff to infiltrate the ground.

Therefore it is proposed that a drainage system which utilises a conveyance trench as a means of attenuation is used within the re-development. This will offer a slight degree of infiltration as well as water quality benefits.

It is proposed to install the conveyance trenches adjacent to the roadways towards the existing ditch to the north. New discharge points will discharge flows into the existing ditch which feeds into an onsite private pond/lake to the east with discharge to coastal waters. This is the anticipated receptor of the existing surface water onsite at present.

It will be the responsibility of the developer to ensure that the surface water drainage scheme is implemented.

Timetable for Implementation

Construction works are to take place in such an order that the risk of pollution and overland flow incidences' are kept to a minimum.

Construction run-off is usually heavily laden with silt, which must not be allowed to block or clog the infrastructure during construction.

Gullies and other formal drainage infrastructure are to be fitted with suitable screens, and silt traps to be regularly inspected and emptied when necessary.

Once the works are complete all parts of the system are to be checked that they meet the design requirements, any sediments or construction by-product must be removed to prevent loading on downstream infrastructure once screens and or other temporary measures are decommissioned.

The proposed drainage systems will be implemented prior to the occupation of the proposed re-development.

Management and Maintenance Plan

The proposed drainage systems will remain private and will be operated and maintained by the site owner.

Regular inspection and cleaning of the drainage infrastructure, including guttering, down-pipes, trenches and outfalls, should be carried out frequently to prevent build-up of silt and debris which will reduce the system conveyance capacity.

Visual inspection should ideally be carried out after any heavy rainfall event during the first year of operation, then six-monthly after that. Particular attention should be paid during the autumn months when leaf litter and other dead plant material may cause obstruction.

Routine inspection of the trenches should occur to ensure its volume is maintained. Silt/debris removal may be needed from time to time.

Any issues or failures identified with the system should be rectified immediately by a suitable contractor, observing suitable working practices and following the guidance and procedures as identified above.

I hope the above is clear and please do not hesitate to contact me should you have any further queries.

Yours sincerely

For and on behalf of Nijhuis H₂OK Ltd



Hannah Graham

Team Leader – Flood Water Management

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 - THE ACTIVITIES REQUIRED TO CONSTRUCT THE WORK, SHOWN ON DRAWINGS CLEARLY MARKED FOR CONSTRUCTION, MAY BE SUBJECT TO THE PROVISIONS OF THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015. THE CONTRACTOR AND CLIENT MUST ENSURE THAT THEY ARE ADEQUATELY CONVERSANT WITH THESE REGULATIONS AND THAT THE APPROPRIATE PROCEDURES REQUIRED UNDER THE REGULATIONS ARE OBSERVED AT ALL TIMES.
 - DESIGN RISK ASSESSMENT
- A RISK ASSESSMENT RELATING TO POTENTIAL HAZARDS ASSOCIATED WITH THE CONSTRUCTION, OPERATION AND DEMOLITION OF THE WORK DESCRIBED WITHIN THIS DRAWING, IN SO FAR AS IT HAS BEEN DESIGNED BY NIJHUIS H2OK LTD, HAS BEEN UNDERTAKEN. RISKS SO IDENTIFIED HAVE BEEN ELIMINATED BY DESIGN WHEREVER PRACTICABLE. THE SITUATION WITH REGARD TO RESIDUAL RISKS IS AS FOLLOWS:
- THE WORK IS AT AN EARLY PLANNING STAGE AND IS NOT SUFFICIENTLY ADVANCED TO ALLOW A MEANINGFUL ASSESSMENT OF RISKS TO BE UNDERTAKEN AT THIS TIME.

KEY

- SITE BOUNDARY
- SW SEWER (TO BE CONSTRUCTED PRIOR TO COMMENCEMENT OF ANY EARTHWORKS)
- PRIVATE CONVEYANCE TRENCH (TO BE CONSTRUCTED PRIOR TO COMMENCEMENT OF ANY EARTHWORKS)
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED PRIVATE SURFACE WATER POLYPROPYLENE INSPECTION CHAMBER (475ø P.P.I.C.)
- OVERLAND FLOW ROUTES

NOTE:

A TEMPORARY BUND SILT CONTROL BARRIER SHOULD BE SET UP AROUND THE DOWNSTREAM PERIMETER OF THE SITE / PHASE PRIOR TO CARRYING OUT EARTH WORKS TO ENSURE RUN-OFF DOES NOT CARRY SILTS OR TOP SOIL MATERIAL OFF THE SITE

POST INSTALLATION OF SILT FENCE THE CONVEYANCE TRENCH, SURFACE WATER SEWERS AND ALL OTHER SURFACE WATER INFRASTRUCTURE TO BE CONSTRUCTED PRIOR TO FURTHER WORKS.

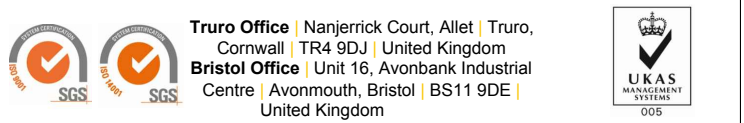
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DATE	DRWN	CHKD	APPR	REV	NOTES
PROJECT MANAGER:-					HANNAH GRAHAM
ASSISTANT:-					-
DRAWN DATE:-					AUGUST 2017
SCALE & SHEET SIZE:-					1:500@ A1

PRELIMINARY



- Waste to Value (AD/Biogaz)
- Industrial Effluent Treatment
- Sewage Treatment
- Flood Risk Management/SUDS
- Design Consultancy
- Service and Maintenance

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CLIENT

A & M ARCHITECTURAL PARTNERSHIP
LLP

PROJECT

MILL RYTHE HOLIDAY PARK

DRAWING TITLE

SURFACE WATER DRAINAGE

PROJECT No.	DRAWING No.	REV.
J-11713	3001	A

SURFACE WATER DRAINAGE STATEMENT

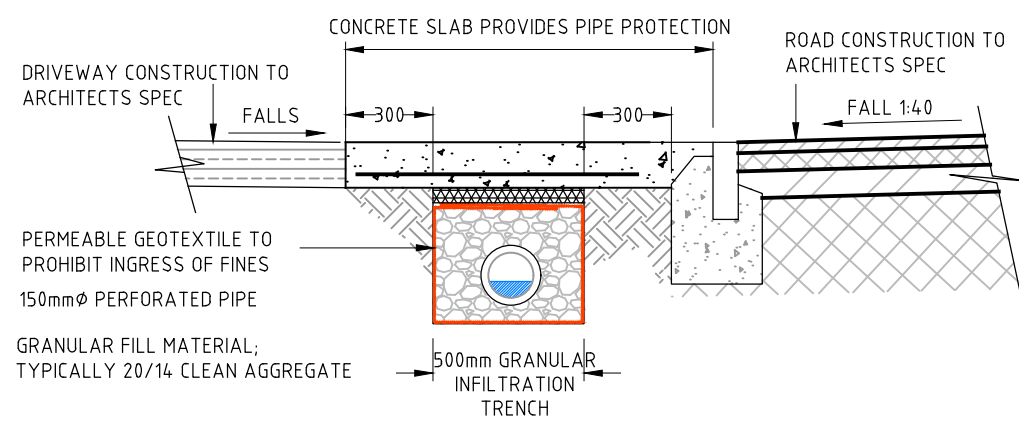
THE SITE AT PRESENT IS LOW LYING AND SURROUNDED BY TIDAL FLOOD DEFENCES, AS SUCH, WATER FALLING ON TO THE SITE RUNS DIRECTLY INTO THE DRAINAGE DITCH TO THE NORTH. THE RE-DEVELOPMENT RESULTS IN AN OVERALL DECREASE IN IMPERMEABLE AREA AND WILL NOT INCREASE THE PRE-DEVELOPMENT RUNOFF ROUTE. IN ADDITION TO THIS, THE DISCHARGE IS TO COASTAL WATERS, SO NO INCREASED FLOOD RISK TO THIRD PARTIES OR THE SITE ITSELF IS ANTICIPATED. THE FILTER DRAIN/CONVEYANCE TRENCH WILL PROVIDE ADDITIONAL STORAGE AND FILTRATION OVER AND ABOVE THAT CURRENTLY IN PLACE OF THE SITE.

DUE TO THE LOW LYING NATURE OF THE SITE, IT IS LIKELY THAT THE GROUNDWATER IS CLOSE TO THE SURFACE. SURFACE PONDING HAS BEEN NOTED ON PREVIOUS VISITS TO SITE (FEB 2011) AND IN ADDITION TO THIS, ACCORDING TO THE CRANFIELD UNIVERSITY NATIONAL SOIL MAP THE SITE IS DESCRIBED AS "LOAMY AND CLAYER SOILS OF COASTAL FLATS WITH NATURALLY HIGH GROUNDWATER", THUS PROVIDING LOW PERMEABILITY.

IT IS NOT RECOMMENDED TO USE A SOAKAWAY BASED SYSTEM DUE TO THE INABILITY FOR THE RUNOFF TO INFILTRATE THE GROUND.

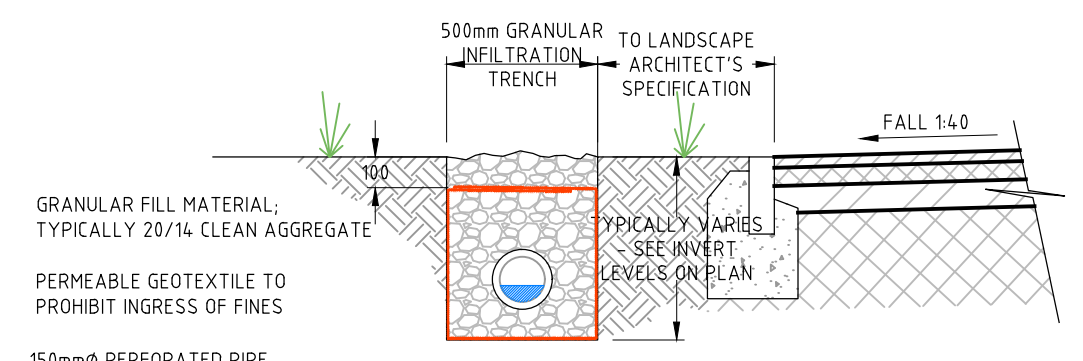
THEREFORE, IT IS PROPOSED THAT A DRAINAGE SYSTEM WHICH UTILISES A CONVEYANCE TRENCH AS A MEANS OF ATTENUATION IS USED WITHIN THE DEVELOPMENT. THIS WILL OFFER A SLIGHT DEGREE OF FILTRATION AS WELL AS WATER QUALITY BENEFITS.

IT IS PROPOSED TO INSTALL THE CONVEYANCE TRENCH ADJACENT TO THE ROAD, RUNNING DOWNHILL TOWARDS THE EXISTING DITCH TO THE NORTH. NEW DISCHARGE POINTS WILL DISCHARGE FLOWS INTO THE EXISTING DITCH WHICH FEEDS INTO AN ONSITE PRIVATE POND TO THE EAST WITH DISCHARGE TO COASTAL WATERS.



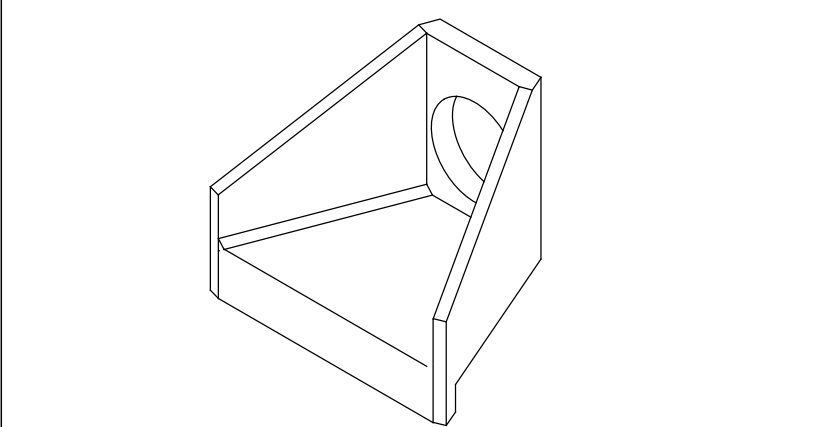
SECTION THROUGH TYPICAL INFILTRATION / CONVEYANCE TRENCH CROSSING BENEATH DRIVEWAY

1:25



SECTION THROUGH TYPICAL INFILTRATION / CONVEYANCE TRENCH

1:25



SPILLWAY HEADWALL (DRAINAGE OUTFALL)

1:25



MAIN
ENTRANCE

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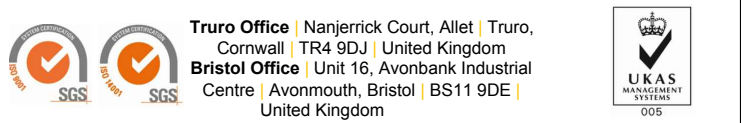
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