PLANNING / DESIGN & ACCESS STATEMENT

Hodder Water Treatment Works

Construction of a new RGF Filter and associated infrastructure, pipework and landscaping.

March 2020

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1. Site Setting and Description

1.1 General Location

Hodder Water Treatment Works (WTW) is located to the south west of Stocks Reservoir, approximately 2km to the north east of Slaidburn at National Grid Reference SD 71743 54486. The site is accessed via a private access road, off an unclassified road, known as the Skaithe which runs north from Slaidburn.

1.2 Application Site

The application site is located primarily within the operational land boundary of Hodder WTW. An additional temporary construction compound will be located on agricultural land adjacent to the fenced boundary of the site, on land owned by United Utilities (UU). The site is extensively screened by mature dense tree groups around the site's eastern, southern and western borders. The Stocks Reservoir embankment forms the site's northern boundary. A number of existing treatment buildings are present on site as well as associated plant and machinery related to the treatment of water.

The site is located within the Forest of Bowland Area of Outstanding Natural Beauty (AONB). The surrounding land uses are predominantly agricultural, with a number of agricultural holdings located within the area. The area is also used for forestry plantation and used for recreation for those visiting Stocks Reservoir.

1.3 Site History

A review of the planning history at the site has been completed. This is detailed in Table 1 below.

Table 1: Planning History

Application Number	Proposal	Date Submitted	Status
3/2016/0375	EIA Screening request in respect of the proposed installation of photovoltaic arrays at Hodder Water Treatment Works Slaidburn.	28/04/2016	Decided
3/2016/0303	EIA Screening request for refurbishment of Hodder WTW and increase in level of Stocks Reservoir	08/04/2016	Decided
3/2015/0662	EIA Screening request for the proposed installation of photovoltaic arrays.	05/08/2015	Decided
3/2003/0778	To construct press building with associated landscaping	20/10/2003	Approved with Conditions
3/2003/0444	To construct press building, kiosk and landscaping	30/06/2003	Approved with Conditions
3/2003/0191	Modification of conditions to planning consent ref. No. 3/01/0419	16/04/2003	Approved with Conditions

Application Number	Proposal	Date Submitted	Status
3/2001/0419	Construct clarifier control building, pumping station, storage building and washwater plant, pump kiosks with associated landscaping	07/09/2001	Approved with Conditions
3/2000/0046	Erection of a control building	10/03/2000	Approved with Conditions
3/1998/0554	Demolition of shed, garage, tanks and bund. Erection of control building.	04/09/1998	Approved with Conditions
3/1991/0817	2400mm high chain link fencing	13/02/1992	Approved with Conditions

It is considered that the above planning applications will not be impacted by the proposed development.

2. Proposed Development

2.1 Requirement for Development

Hodder Water Treatment Works is situated adjacent to Stocks reservoir and treats raw water from Stocks Reservoir which supplies potable water to the Fylde, Blackburn and Preston districts. The first stage pressure filters at Hodder WTW which were installed in the 1930's are nearing asset life expiry. This development is to replace the ageing assets with a new eight stream rapid gravity filter system to enable Hodder WTW to continue achieving the required standard for treated water flows. As part of this development, the sludge and wash water system will also be upgraded with new dirty backwash buffering tanks and new Lamella clarifiers to allow the wash water to be treated and recirculated around the system along with associated pipework.

Modifications will also be made to the existing lime dosing plant to ensure the system works efficiently and is able to treat the required flows.

As part of the works on site, it is proposed that the overflow weir at Stocks Reservoir will be increased in height. This increase will provide an additional amount of storage within the reservoir, therefore increasing resilience within the supply zone.

2.2 General Scheme Overview

The scheme as a whole will consist of the construction and installation of the following structures, plant and machinery:

- Construction of a new Rapid Gravity Filter (RGF) plant which will consist of 8. No open-air filters and an associated building to house the pipework gallery and Motor Control Centre (MCC);
- Installation of dirty backwash tanks to store dirty backwash water from the RGF filters;
- Modifications to the lime dosing equipment including replacement of existing pumps to improve lime dosing performance;
- Increasing the level of the overflow weir at Stocks Reservoir by 300mm to increase storage volumes;
- Improvements to the sludge/wash water handling process on site, including construction of new Lamella clarifiers;
- Installation of connecting pipework below ground with maximum pipe diameter of 1000mm;
- Installation of new 3m high palisade security fencing with razor wire top around new lamella clarifiers; and
- Reprofiling of agricultural land with site won soils and the implementation of a landscaping scheme.

The above-mentioned elements are shown on drawings 80040117-01-MMB-HODDE-97-DR-I-00001, 00002 and 00015. The area requiring planning permission is 9183m2 as shown on drawing 80040117-01-MMB-HODDE-97-DR-I-00003 Location Plan.

3. Site Selection

The proposed development is required at Hodder WTW to maintain its operational effectiveness and performance. The site is an existing operational water treatment works and as such the improvements proposed have no alternative locations. The proposed development will also improve the storage volumes of Stocks Reservoir.

4. Environmental Considerations

4.1 Energy

The proposed development has been designed to reflect United Utilities' whole life costing model and will integrate existing infrastructure where feasible to reduce energy consumption. These include:

- The process chosen is inherently more energy efficient than the existing process; and
- The proposed location of the RGF and associated plant and machinery has utilised the sites topography to reduce the requirement for pumping water across the site.

4.2 Materials and Waste

Construction Materials
The proposed RGF Building will be constructed from precast concrete. A mixture of cladding is proposed on some of the faces of the building to reduce the visual impact and integrate the building into the surrounding landscape:

- Eastern Face: Stone cladding to the gable end nearest the reservoir;
- Northern Face: A mixture of stone cladding and Cedar Wood cladding;
- Southern Face: Concrete;
- Western Face: Concrete

Protective barriers and access steps will be installed across the RGF Building, enabling access to and across the structure. These will be constructed and finished in galvanised steel.

The palisade fencing is a prefabricated unit, constructed from steel and will be finished in green (BS4800 colour code: 14C39).

Materials Arising from Development
Any soil that is confirmed to be free of contamination will be used to re-profile the agricultural land used as a temporary construction compound.

Any construction waste including concrete or soils found to be contaminated, will be removed from site by a licenced sub-contractor in line with CL:AIRE guidelines.

4.3 Contaminated Land

Contamination testing has been undertaken on 20No. soil samples, 24No. leachate samples and 10No. water samples collected from the trial holes, bore holes and window samples during the completed site investigation.

A Contamination Assessment has been made of the soils and groundwater. Testing has shown that excavated soils would be classified as 'non-hazardous waste'.

4.4 Noise

Due to the nature and location of the proposed development within an existing operational site, it is not considered that the development will cause noise disturbance to the surrounding properties once the equipment becomes operational.

There may be some noise disturbance resulting from general construction activities, however this will be temporary, and the construction of the proposed development will be carried out in a manner which minimises noise disturbance and mitigation will be provided where necessary.

4.5 Flood Risk

A Flood Risk Assessment (FRA) (368589JS13_HodderWTW_FRA_v1-00) has been prepared and submitted to support this application. This section summarises the findings of the FRA.

Fluvial Flood Risk
The site is located partly within both Flood Zone 2 (land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding) and Flood Zone 3 (land having a 1 in 100 or greater annual probability of river flooding), as defined by the Environment Agency's (EA) Flood Maps for Planning.

However, through consultation with the EA, we have concluded that Flood Zones are based on the National Generalised Modelling, undertaken in 2004, which do not represent flows routing through Stocks Reservoir and do not adequately represent the site's flood risk. An estimate of the flows (including an allowance for climate change) from the reservoir and spillway have demonstrated that the proposed development would not be at risk from fluvial flooding.

Surface Water, Groundwater and Sewer Flooding
The proposed development is not considered to be at risk of surface water, groundwater, or sewer flooding. The treatment works itself poses a risk should infrastructure become blocked or malfunction, however, this will be managed through ongoing operation and maintenance of the treatment works by trained operatives.

Flood Risk Resulting from the Proposed Development
The proposed development will not increase fluvial flood risk elsewhere, and flood flows are likely to be slightly attenuated downstream by increasing the capacity of the reservoir. Furthermore, the proposed development will not result in an increase to surface water flooding, sewer flooding or groundwater flooding elsewhere.

4.6 Drainage

The surface water drainage for the proposed development will be connected to the existing on-site surface water drainage system, which discharges to the River Hodder.

4.7 Ecology

A Preliminary Ecological Appraisal (PEA) has been undertaken provide an assessment of the protected and/or notable habitats and species which occur or have the potential to occur on or near the site which may be impacted by the proposed works.

This assessment recommended additional surveys be undertaken to ascertain the potential presence of and impacts on protected species. The following assessments have been undertaken to support his planning application:

- National Vegetation Classification (NVC) survey
- Breeding Bird Report
- Bat Report

This section summarises the finding of these reports. Ecological and biodiversity enhancements are presented in section 4.10 of this report.

Statutory and Non-Statutory Sites
There are eight statutory sites within 2km of the site. Due to the location and nature of the proposed development, it is unlikely that any impacts will occur on any statutory designated sites.

There are 32 non-statutory designated sites of local importance within 2km of the site. Two of these are within the site, Stocks Reservoir Biological Heritage Site (BHS) and the River Hodder BHS.

Stocks Reservoir BHS is designated for inundation vegetation, wildfowl and waders. Further surveys (NVC and Breeding Bird) have concluded that this site will not be significantly impacted by the proposed development.

The River Hodder BHS is designated for species such as otter and fish. The River Hodder will not be affected by the proposed development and therefore no impacts are envisaged.

Invasive Species
New Zealand pigmyweed, an invasive plant species, is present along the entire shoreline of Stocks Reservoir. It also dominates the inundation vegetation in the shallow bays to the north, north-east and east of the reservoir. A biosecurity method statement will be prepared prior to any works being undertaken within the spillway or along the embankment to demonstrate the measures that will be in place to reduce the risk of this being spread.

Birds
A breeding bird report was conducted as part of the PEA and vegetation including trees and scrub, a suitable habitat for breeding birds, was identified. The shore of Stocks Reservoir and the islands provide suitable habitat for breeding, wintering and migratory waders and wildfowl.

There are 505 records of birds within 2km of the Site which cover 68 species. There are 10 species listed on Schedule 1 of the Wildlife and Countryside Act 1981, 19 on S41 of the NERC Act and 3 listed on the Lancashire BAP.

Additionally, a number of species have been recorded on and adjacent to Stocks Reservoir through breeding bird surveys in 2014 (Bowland Ecology, 2014) and a number of species using the reservoir have been recorded within the local records. These primarily consist of wildfowl and waders.

Enhancement for breeding birds will include clearance of scrub on the island to increase the habitat available for breeding birds and plant with soft rush *Juncus effuses*.

A Breeding Bird Report (80040117-01-MMB-HODDE-NA-97-RP-I-0003), as recommended by the PEA, has been prepared to support this application and focusses on the usage of Stocks Reservoir by waterbird (wildfowl and wader) species. Three survey visits were conducted within the breeding season survey period (1 April to 31 July 2019).

A total of 24 waterbird species were recorded during the surveys. Notable species recorded during the surveys included the following:

- Three species listed in Section 41 of the NERC Act 2006;
- One species listed on Schedule 1 of the WCA;
- Three Red List Birds of Conservation Concern; and
- Nine Amber List Birds of Conservation Concern.

Stocks Reservoir is also shown to be an important site for migratory and over wintering wildfowl and wader species. The potential impacts of the works to raise the weir and the water level within Stocks Reservoir have been identified and the following avoidance and mitigation measures will be undertaken:

- The re-filling of reservoir water levels will be undertaken outside of the breeding bird season, weather conditions permitting, to limit the impact to birds.

- BS 5228-1:2009+A1:2014 'Code of practice for noise and vibration control on construction and open sites' will be implemented during construction

The details for increasing the habitat for breeding birds within the area are discussed within section 4.10 of this document.

Bats
A bat emergence and activity survey has been undertaken to support this planning application. The survey has found that Building 2/3 has a high count of bat emergence and has been confirmed as a maternity roost. After emerging from the building, the bats flew down toward the River Hodder for foraging.

Bats were also found to be emerging from Building 6, but lower in number than Building 2/3, and flew westwards toward the woodland and likely down to the River Hodder for foraging.

The proposed development has the potential to disturb bats within Building 2/3 and interfere with their flight path, when commuting between the River Hodder and their nest.

In order to avoid impacts the following mitigation will be implemented:

- No works will be undertaken within a minimum of 30m from Building 2/3 that contains the maternity roost or Building 6 with the day/satellite roost. If this is required, further liaison with a qualified ecologist will be required prior to the works being undertaken. This requirement does not include vehicle movements or other construction activities which would be a similar disturbance to which occurs during normal operational activities of the water treatment works.
- No lighting will be used overnight. Site compound lighting will be directed into the compound and onto hardstanding

Otters
Otters are known to be present within 2km of the site, but not within the site boundary, focussed mainly downstream of the WTW. Otters are likely using the River Hodder for commuting and foraging, with Stocks Reservoir principally used for feeding.

Currently high water levels, especially in winter, mean that any identified resting places on the reservoir shores are subject to inundation. Therefore, it is unlikely that otters will be impacted by the Scheme.

4.8 Trees & Hedgerows

An Arboricultural Report (80040117-01-MMB-HODDE-NA-97-RP-I-0006) has been prepared to support this application. The report surveyed a total of 29 individual trees, 12 tree groups and four hedges to inform the design of the proposed development. The trees were assigned the following retention categories:

- Category A (trees of high quality): 0 trees;
- Category B (trees of moderate quality): 16 individual trees, 1 tree group and 4 hedges;
- Category C (trees of low quality): 11 individual trees and 11 tree groups; and,
- Category U (trees to be removed for arboricultural reasons): 2 individual trees.

Following a review of the proposed development, it has been determined that a total of 8 individual trees require felling to facilitate the safe construction of the proposed development. These are:

- Category A: no trees;
- Category B: 1 individual tree;
- Category C: 5 individual trees; and,
- Category U: 2 individual trees.

A total area of 4230m^2 of tree groups and 84 linear metres of hedgerow require removal as part of this proposed development. None of the trees within the site are known to be subject to a Tree Preservation Order (TPO) as confirmed by Ribble Valley Borough Council.

The tree removal is detailed in Appendix A of the Arboricultural Report that supports this application.

Tree Protection
There are a number of trees which are not required to be removed but will be close to the construction working area and require additional protection. Protective barriers will be erected in accordance with British Standard (BS) 5837:2012 and positioned to enclose the defined Root Protection Areas and 'above ground' structure of trees identified for retention

The location of the proposed protective fencing is included within Appendix A of the Arboricultural Report. Details of the BS 5837:2012 default specification for protective barriers can be found within Appendix D of the Arboricultural Report

Enhancement
United Utilities employ a no net loss and 2:1 replacement strategy for trees that are felled or removed during construction. A total of 16 individual trees as well as tree group(s) equating to an area of 8766m^2 will planted to offset the tree loss associated with this proposed development. These proposals are detailed further within section 4.9 of this report.

4.9 Landscape / Visual impact

The site is within National Character Area (NCA) 34 Bowland Fells as defined by Natural England. It is further classified as Moorland Hills 2b Central Bowland Fells in Lancashire County Council's (LCC) A Landscape Strategy for Lancashire 2000, also character M1: Gisburn in the Forest of Bowland AONB Landscape Character Assessment 2009 commissioned by LCC. The Bowland Fells form a distinctive upland block on the boundary between north Lancashire and the Yorkshire Dales. The landscape is wild and windswept, with steep escarpments, upland pasture and expansive open moorland.

The site is also located within the Forest of Bowland Area of Outstanding Natural Beauty. The area was designated as a landscape of national significance due to a variety of factors, including:

- The grandeur and isolation of the upland core
- The steep escarpments of the moorland hills
- The undulating lowlands
- The serenity and tranquillity of the area

- The distinctive pattern of settlements
- The wildlife of the area
- The landscape's historic and cultural associations

The proposed development is located within the existing site boundary of Hodder WTW, downhill of the Stocks Reservoir embankment. The site is extensively screened by thick tree belts surrounding the site's boundary.

The visibility of the proposals will vary depending on where they are viewed in relation to the surrounding topography and woodland. The view with potential high impact during construction is from the Stocks Reservoir circular permissive footpath which crosses the impounding reservoir (IR) embankment. The positioning of the structures within or adjacent to the existing WTW in conjunction with proposed mitigation will limit the residual visual impact of the development.

There is potential for long distance views, through gaps in vegetation from the Access Land to the north of the WTW and the Public Rights of Way to the south and east. The significance of these views is likely to be limited by distance, vegetation and topography. Again, the clumping together of the new structures with the existing in conjunction with proposed mitigation will minimise long term impact on the landscape character.

The anticipated impact of the development on the surrounding landscape character will involve the loss of plantation to the WTW and potentially margin habitat to Stocks IR.

The materials chosen for the construction of the RGF have been selected with the longevity of the structure in mind, balancing the need to integrate it into the existing site as well as the wider landscape. For this reason, the following materials are proposed:

- Coursed, natural stone cladding to the gable at the eastern end of the RGF, facing the reservoir. This material has been selected here as views from the footpath in this area will look onto the eastern gable and natural stone is seen as the most appropriate material.
- The large northern façade of the building will be visually broken up by using 6m wide panels of coursed, natural stone cladding interspersed with 6m panels of cedar cladding.
- South façade of the RGF is not subject to views from sensitive receptors. It is proposed that the material used along this façade will be concrete
- The western gable façade will also be concrete as this elevation faces into the works and is not viewed from sensitive receptors.

Additional plant and machinery, including the lamellas and dirty backwash tank, are being installed close to other existing plant and machinery on site and will be constructed from materials to compliment and reflect these existing structures. The proposed palisade security fencing around the new lamella clarifiers has been specifically chosen to match the existing security fencing on site and meets the necessary security standards required for a WTW.

Due to the topography of the site it will be necessary to install a retaining wall to the south of the RGF to ensure that there is an area immediately adjacent to the structure to act as a crane pad for future pump removal and maintenance. It is proposed that this will be a vegetated wall system (maximum height 6m) constructed from bags with interlocking plates which build a naturally resilient geo-modular structure. This solution requires no concrete or steel and is much more aesthetically pleasing. It is also proposed that the wall will be hydroseeded to encourage quick vegetation growth.

An example of a vegetative wall system is in the photograph below.

The raising of the weir at Stocks Reservoir is a relatively small increase. The materials used during its initial construction are understood to be locally sourced stone. It is proposed that stone will be sourced to match the existing weir as closely as possible, to be in keeping with the surrounding landscape character and limit visual impact.

4383m^2 of trees and shrubs will need to be removed to accommodate the work.

Landscape Proposals
There are significant constraints to tree and shrub replacement planting on the site as a result of existing buildings, road infrastructure and below-ground services. Of the 8766m^2 offset required, only 6222m^2 of mixed species native tree and shrub planting can be planted on the development site. This is supplemented by a further 52m of hedgerow, to directly replace the hedgerow being removed to accommodate construction. Finally, existing shrub and semi-

mature unmanaged planting will be strengthened where this will not impact on existing buried services.

To achieve a 2:1 level of tree replacement planting and meet the remaining offset, it has been agreed with the Forestry Commission that compensatory tree planting can take place within and adjacent to Forestry Commission managed woodland on the catchment area of the reservoir site. The proposed 16 standard trees will form part of this wider catchment planting.

Full details of the proposed landscaping scheme, including on-site and off-site compensation plant and species mix, planting techniques and ongoing maintenance are detailed within the proposed landscaping plans. (80040117-001-MMB-97-M2-L-00011 to 00014)

Excess soil excavated from the RGF development will be re-used within the temporary construction compound area to re-profile the vacant pasture field. This is detailed further on drawings 80040117-001-MMB-97-M2-L-00013 and 00014. The excess soil will be set out using the existing sloped profile, tying in to existing levels and ensuring there are no drainage issues. The re-profiled area will be seeded with a lowland meadow mix. The intention being that the new ground profile will integrate into the existing surrounding landform.

4.10 Environmental and Biodiversity Enhancements

UU operate a no net loss policy in relation to habitat, as well as a minimum 2:1 replacement for trees associated with all their schemes. In order to meet these objectives, the following enhancements are being incorporated into the scheme:

- A total of 16 individual trees as well as a tree group(s) equating to an area of 8766m2 will be planted to offset the loss of 4230m^2 of tree groups and 84m linear metres of hedgerow.
- The scheme will also include the clearance of scrub and additional planting of 1ha of soft rush on the island of Stocks Reservoir. This is proposed in order to increase the amount of available habitat for breeding birds.
- Planting of wildflower mix and species rich grassland around the WTW instead of amenity grassland to increase the invertebrate diversity and food for bats.

Overall, following the implementation of the above enhancement measures, there will be no net loss in biodiversity at the site.

4.11 Public Rights of Way

There are no public rights of way which run through the site. A permissive footpath is located along the embankment of Stocks Reservoir, which connects to the permissive footpath route around the reservoir. During construction of the raised weir, the permissive footpath will be temporarily diverted to enable the safe construction of the works. Once completed, the permissive footpath will be reinstated and returned to its original alignment.

4.12 Cultural Heritage and Archaeology

There are no Listed Buildings or Scheduled Monuments within 500m of the site. The closest listed building is Hammerton Hall, a Grade II* listed building located 740m to the south east of the site.

Due to the distance between the site, the extensive tree coverage around Hodder WTW, and the undulating nature of the surrounding landscape, it is considered that the proposed development will not impact the setting of the listed building.

5. Construction Phase

5.1 Construction Programme/Timing

Work is due to commence on the proposed development in Spring / Summer 2020 and finish in Spring / Summer 2023.

Construction work will be undertaken on site during the following hours:

- Monday to Friday: 07:00 to 18:00
- Saturday: 08:00 to 13:00
- Sunday and Bank Holidays: No works undertaken

5.2 Traffic Management & Access

A new access road will be required within the site for the construction and operational phases of the development as shown on the Traffic Management Plan (80040117-01-MMB-HODDE-97-DR-I-00004).

Due to the location of the works, several constraints have been considered when looking at the project. These include but are not limited to:

- Access through the village of Slaidburn
- Narrow single-track roads
- Poor visibility around corners North of Slaidburn
- Vehicles parked at the side of the road in Waddington / Slaidburn
- Brennand's Endowed Primary School is on the route for concrete deliveries
- Shared access track with Stocks Fly Fishery/RSPB/Life for a life foundation
- Bridges along access route

Access for deliveries will be predominantly through Slaidburn and via the Skaithe through to the site. The route to be taken is through West Bradford Road, through Waddington and onto Slaidburn Road (B6478) then the Skaithe. Deliveries from the contractor's office in Skipton will come via the A59, on to Tinklers Lane, through Slaidburn onto the B6478 and on to the Skaithe.

Mitigation
In order to mitigate the impact to the residents of Slaidburn as a result of the temporary increase in traffic, the following measures are proposed:

- Once routes have been confirmed, a number of strategically located advisory route signs will be erected on the motorway/principal/trunk road network for the duration of the construction period. The style and location of the signage will be agreed with Lancashire County Council Highways Department / Highways England and will be used to direct HGVs to the preferred route.

- The directional signs to the site will also be supplemented with signs that control the movement of vehicles travelling from the site back to the strategic

highway network. These will take the form of 'black on yellow' signs located at strategic locations to be agreed.

- The movement of HGV's will be restricted to between the hours of 7.30am and 6.00pm to minimise the environmental/social impact. Where possible HGV deliveries will be scheduled to occur outside of 8.30-9.30am and 3.00-4.00pm during school term time to avoid coinciding with the start/finish of local schools in the area. Only in exceptional circumstances will these hours of operation be exceeded such as for major equipment delivery or in the case where emergency works are required. In the case of major equipment deliveries schools will be notified in advance of these periods.

- To ensure efficient scheduling of site works, where possible, deliveries will be given set times to arrive. Site specific delivery instructions will be sent to all suppliers and hauliers. The logistics associated with the delivery of larger plant/equipment will be discussed and agreed at specific site meetings in advance of transit. The Contractor will brief all employees and visitors about safe and courteous driving to and from the site during site inductions.

- The access through Slaidburn and on to The Skaithe is narrow with limited passing places. This route will be managed, at periods of heavy sustained delivery traffic, i.e. during large concrete pours, by positioning marshals at agreed control points between Slaidburn and the site. Communicating via walkie talkies the marshals will hold vehicles on site (Catlow Road) or direct vehicles to safe passing places to ensure that HGVs are routed to site as safely and effectively as possible and with minimum disruption to local road users.

Additionally, local residents have been provided with contact information should they wish to contact the site team and raise concerns regarding traffic movements. Regular letters will be sent to residents to communicate the progress of the works.

5.3 Contractor's Compound

An existing construction compound located on the west of the site (shown on drawing 80040117-01-MMB-HODDE-97-DR-I-00002) will be used as a welfare facility and construction staff car parking to facilitate the construction of the proposed development. A field located to the north west of the site, shown on drawing 80040117-01-MMB-HODDE-97-DR-I-00001, will be used to store materials and park vehicles during construction. Following completion of construction of the scheme, this area of land will be re-profiled using surplus material generated during construction and will form part of the landscaping proposal outlined above.

6. Planning Requirement

6.1 Works requiring planning permission

Planning permission is sought for the following elements:

- Construction of a new Rapid Gravity Filter (RGF) plant 69.2m x 23.8m x 9.7m high which will consist of 8. No open aired filters and an associated building to house the pipework gallery and Motor Control Centre (MCC);
- Installation of new 3m high palisade security fencing with razor wire top around new lamella clarifiers; and
- Re-profiling of an area of 5500m^2 of agricultural land with surplus soil and the implementation of a landscaping scheme.

6.2 Permitted Development

Associated Permanent Works
The remaining works are considered to fall within the provisions of The Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO).

Part 13 Class A, provides permitted development rights for development by water or hydraulic power undertakers.

The following elements of the scheme are considered to be permitted development by virtue of Schedule 2, Part 13, Class A(a) of the GPDO which permits "*Development not above ground level required in connection with the supply of water or for conserving, redistributing or augmenting water resources, or for the conveyance of water treatment sludge."*

- Installation of connecting pipework below ground with maximum pipe diameter of 1000mm.

The following elements of the scheme are considered to be permitted development by virtue of Schedule 2, Part 13, Class A(g) of the GPDO which permits "*Any other development in, on, over or under operational land other than the provision of a building but including the extension or alteration of a building."*

- Installation of a dirty backwash tanks to store dirty backwash water from the RGF filters;
- Modifications to the lime dosing equipment including replacement of existing pumps to improve lime dosing performance;
- Installation of a vegetated green wall to the south of the RGF;
- Increasing the level of the overflow weir at Stocks Reservoir by 300mm to increase storage volumes; and
- Improvements to the sludge/wash water handling process on site, including construction of new Lamella clarifiers.

Temporary Works

A site compound will be located on agricultural land to the north west of the site. During the construction phase, the area for the new treatment plant will be temporarily fenced off and the fences will be removed upon completion of the works.

Part 4 Class A of the GPDO permits *"The provision on land of buildings, moveable structures, works, plant or machinery required temporarily in connection with and for the duration of operations being or to be carried out on, in, under or over that land or on land adjoining that land."*

It is considered that the proposed temporary site compound and associated temporary structures associated with the construction of the proposed development, would be considered permitted development under Part 4, Class A of the GPDO.

6.3 Community Consultation

A public consultation event was hosted at Slaidburn Village Hall on Tuesday 24th September between 3pm and 6:30pm. This provided an opportunity for local residents to view the plans and feedback any comments they had regarding the scheme. The event was well attended by 28 residents from Slaidburn and the surrounding area, with members of the project team on hand to give an overview of the scheme and answer any queries.

7. Planning Policy Appraisal

7.1 National Planning Policy Framework (NPPF), February 2019

At the heart of the NPPF is a presumption in favour of sustainable development. The presumption highlights that proposals which accord with the policies contained within the NPPF should be approved without delay, unless material considerations indicate otherwise. The economic role of sustainable development identifies the provision of infrastructure as a requisite to build a strong, responsive and competitive economy.

The proposed development is being brought forward by United Utilities to enable the site to continue to provide potable drinking water to their customers. The wider scheme will also improve the reservoir, and the treatment works drought resilience.

The NPPF considers good design to be a key aspect of sustainable development. Specifically, in relation to infrastructure, Paragraph 131 states that great weight should be given to outstanding or innovative designs which promote high levels of sustainability or help raise the standard of design more generally in an area, so long as they fit in with the overall form and layout of their surroundings.

The proposed development has been designed carefully, considering the surrounding site and the wider landscape for which the site is situated within. The materials of the proposed development have been chosen to closely match those materials and colours of the existing treatment works, enabling the new structures to integrate into the site.

Paragraph 170 of the NPPF states that development should contribute to and enhance the natural and local environment. Furthermore, paragraph 175 of the NPPF recognises that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible.

The proposed development has incorporated a number of ecological mitigation measures and enhancements to ensure there is an overall net gain in biodiversity across the site. This will be delivered though the proposed landscaping scheme.

Paragraph 172 of the NPPF identifies that great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of

protection in relation to these issues. Consideration of an application within an AONB should include an assessment of:

- the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

The proposed development is required in connection with continuing and optimising the existing treatment process at Hodder WTW, providing potable water to local customers. The site is located within the Forest of Bowland AONB and it is therefore not possible to be moved outside of the designated area. The proposed development has been designed to take account of the potential adverse impacts the construction of the scheme will have on the local environment and surrounding landscape. Mitigation measures and enhancement have been proposed to ensure there is no net loss in biodiversity across the site as a result of the proposed development. Building materials have been chosen to match those already present on site, and a landscape scheme has been proposed to be delivered alongside the scheme to help screen the RGF and integrate the development into the surrounding landscape.

7.2 The Local Development Plan

The site falls within the administrative boundary of Ribble Valley Borough Council. The statutory development plan for the site includes the Ribble Valley District Council Core Strategy.

A search of local planning policy has identified several policies of relevance to this application. An assessment of the proposed development with regards to these policies is detailed in the Table 2 below.

Table 2: Planning Policy Review and Assessment

Policy	Relevance	Assessment of Development
Core Strategy		
DS2: Presumption in Favour of Sustainable Development When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.	As the proposed works are classified as development, they must meet Policy DS2.	The proposed development is being brought forward by United Utilities to enable the site to continue to provide potable drinking water to our customers. The wider scheme will also improve the reservoir, and the treatment works drought resilience. The proposed development has been designed to take account of the potential adverse impacts the construction of the scheme will have on the local environment and surrounding landscape. It is considered that the proposed development

		would constitute sustainable development.
EN2: Landscape The landscape and character of the Forest of Bowland Area of Outstanding Natural Beauty will be protected, conserved and enhanced. Any development will need to contribute to the conservation of the natural beauty of the area. The landscape and character of those areas that contribute to the setting and character of the Forest of Bowland Areas of Outstanding Natural Beauty will be protected and conserved and wherever possible enhanced. As a principle the Council will expect development to be in keeping with the character of the landscape, reflecting local distinctiveness, vernacular style, scale, style, features and building materials.	The proposal is required to meet Policy EN2 as it is located within the Forest of Bowland Area of Outstanding Natural Beauty. The area was designated as a landscape of national significance due to a variety of factors, including: • The grandeur and isolation of the upland core • The steep escarpments of the moorland hills • The undulating lowlands • The serenity and tranquillity of the area • The distinctive pattern of settlements • The wildlife of the area • The landscape's historic and cultural associations	The materials chosen for the construction of the RGF have been selected with the longevity of the structure in mind, balancing the need to integrate it into the existing site as well as the wider landscape. For this reason, the following materials are proposed: • Coursed, natural stone cladding to the gable at the eastern end of the RGF, facing the reservoir. This material has been selected here as views from the footpath in this area will look onto the eastern gable and natural stone is seen as the most appropriate material. • The large northern façade of the building will be visually broken up by using 6m wide panels of coursed, natural stone cladding interspersed with 6m panels of cedar cladding. • South façade of the RGF is not subject to views from sensitive receptors. It is proposed that the material used along this façade will be concrete • Western façade of the RGF is not subject to views from sensitive receptors. It is proposed that the material used along this façade will be concrete. Additional plant and machinery, including the lamellas and dirty backwash tank, are being installed close to other existing plant and machinery on site and will be constructed from materials to compliment and reflect these existing structures. The proposed palisade security fencing around the new lamella clarifiers has been specifically chosen to match the existing security fencing on site.
EN4: Biodiversity and Geodiversity	The proposed development will be altering the existing	The planning system should contribute to and enhance the

The Council will seek wherever possible to conserve and enhance the area's biodiversity and geodiversity and to avoid the fragmentation and isolation of natural habitats and help develop green corridors. Where appropriate, cross-Local Authority boundary working will continue to take place to achieve this. Negative impacts on biodiversity through development proposals should be avoided. Development proposals that adversely affect a site of recognised environmental or ecological importance will only be permitted where a developer can demonstrate that the negative effects of a proposed development can be mitigated, or as a last resort, compensated for. It will be the developer's responsibility to identify and agree an acceptable scheme, accompanied by appropriate survey information, before an application is determined. There should, as a principle be a net enhancement of biodiversity.	biodiversity and geodiversity of the landscape and must meet the requirements of Policy EN4.	natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible. The following ecological enhancements have been included to ensure that there is an overall biodiversity net gain as a result of the proposed development: • A total of 16 individual trees as well as a tree group(s) equating to an area of 8766m^2 will be planted to offset the loss of 4230m^2 of tree groups and 84m of hedgerow. • The scheme will also include the clearance of scrub and additional planting of 1ha of soft rush on the island of Stocks Reservoir. This is proposed in order to increase the amount of available habitat for breading birds. • Planting of wildflower mix and species rich grassland around the WTW instead of amenity grassland to increase the invertebrate diversity and food for bats. Overall, following the implementation of the above enhancement measures, there will be an overall no net loss of biodiversity at the site.
Policy DMI2: Transport Considerations New development should be located to minimise the need to travel. Also it should incorporate good access by foot and cycle and have convenient links to public transport to reduce the need for travel by private car. In general, schemes offering opportunities for more sustainable means of transport and sustainable travel improvements will be supported. Sites for potential future railway stations at Chatburn and Gisburn will be protected from inappropriate development. Major	The proposed development will result in a temporary increase in traffic during construction.	Access for deliveries will be predominantly through Slaidburn and via the Skaithe through to the site. In order to mitigate the impact to the residents of Slaidburn as a result of the temporary increase in traffic, the following mitigation measures are proposed: • A number of advisory route signs will be erected on the road network for the duration of the construction period. • The movement of HGV will be restricted to between the hours of 7.30am and

applications should always be accompanied by a comprehensive travel plan**.**		6.00pm to minimising the environmental/social impact. • Where possible HGV deliveries will be scheduled to occur outside of 8.30-9.30am and 3.00-4.00pm during school term time to avoid coinciding with the start/finish of local schools in the area. • Where possible, deliveries will be given set times to arrive. Site specific delivery instructions will be sent to all suppliers and hauliers. • The access through Slaidburn and on to The Skaithe is narrow with limited passing places. This route will be managed, at periods of heavy sustained delivery traffic, i.e. during large concrete pours, by positioning marshals at agreed control points between Slaidburn and the site. Communicating via walkie talkies the marshals will hold vehicles on site (Catlow Road) or direct vehicles to safe passing places to ensure that HGVs are routed to site as safely and effectively as possible and with minimum disruption to local road users. • Local residents have been provided with contact information should they wish to contact the site team and raise concerns regarding traffic movements.
Policy DMG1: General Considerations In determining planning applications, all development must: • Be of a high standard of building design which considers the 8 building in context Principles (from the CABE/English heritage building on context toolkit.	As the proposed works are classified as development, they must meet Policy DMG1.	The proposed development has been designed carefully, considering the surrounding site and the wider landscape for which the site is situated within. The materials chosen for the construction of the RGF have been selected with the longevity of the structure in mind, balancing the need to integrate it into the existing site as well as the wider landscape.

• Be sympathetic to existing and proposed land uses in terms of its size, intensity and Nature as well as scale, massing, style, features and building materials. • Consider the potential traffic and car parking implications. • Ensure safe access can be provided which is suitable to accommodate the scale and Type of traffic likely to be generated. • Not adversely affect the amenities of the surrounding area. • Consider the environmental implications of development to Heritage Sites, Designated habitats and Species and Special areas of conservation.		Access will be taken off the Skaithe, via a private access road to the WTW. It is expected that there will be a temporary increase in traffic during the construction works. Following construction and commissioning, the frequency of visits to the site and overall traffic may only decrease slightly from current operational quantities. It is expected that the current site access can accommodate the temporary increase in in construction traffic. In order to mitigate the traffic impacts on the residents of Slaidburn, traffic movements will be timed wherever possible to avoid the peak local traffic flows expected in the mornings and evenings. Additionally, local residents have been provided with contact information in the event they require to complain or communicate with the construction team.
DMG2: Strategic Considerations Within the open countryside development will be required to be in keeping with the Character of the landscape and acknowledge the special qualities of the area by virtue of Its size, design, use of materials, landscaping and siting. Where possible new development Should be accommodated through the re-use of existing buildings, which in most cases is More appropriate than new build. In protecting the designated area of outstanding natural beauty, the council will have Regard to the economic and social wellbeing of the area. However the most important Consideration in the assessment of any development proposals will be the protection, Conservation and enhancement of the landscape and character of the area avoiding Where possible habitat fragmentation	The proposed development is located within countryside designated land and must meet the requirements of Policy DMG2.	As the proposed development consists of development within an existing infrastructure site that will be constructed no higher than existing structures on site, it is considered that the development is acceptable to be constructed in this location. The materials chosen for the construction of the RGF have been selected with the longevity of the structure in mind, balancing the need to integrate it into the existing site as well as the wider landscape.

DMG3: Transport and Mobility In making decisions on development proposals the local planning authority will, in addition to assessing proposals within the context of the development strategy, attach Considerable weight to: • The availability and adequacy of public transport and associated infrastructure to serve Those moving to and from the development - • The relationship of the site to the primary route network and the strategic road Network. • The provision made for access to the development by pedestrian, cyclists and those with reduced mobility. • Proposals which promote development within existing developed areas or extensions to them at locations which are highly accessible by means other than the private car. • Proposals which locate major generators of travel demand in existing centres which are highly accessible by means other than the private car. • Proposals which strengthen existing town and village centres which offer a range of Everyday community shopping and employment opportunities by protecting and Enhancing their vitality and viability. • Proposals which locate development in areas which maintain and improve choice for People to walk, cycle or catch public transport rather than drive between homes and Facilities which they need to visit regularly. • Proposals which limit parking provision for developments and other on or off-street Parking provision to discourage	The proposed development will result in a temporary increase in traffic during construction.	Refer to Policy DMI2: Transport Considerations

reliance on the car for work and other journeys where there are effective alternatives.		
DME1: Protecting trees and Woodlands There will be a presumption against the clearance of Broad-leaved woodland for development proposes. The Council will seek to ensure that woodland management Safe guards the structural integrity and visual amenity Value of woodland, enhances biodiversity and provides Environmental health benefits for the residents of the Borough. The council encourages successional tree Planting to ensure tree cover is maintained into the Future. Where applications are likely to have a substantial effect on tree cover, the borough Council will require detailed arboricultural survey information and tree constraint Plans including appropriate plans and particulars. These will include the position of Every tree on site that could be influenced by the proposed development and any tree on Neighbouring land that is also likely to be with in influencing distance and could also Include other relevant information such as stem diameter and crown spread.	The site is extensively screened my mature dense tree groups around the sites eastern, southern and western border. An area of 4150m^2 of trees will require removal as part of this proposed development. None of the trees within the site are known to be subject a tree preservation order (TPO) as confirmed by RVBC. The proposed works will be required to meet policy DME1	United Utilities employ a 'no net' loss and 2:1 replacement strategy in relation to trees impacted by their construction. A total of 16 individual trees as well as a tree group(s) equating to an area of 8766m2 will be planted to provide mitigation and overall net gain to offset the tree loss associated with this proposed development. These proposals are detailed further within section 4.9 of this report. There are a number of trees which are not required to be removed but would be close to the construction working area that will require additional protection. Protective barriers will be erected in accordance with British Standard (BS) 5837:2012 and positioned to enclose the defined Root Protection Areas and 'above ground' structure of trees identified for retention. The location of the proposed protective fencing is included within Appendix A of the Arboricultural Report. Details of the BS 5837:2012 default specification for protective barriers can be found within Appendix D of the Arboricultural Report.
DME2: Landscape and Townscape Protection Development proposals will be refused which significantly harm important landscape or landscape features including: • Traditional stone walls. • Ponds. • Characteristic herb rich meadows and pastures. • Woodlands. • Copses. • Hedgerows and individual trees (other than in exceptional circumstances where satisfactory works of mitigation or enhancement would be achieved, including	A total area of 4303m^2 of groups (4150m^2) and hedges (84 linear metres) will require removal as part of this proposed development. The proposal is required to demonstrate how hedges and trees will not be affected to meet Policy DME2.	United Utilities employ a 'no net' loss and 2:1 replacement strategy in relation to trees impacted by their construction. A total of 16 individual trees as well as a tree group(s) equating to an area of 8766m^2 will be planted to provide mitigation and overall net gain to offset the tree loss associated with this proposed development. These proposals are detailed further within section 4.9 of this report. There are a number of trees which are not required to be removed but would be close to the construction working area

rebuilding, replanting and landscape management). • Townscape elements such as the scale, form, and materials that contribute to the characteristic townscapes of the area. • Upland landscapes and associated habitats such as blanket bog. • Botanically rich roadside verges (that are worthy of protection)		that will require additional protection. Protective barriers will be erected in accordance with British Standard (BS) 5837:2012 and positioned to enclose the defined Root Protection Areas and 'above ground' structure of trees identified for retention The location of the proposed protective fencing is included within Appendix A of the Arboricultural Report. Details of the BS 5837:2012 default specification for protective barriers can be found within Appendix D of the Arboricultural Report.
DME3: Site and Species Protection and Conservation Development proposals that are likely to adversely affect Internationally, nationally and locally designates sites will not be granted planning permission. Exceptions will only be made where it can clearly be demonstrated that the benefits of a development at a site outweigh both the local and the wider impacts. Planning conditions or agreements will be used to secure protection or, in the case of any exceptional development as defined above, to mitigate any harm, unless arrangements can be made through planning conditions or agreements to secure their protection	The proposed development is located within an AONB and several protected species have been registered on and near the site and therefore must meet the requirements of Policy DME3.	The following ecological enhancements have been included to ensure that there is an overall biodiversity net gain as a result of the proposed development: • A total of 16 individual trees as well as a tree group(s) equating to an area of 8766m^2 will be planted to offset the loss of 4230m^2 of tree groups and 84m of hedgerow. • The scheme will also include the clearance of scrub and additional planting of 1ha of soft rush on the island of Stocks Reservoir. This is proposed in order to increase the amount of available habitat for breading birds. • Planting of wildflower mix and species rich grassland around the WTW instead of amenity grassland to increase the invertebrate diversity and food for bats. Overall, following the implementation of the above enhancement measures, there will be an overall net gain in biodiversity at the site.
DME6: Water Management Development will not be permitted where the proposal would be at an unacceptable risk of flooding or exacerbate flooding elsewhere.	As the proposal is for the improvement of management of water it will need to demonstrate that the development contributes in the ways outlined in Policy DME6.	The proposed development is not considered to be at risk of surface water, groundwater flooding or sewer flooding. The treatment works itself poses a risk should infrastructure

Applications for development should include appropriate measures for the conservation, protection and management of water such that development contributes to: • Preventing pollution of surface and / or groundwater • Reducing water consumption • Reducing the risk of surface water flooding (for example the use of sustainable drainage systems (SUDS)		become blocked or malfunction, however, this will be managed through ongoing operation and maintenance of the treatment works by trained operatives. The development is required to replace existing first stage filters, which are no longer fit for purpose and past their asset life, with a new Rapid Gravity Filter system. Dirty backwash tack will be installed to store waste backwash water from the new treatment process. Additional modifications will be made to the lime dosing pumps, to improve the assets performance. The scheme will also increase the height of the Stocks reservoir overflow weir, to provide an increased amount of drought storage within the reservoir, increasing resilience within the local network.
DMB5: Footpath and Bridleways The borough council will seek to ensure the retention, maintenance and improvement of by-ways and un-surfaced/unclassified roads as part of the public rights of way network. In situations where a public right of way will inevitably become less attractive (due to adjacent/surrounding development), the policy should require compensatory enhancements such that there is a net improvement to the public right of way network. The borough council will, unless suitable mitigation measures are made, protect from the development footpaths which: • Provide a link between towns/villages and attractive open land; • Link with the Ribble way footpath; • Are associated to the local nature reserves; and • Are heavily used.	The proposed development will require the temporary diversion of a permissive footpath which runs atop the embankment of Stocks Reservoir.	A permissive footpath is located along the embankment of Stocks Reservoir, which connects to the permissive footpath route around the reservoir. During construction of the raised weir, the permissive footpath will be temporarily diverted to enable the safe construction of the works. Once completed, the permissive footpath will be reinstated and returned to its original alignment.

7.3 Conclusion

It is considered that the proposed development complies with all relevant planning policies and there are no other overriding material considerations in conflict with the proposals.

8. Plans

Plans and documents submitted in support of this application are:

Drawing / Document Title	Drawing number(s) / Document Reference
Proposed Site Layout - 1 of 3	80040117-01-MMB-HODDE-97-DR-I-00001
Proposed Site Layout - 2 of 3	80040117-01-MMB-HODDE-97-DR-I-00002
Proposed Site Layout - 3 of 3	80040117-01-MMB-HODDE-97-DR-I-00015
Location Plan	80040117-01-MMB-HODDE-97-DR-I-00003
Traffic Management Plan Drawing	80040117-01-MMB-HODDE-97-DR-I-00004
Existing Site Layout - 1 of 2	80040117-01-MMB-HODDE-97-DR-I-00005
Existing Site Layout - 2 of 2	80040117-01-MMB-HODDE-97-DR-I-00016
Proposed RGF Plan	80040117-01-MMB-HODDE-97-DR-I-00006
Proposed RGF Elevation - 1 of 2	80040117-01-MMB-HODDE-97-DR-I-00007
Proposed RGF Elevation - 2 of 2	80040117-01-MMB-HODDE-97-DR-I-00008
Site Section Plan	80040117-01-MMB-HODDE-97-DR-I-00010
Security Fencing Details	80040117-01-MMB-HODDE-97-DR-I-00011
RGF Sections	80040117-01-MMB-HODDE-97-DR-I-00020
West Elevations	80040117-01-MMB-HODDE-97-DR-I-00021
East Elevations	80040117-01-MMB-HODDE-97-DR-I-00022
North Elevations	80040117-01-MMB-HODDE-97-DR-I-00023
South Elevations	80040117-01-MMB-HODDE-97-DR-I-00024
Landscaping Overview Plan	80040117-01-MMB-HODDE-97-M2-L-00011
Landscaping Inset Plan 1 of 2	80040117-01-MMB-HODDE-97-M2-L-00012
Landscaping Inset Plan 2 of 2	80040117-01-MMB-HODDE-97-M2-L-00013
Landscaping Sections	80040117-01-MMB-HODDE-97-M2-L-00014
Flood Risk Assessment	80040117-01-MMB-HODDE-NA-97-RP-I-0007
Traffic Management Plan	80040117-01-MMB-HODDE-NA-97-RP-I-0008

Arboricultural Report	80040117-01-MMB-HODDE-NA-97-RP-I-0006
Preliminary Ecological Appraisal	80040117-01-MMB-HODDE-NA-97-RP-I-00037
Bat Report	80040117-01-MMB-HODDE-NA-97-RP-I-0004
Botanical Report (NVC)	80040117-01-MMB-HODDE-NA-97-RP-I-0002
Bird Report	80040117-01-MMB-HODDE-NA-97-RP-I-0003