

RAINWATER, FOUL SEWERAGE & UTILITIES ASSESSMENT:

Erection of 20 pre-fabricated glamping pods and associated footpaths, retrospective alterations to previously consented raised timber decking adjacent to driving range with addition of pergola and associated alterations, and erection of pergolas over clubhouse rear patio

Blacknest Golf & Country Club, Frith End Road, Blacknest, Alton, Hampshire, GU34 4QL

Applicant : 360 Beech Limited

Ref: 23-2675/FULPP/CF/FSU/V2

Date: November 2022— revision A dated 25th April 2023—revision B dated 15/02/2024



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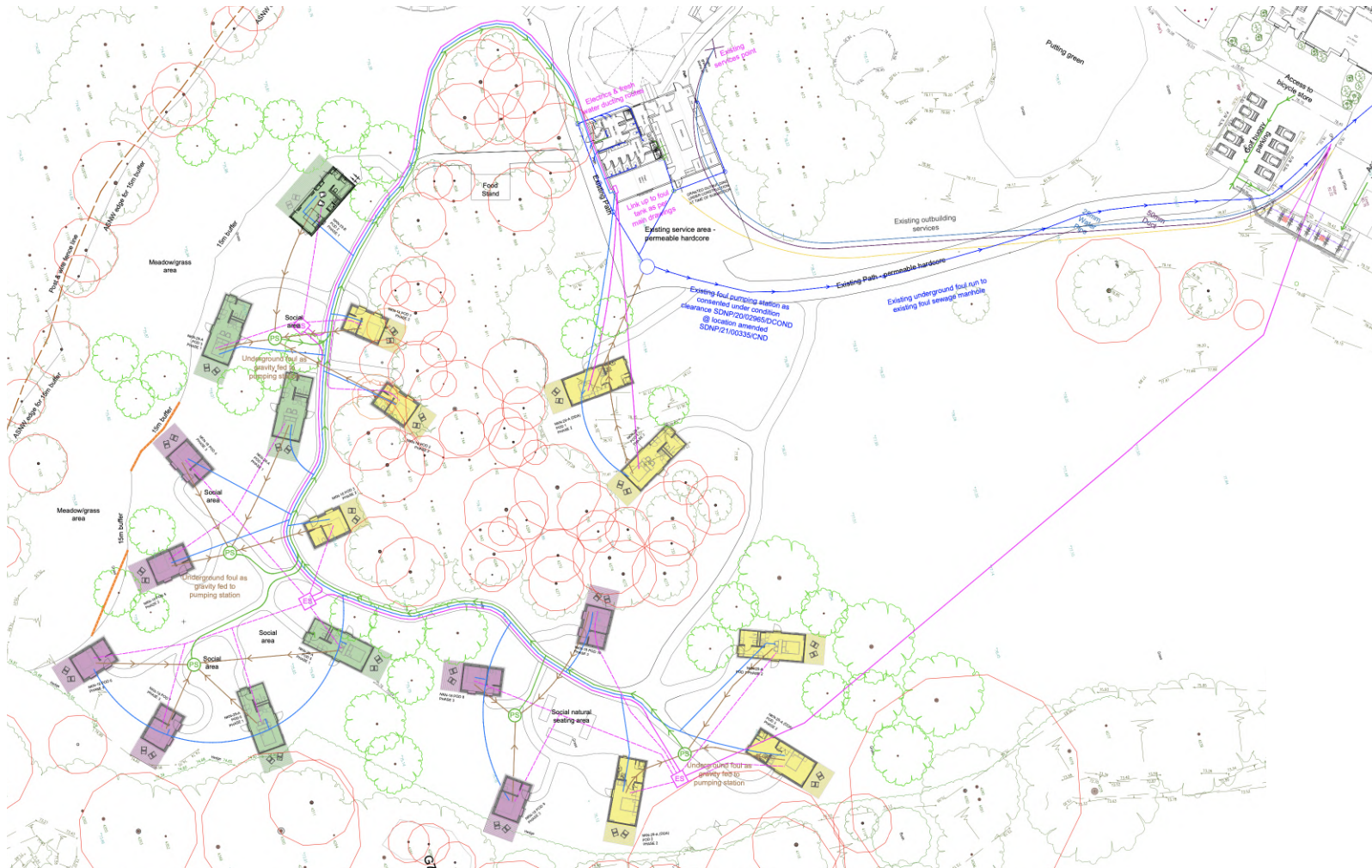


Figure 1: Site plan showing proposed and existing foul sewerage and utilities runs (NTS)
 - refer to drawing 20-2487-PX-02

RAINWATER DISPOSAL ASSESSMENT

Pergolas and raised decking driving range:

The pergolas have fabric sails to provide shade and some protection from light rain, however, these do not hinder rainwater from continuing to dispose onto and infiltrating into the existing ground conditions below.

On the rear patio by the clubhouse, surface water continues to dispose as existing onto the paving slab patio where it infiltrates or flows into the adjacent planters and grass to dispose through natural infiltration.

For the driving range, rainwater can travel through the pergolas and the gaps between the timber decking to continue to infiltrate into the ground/soil below, which as existing is covered in a geotextile membrane covered in bark.

Cabins and pathways:

The cabins are pre-fabricated modules that sit above ground. **They are non permanent and are able to be supported on EasyPads or helical screw piles (ground screws). They do not require concrete foundations or a concrete base and are moveable.** A permeable hardcore scalplings base of approximately 100-150mm deep is recommended for the cabins, especially those using EasyPads to provide a stable base to allow them to be level. This consists of a geotextile membrane with compacted hardcore/scalplings above, which is a permeable construction.

The cabins have a parapet flat roof with a downpipe that allows rainwater to be collected and transferred to the exposed permeable hardcore/ground below the cabins to allow the rainwater to naturally filtrate away as per the existing situation and previous consent.

Whilst the roofs are an 'impermeable' area, due to the nature of construction the cabins do not reduce natural infiltration, and no soakaways are considered necessary as the infiltration capacity of the land beneath the cabins is not decreased and remains exposed to the air.

The pathways, including the low-dig pathway areas, are to be formed from self-binding gravel, which consists of a 100mm thick permeable sub-base and 25-50 mm compacted self-binding gravel over. Self-binding gravel lets some water through but is not fully permeable, however, the ground underneath the path remains permeable so heavy rainfall falling onto the paths moves to the sides of the paths and then infiltrates into the ground below, light to moderate rainfall can infiltrate through the paths. The other paths are to be formed from 75-100mm wood/bark chippings over a 50-75mm scalplings layer, which is a fully permeable construction.

It is considered that no further mitigation is required for the paths as they do not block the ground below from infiltration of surface water.

FOUL DRAINAGE:

Pergolas and raised decking driving range:

The pergolas and raised decking associated with the clubhouse and driving range have no foul drainage requirements.

Cabins and pathways:

All 20 cabins have shower rooms which require foul drainage disposal. This is not considered an increase in disposal compared to the original consent, as it reduces demand on the sanitary facilities in the shared facilities building.

As existing the clubhouse utilises a sewerage pumping station to pump the sewage underground along the driving range boundary, and terminates at the pumping station at Binsted Road. This pumping station has been checked by a utility company as suitable for the current uses and the minor additional capacity for these proposals.

Planning condition clearance consent SDNP/20/02965/DCOND discharged the foul drainage condition attached to SDNP/18/03009/FUL, approved at appeal, to allow use of an attenuation storage tank with pump to connect the tipis and kitchen/WC outbuilding with the existing foul sewage pumping station. The foul pump station's location was amended by application SDNP/21/00335/CND.

The approved pumping station is located outside of the tree groups' RPAs, and is linked to the existing foul sewage manholes in the car park, which in turn flow via gravity into the main private pumping station through the site's existing foul network.

The previously consented attenuation tank has been installed and in use by the approved tipis and facilities outbuilding. The utilities company which specialises in pumping stations has confirmed that the installed foul attenuation system has suitable capacity and pipework sizes to attenuate the foul drainage from the tipis' bar, outbuilding kitchen, WCs and also the foul waste from the proposed cabins.

The additional foul waste from the cabins is standard kitchenette sink and bathroom waste.

These proposals are to use the previously consented pumping station (appendix A), with associated underground pipework connections. Due to the ground levels which fall away from the installed pumping station, only 2 cabins feed into the existing pumping station via gravity. The remaining 18 cabins have 5 mini underground pumps to gather foul waste and pump it up to the main pumping station, which also helps reduce the depth of trenches required between pods and the main pumping tank.

These mini pumps are to be the 'Xylem Flygt micro series' outdoor underground pumps to match the manufacturer of the main pump station for this area.

Refer to plan 20-2487-PX-02 and 20-2487-PX-05 for locations of mini sub-pumps to push foul waste to the main attenuation tank and also trench runs outside of RPAs.

Refer to Arboricultural report by SMW (Tree) Consultancy Ltd for details on trenching and tree protection requirements.

FOUL SEWERAGE—MAINTENANCE & MANAGEMENT PLAN:

The ultimate responsibility for the long term maintenance of the private additional pumping station and mini sub-pumps is with the land owner and management company, Blacknest Golf and Country Club.

All the new foul drainage pipework and equipment is to be installed with full consideration to long term maintenance.

Maintenance for the system is as follows:

- Prior to start of season and use of outbuilding facilities, and cabins if they have been unoccupied for over 1 month:
- - Each foul water disposal point is to be visually checked for blockages, inspection points for foul pipes and new pumping stations to be lifted to check for blockages, and clean water to be flushed through all foul water disposal points to ensure no blockages and pumps working correctly.
- - If blockages or accumulation found, to be removed, cleaned through and checked again.
- All inspection points resealed once checks completed.
- During season of use:
- - Regularly check that each foul sewage disposal point is disposing without issues, aka general checks in WCs and kitchen sinks prior to start of each event, and checks of each cabin at each change over, or at least at minimum inline with Legionella flush through

and testing requirements.

- Once season of use has ended for all outbuildings, including if cabins are closed over a period of time:
- - Open up inspection points and with one person watching and one active, flush clean waste water through each foul drainage disposal point to ensure each foul pipe run is clear of blockages and left over waste water, and check pumping station has emptied itself of 'dirty' sewage water, leaving only 'clean' water in the pumping station;
- - Follow manufacturer's details for how to leave the pumping stations in safe mode when not in use for long periods of time;
- - Ensure all inspection covers are closed up, all foul drainage disposal points are clear.
- Longer term maintenance;
- - Follow manufacturer's instructions for cleaning and maintenance of pumping station and mini sub-pump stations.

WATER SERVICES:

A 50mm water mains serves the existing Golf Course and Clubhouse terminating at the Greenkeepers shed where a 5000 gal. storage tank is located, which also provides an automatic watering facility to the course.

As part of the tipi and facilities outbuilding proposals, a 25mm water pipe and 50mm duct was installed to the North side of the tipis connecting to the main water source. A utility company has checked the existing system and confirms there is enough capacity to extend this to service the cabin proposals.

All 20 of the cabins requiring water are to be connected off this 25mm water pipe through underground trenches that are run in separate ducts alongside the foul drainage trenches to minimise number and size of trenches. This will provide a constant supply of fresh water to the cabins for their shower rooms. Refer to drawing 20-2487-PX-02 & 20-2487-PX-05.

ELECTRICAL SERVICES:

The existing 3 phase main supply's substation is position by the driveway near to the bridge on site. This has now been upgraded to increase the site's supply, to provide for these proposals and improve general supply to the site. As part of

these works a 200m armoured cable 35mm 5 core is proposed to provide electricity to the previously consented facilities building as per the consented trenches in SDNP/20/02965/DCOND. This will upgrade the amount of power in this location to serve the cabins too.

All 20 cabins are to take electrical power from the existing electrical incoming point by the tipis and facilities outbuilding, using the same trench routes as the fresh water and foul drainage to reduce number of trenches.

3 mini electrical sub-stations are proposed by the groups of cabins, to provide a point of servicing, and location for shared wifi and security feature requirements.

Refer to Arboricultural report for details on trenching and tree protection requirements.

TRADE WASTE DISPOSAL:

Existing trade effluent consists of waste from kitchen sinks, shower rooms, and changing rooms that is suitable for disposal via the foul sewer system, and other trade waste consists of food and drink waste which is disposed of via commercial waste bins that are privately collected on a regular basis. It is not proposed to change the type of waste produced by the proposals.

As existing there is a large uncovered yard that stores several 1100L and 360L commercial refuse bins, which are collected on a regular basis by a private waste company, these are split into refuse, recycling and food waste bins.

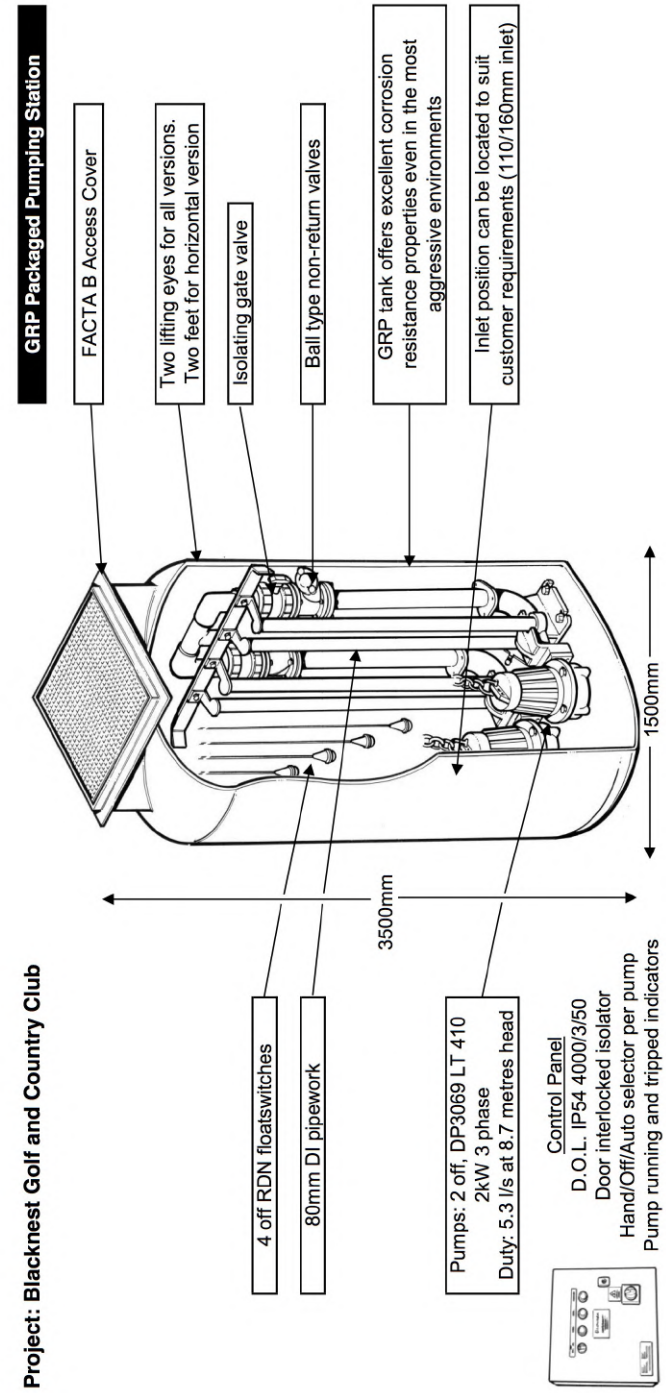
The cabin proposals will not generate any significant amount of trade waste apart from foul sewage for the new en-suites and laundry, with the majority of laundry cleaning carried out off site. There will be minimal other waste produced by these proposals, with a minor increase in kitchen and bar waste for the additional meals and drinks prepared for the cabin guests.

Bin waste from the kitchenettes and en-suites will be collected from the cabins on a regular basis by the cleaners, depending on how long they are occupied ie. next day for single night occupation, and every other day for longer stays ie. 3 times in a week long occupation, or more frequently where needed.

This waste is disposed of by the cleaners into the existing trade waste bins, which are emptied regularly with ability to add in extra collections when needed.

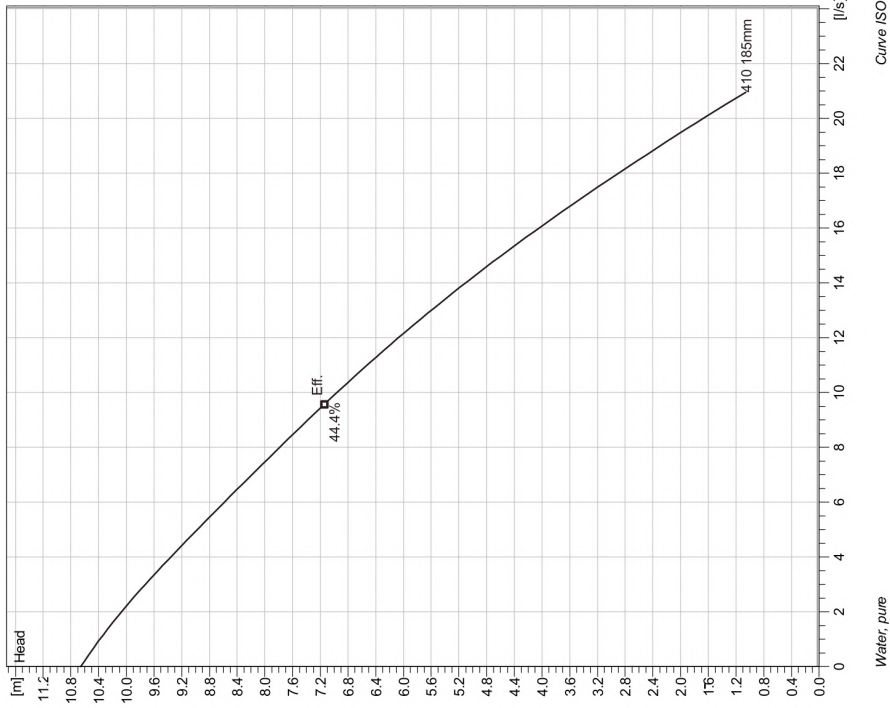
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APPENDIX A





DP 3069 LT 3~ 410
Technical specification

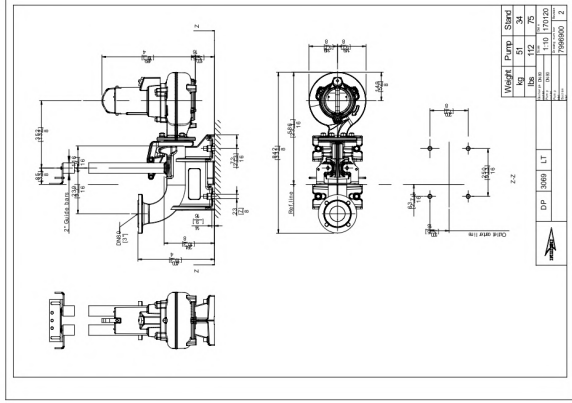


Note: Picture might not correspond to the current configuration.

General
 Portable pumps with vortex impellers ideal for applications in which the water or liquid contains concentrations of abrasives when clogging problems can occur.

Impeller
 Impeller material Grey cast iron
 Discharge Flange Diameter 80 mm
 Suction Flange Diameter 185 mm
 Impeller diameter 185 mm
 Number of blades 6

Installation: P - Semi permanent, Wet



Motor #
 D3069.180 13-10-4BB-W 2KW Standard

Stator variant 1
 Frequency 50 Hz
 Rated voltage 400 V
 Number of poles 4
 Phases 3~
 Rated power 2 kW
 Rated current 4.9 A
 Starting current 19 A
 Rated speed 1355 rpm
 Power factor 0.85
 1/1 Load 0.77
 3/4 Load 0.64
 1/2 Load
 Motor efficiency 69.5 %
 3/4 Load 72.2 %
 1/2 Load 70.9 %

Configuration