

Fisher German LLP Severn Trent Water Limited

Poolend Borehole Pumping Station, Macclesfield Road, Poolend, Leek, ST13 8SG

Planning, Design & Access Statement

on behalf of:	Severn Trent Water Limited
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Severn Trent Water

Severn Trent Water Limited (STWL) is a regulated business with statutory responsibilities for the provision of water and sewerage services to over eight million people in an area of 21,000 square kilometres stretching from the Bristol Channel to the Humber, and from mid-Wales to the East Midlands.

STWL is currently implementing its Asset Management Plan for AMP6 (April 2015 to March 2020), which is the mechanism by which the regulator OFWAT defines in a five year capital expenditure programme for all water companies. Investment during the AMP6 period is in response to a number of key drivers. These drivers include providing a continuous supply of quality water, dealing effectively with waste water, and promoting an effective regulatory regime.

Scope of project/background

This statement has been prepared on behalf of STWL to support an application for the change of use of land for the provision of a site extension to the existing Poolend Borehole Pumping Station, in order to provide a new borehole and associated kiosk. To provide access to this new borehole, a gravel access track is required. A filtration kiosk will be required on the existing operational site during the borehole construction works.

This application also includes amendments to the previously approved planning application (ref: SMD/2015/0271), to include the repositioning and amendment of detailing of the treatment kiosk and fencing. There are numerous additional changes, however these are considered to comprise permitted development, as detailed later in this report.

STWL/external driver

Severn Trent Water Limited (STWL) is undertaking a programme of rehabilitation works at their Poolend borehole pumping station (BPS) near Leek, Staffordshire.

Poolend BPS comprises two boreholes (BH1 and BH2), operated as Duty/Standby. BH1 and BH2 were completed in 1934 and 1949 respectively. They are towards the end of their expected generic asset life (GAL) of 80 years and in the case of BH2 in excess of the expected life. CCTV and geophysical evidence (from surveys undertaken in 2012) indicates that Poolend BH1 is in a very poor condition, with extensive and severe encrustation and corrosion. Failure of the structural integrity of the borehole is considered to be the key risk at the source.

Although there are currently no persistent turbidity or other water quality issues, the poor structural state of the borehole means that these issues are more likely to occur.

Options appraisal for BH1 has concluded that the preferred solution to the structural integrity risks at the source is to replace BH1 with a new borehole and backfill the existing borehole. The replacement borehole will be a direct replacement of BH1, needing to have a yield of 10 MI/d.

Site location/description

The proposed development is located within and adjacent to the existing operational boundary of Poolend BPS.

The majority of the existing operational site comprises hardstanding. The proposed area for the site extension is currently woodland and is already within the ownership of STWL.

The site is located approximately 2.4km north west of Leek and 11.9km south east of Congleton.

The perimeters of the land owned by STWL are bounded by a stone wall and 1.8m high holly green metal fence to the eastern boundary and a post and rail fence to the north western boundary. A newly installed 1.8m high holly green metal fence encloses the trees to the south western boundary.

Macclesfield Road runs alongside the eastern boundary of the site. To the north west and south west of the land owned by STWL, is agricultural land with a public right of way running alongside the south western boundary of STWL's owned land.

The site is situated within the Green Belt and a Special Landscape Area, as defined by the Staffordshire Moorlands Proposals Map.

The northern half of the site is flat in topography, however it falls away to the south towards the proposed site extension. The batter supporting the flat area of the operational site was built as part of the scheme permitted under application ref: SMD/2015/0271.

Existing use

The site currently comprises the operational area of Poolend borehole pumping station and land to the south, which is owned by STWL, but does not form part of the operational area.

Land to the south of the existing operational site comprises numerous scots pine trees.

Existing operational traffic movements (non-construction) comprise:

- Daily sampling visit (small van)
- Weekly ops visit (van)
- Monthly chemical delivery (large truck)

Planning history

A planning application (ref: SMD/2013/0051) for the installation of a UV kiosk at Poolend BPS was approved on 24th April 2013. This kiosk is located upon the existing operational site, to the south west of the existing access gates, as shown on plan ref: A6W11303-CA00021 Rev A.

A planning application (ref: SMD/2015/0271) for the 'extension of borehole pumping station site and provision of plant building, salt saturator, brine waste tank, chemical loading cabinet and other plant and equipment, hardstanding areas for vehicles, security fences/barriers/gates and land remodelling' was approved on 31st July 2015. The approved layout plan, ref: A6W11410-PA00102-D, has been included within Appendix A of this report, for reference only.

Proposed development

It is proposed to change the use of land immediately to the south of the existing operational site at Poolend to extend the operational site and provide a new borehole. New infrastructure will be provided in association with the provision of the new borehole. This application will also seek to regularise some changes to the previously consented application (ref: SMD/2015/0271).

The works which form part of this planning application include the following:

- Change of use of land for new borehole
- Provision of filtration kiosk on existing operational site

- Provision of borehole kiosk on proposed site extension
- Amendment to location and detailing of treatment kiosk
- Provision of gravel access track, outside the existing operational site, leading to new borehole
- Relocation of fencing on existing operational site and replacement of fencing on proposed site extension, where is fronts a highway, as it exceeds 1m in height.

There have been numerous alterations made to the previous planning consent (ref: SMD/2015/0271) and some additional assets proposed, which are considered permitted development. They are as follows:

- Structures not above ground level permitted under Schedule 2, Part 13, Class A(a) of the Town and Country Planning (General Permitted Development) (England) Order 2015:
 - Air valve
 - Valve chamber
 - o Wet well
 - o Manholes
 - Chemical delivery area
 - Extent of tarmac hardstanding within existing operational site
 - o Gravel access track and surfacing within existing operational site
- Kiosks permitted under Schedule 2, Part 13, Class A(e) of the Town and Country Planning (General Permitted Development) (England) Order 2015:
 - PO4 dosing kiosk
 - o Caustic dosing kiosk
 - Hypochlorite dosing kiosk
- Above ground structures permitted under Schedule 2, Part 13, Class A(g) of the Town and Country Planning (General Permitted Development) (England) Order 2015:
 - Amendment to location and detailing of safety shower
 - o Landscaping on existing operational site
 - Provision of ramps
 - Provision of bollards
 - Slight reprofiling of land
- Fencing and gates permitted under Schedule 2, Part 2, Class A(a) of the Town and Country Planning (General Permitted Development) (England) Order 2015:
 - All relocation and replacement fencing, not fronting the highway will be less than 2m in height.

Construction is due to start at the end of November 2016. The drilling platform is due to be installed from 11th January 2017 with drilling equipment to begin arriving from 20th February 2017. The borehole is due to be drilled from 27th February 2017 to 25th April 2017; during which time a drilling rig will be left on site, working 24/7 to drill the borehole. All activity associated with the new borehole are due to be complete by 6th October 2017.

Amount and scale

The total area of the red line boundary area is 4473m²

The relocated treatment kiosk measures the same as previously consented at 18m in length x 10m in width x 6.25m in height, as shown on plan ref: A6W11303-PT00103 Rev A.

The proposed filtration kiosk will measure 16m in length x 6m in width and 4.5m in height. This kiosk will be laid on a concrete slab measuring 0.075m above ground level, as shown on plan ref: A6W11303-PA00121Rev A.

The proposed borehole kiosk will measure 4.5m in length x 3m in width x 2.8m in height. This kiosk will be laid on a concrete slab measuring 0.078m above ground level, as shown on plan ref: A6W11303-PA00122 Rev A.

The proposed gravel access track outside the existing operational boundary, leading to the new borehole, will have a gradient of 1 in 6.

The security fencing around the whole of the proposed site is to measure 1.8m in height.

Layout

The layout of the proposed development is identified on plan ref: A6W11303-CA00021 Rev A, submitted in support of this planning application.

The treatment kiosk, previously consented as part of application ref: SMD/2015/0271 has been relocated slightly to the south east, still within the existing operational boundary.

The filtration kiosk is to be located to the north west of the existing operational site. The existing power lines will be relocated below ground and a new pylon positioned to the west of the proposed filtration kiosk to create room for the filtration kiosk.

The borehole kiosk is to be located just outside the existing operational site boundary to the south. The access track will lead from the hardstanding, within the existing operational site boundary, to the borehole kiosk. A laydown area has been provided for the drilling rig to be located.

The security fencing is to be situated around the full site, including both the existing and proposed operational site areas. Gateways are to be provided to allow access into the site to the east and into the landscaped areas to the west, as shown on plan ref: A6W11303-CA00021 Rev A.

Appearance

The treatment kiosk comprises a steel portal frame and coloured Holly Green (BS 4800 Code 14-C-39). The kiosk has a double personnel door on the southern elevation and a single personnel door on the northern elevation. A flue pipe is provided on the north west corner of the treatment kiosk. Two cowls are located on the western elevation and a two vents; one on the eastern elevation and the other on the northern elevation.

The proposed filtration kiosk will be constructed from glass reinforced plastic (GRP) and coloured Holly Green (BS 4800 Code 14-C-39). The kiosk has a double personnel door on the southern elevation and a single personnel door on the eastern elevation. Two cowls are located on the eastern elevation; one upper and one lower. Another two cowls are located on the western elevation; again, one upper and one lower. There will be a 10 lux security light located to the upper right of the double personnel door, on the southern elevation.

The proposed borehole kiosk will be constructed from glass reinforced plastic (GRP) and coloured Holly Green (BS 4800 Code 14-C-39). The kiosk has a double personnel door on the western elevation and a single personnel door on the northern elevation. Two cowls are located on the southern elevation; one upper and one lower. Another two cowls are located on the northern elevation; again, one upper and one lower. There will be a 10 lux security light located to the upper right of the single personnel door, on the northern elevation.

The proposed access track leading to the borehole will be constructed using gravel. The remainder of the proposed site extension will be laid with grass.

The proposed fencing and gates will be same as existing, which is Holly Green in colour.

Access

Traffic movements for the purposes of the construction are expected to comprise the following:

- Daily delivery of fuel (medium tanker) during drilling and pump testing (3 months)
- Daily delivery of materials (small truck) probably throughout scheme
- Occasional large deliveries to site on arctic lorry, such as; drilling rig, kiosk deliveries.
- Additional visitors to site (daily in cars/vans).

Existing operational traffic movements (non-construction) comprise:

- Daily sampling visit (small van)
- Weekly ops visit (van)
- Monthly chemical delivery (large truck)

The proposed development comprises the reduction in hardstanding from the previously approved planning consent, ref: SMD/2015/0271 and the provision of a new gravel access track to provide vehicular access to the new borehole.

Ecology

Preliminary Ecological Appraisal

A Preliminary Ecological Appraisal was carried out by Mott MacDonald Bentley in June 2016 to identify any potential ecological constraints and has been included as part of this planning application submission.

The report identifies that there are no statutory sites and only one non-statutory sites within 2km of the site. Despite the close proximity of the non-statutory site, the proposed construction works are not expected to impact any of them, as the zone of influence of the likely impacts during construction and operation are likely to be limited to the curtilage of the site or very close to the site.

There are a number of habitat types within the site but it mainly consists of bare ground and hardstanding, with scattered coniferous trees in the southern sections and along the Site boundaries.

The report refers to the presence of Himalayan balsam to be present on the site, and for the potential of nesting birds and badgers using the site. Precautionary recommendations have been made with regards to bats and lighting of the Site.

Spreading of Invasive Species

During a site walkover of the site in June 2016 four plants of Himalayan Balsam were identified by an ecologist at the locations displayed with a number 5 on plan ref: 366312PH34-ENV-DR-XX-001.

These four plants were not in flower so were dug up and left in-situ. Daily inspections of the area were then carried out to ensure any further growth could be terminated.

An Ecology Impact Control Sheet has been submitted as part of this application which providesfurther detail the finding of Himalyan Balsam and a method statement for control/good practice during further works.

Trees

None of the trees within the site are protected by a Tree Preservation Order nor affected by a Conservation Area.

An Arboricultural Survey Report has been carried out by Mott MacDonald in July 2016. This report identifies that there are 52 individual trees within the land owned by STWL. One of these is a Category A tree, 36 are Category B trees, 13 are Category C trees and two are Category U trees and require removal.

The provision of the new borehole and filtration kiosk will require a total of 21 individual trees to be removed as they are in direct conflict with the scheme. Of the trees identified for removal, 15 have been assessed as Category B (trees of moderate quality), 5 have been assessed as Category C (trees of low arboricultural quality) and 1 tree has been assessed as Category U (tree to be removed on grounds of health/condition). Their removal will not significantly impact the landscape or arboricultural value of the area provided that replacement mitigation planting after the Scheme is carried out and the correct barrier protection is installed to protect the remaining trees.

It is advised that 11 individual trees (19, 20, 21, 22, 23, 24, 25, 35, 45, 46 and 47) should be protected with temporary protective barrier in accordance with BS5837:2012 to stop any encroachment into the RPA or crown area of the trees. All of the remaining trees along the southern boundary are adequately protected by the presence of the new inner fenceline around the main infrastructure of the site and adjacent to the access road.

Individual protection for the above ground structure of 6 individual trees (1, 10, 11, 12, 13 and 15) has also been specified to enable construction of the south central area of the site. This protection is to take the form of a robust plywood box built around each trunk (360 degrees) to prevent mechanical/physical damage.

Landscaping

As part of planning application ref: SMD/2015/0271, the trees along the western boundary of the existing operational site were proposed to be removed.

During the construction works to implement the previous planning consent, it became apparent that it was possible to reduce the extent of the hardstanding and retain the majority of the boundary trees to the west of the site.

As part of this application, further tree removal is proposed in the centre of the proposed site extension area, however replacement planting is proposed around the existing and proposed operational site areas to improve the boundary planting. Native evergreen species have been proposed along the south western boundary, as detailed further within the landscaping plan and schedule submitted with this application (ref: A6W11303-PB00123 Rev A), to provide all year screening of the site from nearby properties and the public right of way. Two additional oak trees have been provided on the north eastern boundary, to fill the gaps between the existing scots pine trees, to screen the site from the highway.

Flood risk

The site is located within Flood Zone 1, which is not susceptible to flooding from Rivers and Seas, as shown in Figure 1 below. Further, given the site area under 1 hectare, a flood risk assessment is not required in support of this application.

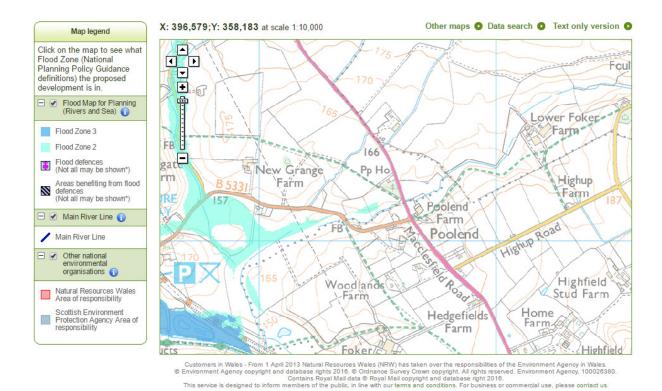


Figure 1 – Extent of flood risk areas (Environment Agency online flood map for planning (rivers and seas), 2016)

Amenities

The nearest residential property is Poolend Farmhouse, located approximately 77m south east of the proposed site. The next nearest property is Lilac Cottage, located approximately 105m south of the proposed development.

Noise

No unacceptable noise is expected to be produced by the proposed filtration kiosk, borehole kiosk and borehole itself.

There will be a generator used to operate the drilling rig, during a period of two months. Acoustic barriers will be installed to the south west boundary of the site, next to the proposed borehole to limit the noise output from the site for this limited period.

Odour

No undue odour will be caused by the proposed development.

Lighting

Permanent motion sensored 10 lux lighting will be provided on the borehole kiosk and filtration kiosk. These lights will only be used by personnel when the site is visited at nightime, which is highly unlikely.

Temporary lighting will however be needed near the borehole whilst personnel are on site during construction when light is poor, for health and safety reasons. There will be eight temporary lighting units, comprising 100 lux lights. All lighting units will be facing towards the centre of the proposed site extension, towards the borehole location. Their exact locations can be seen on plan ref: A6W11303-PA00101 Rev A, submitted with this planning application.

Listed buildings

The nearest listed building is Grade II Listed Foulds Farmhouse, located approximately 1.1km north east of the proposed site. Due to distance between the proposed site and the listed property, it is not considered that the proposed development will negatively impact on any listed buildings in the locality or any other designated heritage assets.

Planning policy

Development proposals are required to comply with relevant development plan policies unless material considerations indicate otherwise. The following policies are considered pertinent to this proposal:

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was published in March 2012 and outlines the Government's planning policies for England. It identifies sustainable development as the key principle underpinning planning and highlights that there are three dimensions to sustainable development – economic, social and environmental. The document also outlines 12 'core planning principles' including securing high quality design; supporting a low carbon future, including the consideration of flood risk; taking account of the different roles and characters of different areas; and encouraging the effective use of land.

The following chapters and paragraphs from the NPPF are considered relevant to this proposal:

Paragraph 12 states proposed development that accords with an up-to-date Local Plan should be approved, and proposed development that conflicts should be refused unless other material considerations indicate otherwise.

Paragraph 14 identifies that a presumption in favour of sustainable development is at the heart of the NPPF, which should be seen as a golden thread running through both plan making and decision making.

Paragraph 79 iterates that the Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.

Paragraph 80 explains that Green Belt serves five purposes: to check the unrestricted sprawl of large built-up areas; to prevent neighbouring towns merging into one another; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns; and to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

Paragraph 81 goes on to say that once Green Belts have been defined, local planning authorities should plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

Paragraph 87 states as with previous Green Belt policy, inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

Paragraph 162 states that "Local Planning Authorities should work with other authorities and providers to: assess the quality and capacity of infrastructure forwater supply, waste-water and its treatment..."

National Planning Practice Guidance (NPPG)

The NPPG provides guidance on water supply, wastewater and water quality. It states that adequate water and wastewater infrastructure is needed to support sustainable development. A healthy water environment will also deliver multiple benefits, such as helping to enhance the natural environment generally and adapting to climate change.

Local Planning Policy

The relevant local planning policy comprises:

Staffordshire Moorlands District Council Core Strategy (2014)

Policy SS1a – Presumption in Favour of Sustainable Development

This policy states that planning applications that accord with the policies within the Core Strategy will be approved without delay, unless material considerations indicate otherwise. Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or
- Specific policies in that Framework indicate that development should be restricted.

Policy SS6c – Other Rural Areas Area Strategy

The policy requires the maintenance of the Green Belt within Staffordshire Moorlands and strict control will continue to be exercised over inappropriate development within the Green Belt allowing only for exceptions as defined by Government Policy.

Policy DC1 – Design Considerations

New development should be of high quality and add value to the local area, incorporating creativity, detailing and materials appropriate to the character of the area; be designed to respect the site and its surroundings and promote a positive sense of place and identify through its scale, density, layout, siting, landscaping, character and appearance; protect the amenity of the area, including residential amenity, in terms of satisfactory daylight, sunlight, outlook, privacy and soft landscaping; and ensure that existing drainage, waste water and sewerage infrastructure capacity is available, and where necessary enhanced, to enable the development to proceed.

Policy DC2 – The Historic Environment

The Council will safeguard and, where possible, enhance the historic environment, areas of historic landscape character and interests of acknowledged importance, including in particular scheduled ancient monuments, significant buildings (both statutory listed and on a local register), the settings of designated assets, conservation areas, registered historic parks and gardens, registered battlefields and archaeological remains.

Policy DC3 – Landscape and Settlement Setting

This policy resists development which would harm or be detrimental to the character of the local and wider landscape or the setting of a settlement and important views into and out of the settlement as identified in the Landscape and Settlement Character Assessment.

Policy R1 – Rural Diversification

Within the Green Belt, inappropriate development which is otherwise acceptable within the terms of this policy, will still need to be justified by very special circumstances.

Planning Policy Summary & Green Belt Justification

The site is located within the Green Belt, controlled within the NPPF and accompanying NPPG. The Green Belt serves five purposes (1) to check the unrestricted sprawl of large builtup areas; (2) to prevent neighbouring towns merging into one another; (3) to assist in safeguarding the countryside from encroachment; (4) to preserve the setting and special character of historic towns; and (5) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land. When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

The proposal involves the replacement of BH1 with a new borehole, to improve its structural integrity and lower the risk of failure. The proposed development will ensure the continued supply of clean water to the local area, thereby providing essential sustainable infrastructure, in line with paragraph 12, 14 and 162 of the NPPF, the NPPG and policy SS1a of the Staffordshire Moorlands Core Strategy.

The proposed development has been designed to the smallest scale possible and sited as sensitively as possible, whilst ensuring operational requirements are met. The proposed structures will be Holly Green in colour, to help assimilate their appearance into the surrounding rural setting. The provision of an access track is required to enable the drilling rig and support vehicles to access the new borehole location. The proposed above ground structures will be seen in context with the existing brick built pump house, currently in situ on the existing operational site. The proposed design is considered to be in line with policy DC1 of the Staffordshire Moorlands Core Strategy.

The provision of compensatory planting will help to soften the proposed development within the surrounding landscape, provide a more robust screening of the built structures on the site at a lower level and provide the biodiversity opportunities around the site. In addition, the proposed works will be adjacent to the existing operational site boundary of the borehole pumping station and therefore the proposed structures will be seen in context with the existing structures on the operational site. It is considered that there will not be an undue impact on the landscape and therefore in line with policy DC2 of the Staffordshire Moorlands Core Strategy.

Within the Dissected Sandstone Uplands Character Area, where the site is located, the Landscape Character Assessment advises that stone walls or native hedgerows should be used a means of enclosure. It also advises that woodland planting should be restricted to the valleys where additional small scale plantings can reinforce the existing vegetational and landscape structure. Both broadleaves and conifer species occur in this landscape and new plantings should reflect this mix. A landscaping scheme has been submitted as part of this application, which proposes compensatory planting for the trees which have had to be removed to facilitate the proposed development. Both broadleaf and conifer species have been provided to provide all year round screening of the built form on the site, to help address policy DC3 of the Staffordshire Moorlands Core Strategy.

The design of the proposed structures, the nature of the proposed development adjacent to an existing operational site and the provision of landscaping around the perimeter of the site ensure the aims of the Green Belt can be met, without unduly affecting the openness of the Green Belt, in line with paragraph 79, 80, 81 and 82 of the NPPF and policies SS6c and R1 of the Staffordshire Moorlands Core Strategy.

Given that the nearest listed building is located approximately 1.1km north east of the proposed site, it is not considered that the proposed development will impact upon the listed

building nor its setting. The development is therefore considered in compliance with policy DC2 of the Staffordshire Moorlands Core Strategy.

The proposed development is located as close as practically possible to the existing operational site to lessen its encroachment on the landscape. The nearest property, approximately 126m south east of the proposed development, does not have any principal windows facing the development, so should therefore remain unaffected by the proposed works. The next nearest property, located to the south of the proposed development faces north towards the site. The proposed tree removal is likely to be visible from this property, however it will benefit from the replacement evergreen planting, proposed along the south western boundary of the site. The proposed development will also not omit any undue noise levels or odour, therefore it is not considered that the proposed development will unduly affect any residential amenities.

The proposed development is in accordance with the policies contained within the local and national planning documents outlined above, by virtue of the proposal relating to the improvement and continued supply of clean water.

Summary

The proposed development has been designed and scaled to the minimum for operational requirements. It is located adjacent to the existing operational site and existing structures and when combined with the existing and proposed landscaping on the land owned by STWL, it is not considered the proposed development will not have an undue visual impact on the surrounding landscape and amenities.

The development will not have any adverse impact on ecology, highways or heritage.

The proposed development is considered to be in full accordance with the relevant planning policy, and will improve the water supply from Poolend Borehole Pumping Station.



Appendix A – Plan ref: A6W11410-PA00102-D