

Broughton WTW to White Bull WTW Raw Water Main

Project No. 80026877

Request for Screening Opinion

United Utilities Water Limited

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1 INTRODUCTION

This statement has been prepared by United Utilities (UU) to support an Environmental Impact Assessment (EIA) screening request made to Preston City Council and Ribble Valley Borough Council.

The proposed work involves the construction of a 9.5km water main and associated temporary works between Broughton Water Treatment Works (WTW) which is located to the north of Preston and White Bull WTW which is located to the north east of Grimsargh.

The expected temporary working area of this proposal is approximately 31.5 hectares (315,000m²) and thus exceeds the threshold for development associated with long distance aqueducts as set under 10 I (i) of Schedule 2 of the Town and Country (Environmental Impact Assessment) Regulations 2017.

This statement provides the information considered necessary for the LPA to provide a 'Screening Opinion' on whether there is a need for an EIA for the proposed works.

The statement has been prepared in accordance with Regulation 6 of the EIA Regulations 2017 to include:

- A description of the proposed development;
- A description of the main potential environmental effects of the proposed development; and
- Plans sufficient to identify the land.

This statement should be read in conjunction with the following supporting information and plans:

- Alston Spade Mill Transfer Pipeline Working Area Plans 80062958-01-ADP-MISCE-96-DR-C-00001 to 00011
- Tree Constraints Plan
- Tree Works Plan
- Tree Survey Data Sheets
- Ecology Survey Report

As set out in this report, United Utilities considers that the proposed development is not likely to have significant effects on the environment by virtue of factors such as its nature, size or location. Consequently, United Utilities considers that the proposed development is not "EIA development" under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

2 CHARACTERISTICS OF DEVELOPMENT

2.1 General location

The works are located between Broughton and Grimsargh to the north / north east of Preston with the start and finish point of the proposed pipeline being indicated on the plan below. The majority of the works are location within Preston City Council with only a short section (approximately 200m) being located within Ribble Valley Borough Council.



2.2 Proposed development site

The proposed development includes works between Broughton WTW to the west and White Bull WTW to the east over a distance of 9.5km as detailed on drawings 80062958-01-ADP-MISCE-96-DR-C-00001 to 00011. The works are generally located in the corridor between the B5269 to the north (apart from a short section to the west of the M6 where the pipeline runs to the north of this) and the B6243 to the south. The development site is mainly located within agricultural fields with a short section of around 1.2km being located in the highway.

The site addresses for Broughton WTW and White Bull WTW which are located at either end of the pipeline are as follows:

Address:	Broughton WTW Woodplumpton Lane Broughton Lancashire PR3 5JL
Grid Reference:	351849, 434819

Address:	White Bull WTW Preston Road, Longridge, Lancashire, PR3 3BL
Grid Reference:	359597, 435183

2.3 Requirement for development

The scheme at Grasmere WwTW is part of the United Utilities Asset Management Programme 7 (AMP7). AMP7 is a major programme of works to provide new assets, together with refurbishing and upgrading existing United Utilities assets across the region as required by the water industry regulator OFWAT (Office of Water Services), and the Environment Agency. It is to be implemented between 2020 and 2025.

The purpose of the development is to provide improve resilience within the water network by transferring surplus raw water of around 20Ml/d from the Longridge Reservoir Group (Alston 1 & 2 and Spade Mill 1 & 2) to Broughton where the water will go into the existing raw water main. From here it will be transferred via existing infrastructure to Franklaw WTW for treatment where it will go into supply to our customers.

2.4 Size and Design of the Whole Development

The proposed works subject to this Screening Opinion request cover a total area of approximately 31.5ha, which includes the footprint of the new pipework, the temporary working area and access, and the area required for the construction compound. This is shown on drawings 80062958-01-ADP-MISCE-96-DR-C-00001 to 00101. The proposed development includes the following elements:

2.4.1 9.5km Transfer Main

The raw water main runs from Broughton WTW off Woodplumpton Lane, Broughton in the west to White Bull WTW which is located to the northeast of Grimsargh at the eastern most point of the pipeline.

The majority of the works (around 8.3km) will be located across farmland with the remaining distance (1.2km) being in the Public Highway. Where the works are located in the highway there will be a minimum working width which will be agreed with Lancashire County Council Highways to minimise the traffic impacts.

Where the pipeline is located in fields there will be a working width generally of between 25 and 30m which will allow access along the route of the pipeline for construction traffic and space for undertaking the works as well as storage of excavated soil adjacent to this. Where the excavations are deeper or through difficult ground conditions then a wider working width will be required as detailed on the plans.

There will be a number of laydown areas along the route of the pipeline which will provide space for the storage of small quantities of pipe and other materials as well as for small scale welfare facilities and parking located close to where the works are being undertaken.

The majority of the pipeline route will be constructed in open cut with only short sections across the A6 (Garstang Road) and Savick Brook as well as under existing services near Houghton Service Reservoir being constructed using trenchless techniques.

The pipeline will all be constructed below ground with typically around 900mm cover (dependant on ground levels). The only element of the works which will be visible following completion will be small manhole and air valve / washout covers and concrete surrounds which will be located along the length of the pipeline. They will generally be located at any changes in direction or depth (for example when the pipeline will go deeper to go under any ditches or changes in ground level), the exact location and number of these will be confirmed during detailed design and following discussions with the landowners.

2.4.2 Temporary Access Points / Haul Roads

To facilitate the construction of the pipeline a number of accesses will be required along the route as detailed on the provided plans (80062958-01-ADP-MISCE-96-DR-C-00001 to 00011). A majority of the access points will be using existing access roads / tracks and will therefore require minimal works such as surfacing

There will be a need for temporary haul roads to be constructed to provide access to the laydown areas as detailed on plans 80062958-01-ADP-MISCE-96-DR-C-00001, 80062958-01-ADP-MISCE-96-DR-C-00002, 00005 and 00008 and summarised below.

- 80062958-01-ADP-MISCE-96-DR-C-00001 – Temporary haul road alongside the pipeline for a length of approximately 65m. Also temporary haul road off existing access to the west of the A6 for a length of approximately 70m.
- 80062958-01-ADP-MISCE-96-DR-C-00002 – Temporary access and haul road off James Towers Way to access working areas. Haul road approximately 130m in length.
- 80062958-01-ADP-MISCE-96-DR-C-00005 – Temporary haul roads off existing track which provides access to farms. Haul roads to be around 350m in length.
- 80062958-01-ADP-MISCE-96-DR-C-00008 – Temporary access and haul road off Houghton Green Lane to the west of Houghton Service Reservoir, approximately 400m long and requiring improvements to the existing gated access off the highway.

Where required along the working area of the pipeline a haul road will be constructed to provide access whilst undertaking the works. This will be located within the working area shown on the provided plans.

Following completion of the works all temporary access points and haul roads will be removed and areas impacted will be reinstated to their existing condition.

2.4.3 Temporary compounds

There will be three compound areas in place during the proposed works located as shown on the provided plans and detailed below – these compound locations are indicative asndare still be agreed with the various landowners but any compound would be similar in scale and location to what is currently proposed. The compound areas will have a stone surfacing and be used for site cabins, office, welfare and parking as well as for storage of plant / machinery and materials. The compounds have been located to be as close to main roads for deliveries and at key points along the route to allow deliveries to be made and transported using smaller vehicles to the various laydown areas along the route.

- The first compound will be located to the south of Whittingham Lane and the west of the M6 on an area of grassland as detailed on drawing 80062958-01-ADP-MISCE-96-

DR-C-00003. It will be accessed via an improved access off the track leading to Yates Farm. The compound will cover an area of approximately 8,000m².

- The second compound will be located to the east of the B5269 (Whittingham Lane) opposite Short Lane on an area of grassland as detailed on 80062958-01-ADP-MISCE-96-DR-C-00004. It will be used to support the construction of the pipeline to the east across the agricultural fields and accessed via a new access off the B5269. The compound will cover an area of approximately 4,500m².
- The third compound will be located at the eastern extent of the pipeline near Oak Tree Farm and White Bull WTW as detailed on 80062958-01-ADP-MISCE-96-DR-C-00004. It will be used to support the construction of the pipeline to the west across the agricultural fields and accessed via the existing access to White Bull WTW or the access to the farms. The compound will cover an area of approximately 6,000m².

2.5 Timescales

The main works are due to commence in spring 2021 subject to the scheme not requiring an EIA and all of the approvals and landowner agreements being in place.

Site investigation work such as boreholes and trial holes to confirm ground conditions and locations of existing services are to be undertaken towards the end of 2020 / early 2021 over a period of around 1 month.

It is expected that the pipeline will take approximately 8 months to install with the reinstatement along the pipeline route and of temporary compounds and access routes following on from this. The reinstatement is seasonally dependant so may extend into spring / summer 2022.

Site working hours will be 08:00 to 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays with no works taking place on Sundays or Bank Holidays. There may be occasions such as the connections into the existing pipework or road crossings when work outside of normal working hours may be required. However this will only take place over a short period and will be communicated to local residents and agreed with the Council's Environmental Health Officer.

2.6 Consents

2.6.1 Planning Permission and Permitted Development

Subject to the scheme not requiring an EIA, the proposed pipeline is classed as permitted development under Schedule 2 Part 13 Class A (a) of the Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO) (SI 2015 596) (as amended). This part of the GPDO enables development not above ground in relation to the supply of water.

In addition, Part 2 Class B allows for the creation of a means of access in connection with permitted development to a highway which is not a trunk road or classified road, whilst Part 4 Class A allows for the provision of buildings, moveable structures, works, plant or machinery required temporarily in connection with operations being carried out on land or on land adjoining that land which will include the temporary working area for the installation of the pipeline as well as the construction compound.

The works listed below will require Planning Permission

- Temporary access off James Tower Way
- Temporary access off Whittingham Lane

- Temporary Access off Houghton Green Lane

The remaining works on this scheme will be undertaken under our Permitted Development Rights subject to an EIA not being required. This will be kept under constant review as the scope of works develops and any additional Planning Applications will be made as required.

2.6.2 Ordinary Watercourse Consent

The route of the proposed pipeline crosses a number of Ordinary Watercourses. For each of these crossings (where not being done using Directional Drill Techniques) permission will be sought from Lancashire County Council as the Lead Local Flood Authority for both the temporary and permanent works. A majority of the watercourses will be open cut with the exception of Savick Brook where trenchless technology (directional drill) will be used to cross the watercourse subject to suitable ground conditions being found during site investigation works.

2.6.3 Public Right of Way Closures

The route of the proposed pipeline and associated temporary works crosses / impacts on a number of Public Rights of Way (circa 16). The need for temporary closures, diversions and/or crossing points along the route will be discussed and agreed with Lancashire County Council. We will ensure that any permissions are in place prior to the works taking place and following completion of the works the path will be reinstated to its existing condition and line.

2.6.4 Temporary Traffic Regulation Order (TTRO) and Highways Notices

The majority of the works (around 8.3km) will be located across farmland with the remaining distance (1.2km) being in the Public Highway. The distance located in the highway has been minimised as far as possible given how well used the roads in the local area are on a daily basis. This will therefore minimise the traffic impacts on local residents and businesses during the construction of this scheme as well as during any future maintenance. During the works we will provide one way traffic using traffic lights. The need for a TTRO and the traffic management required will be discussed and agreed with Lancashire County Council Highways and will be communicated to local residents and businesses prior to any works taking place.

A majority of the accesses along the route to the working area will be taken using existing access points off the highway. Where there is a need for a new / improved access the appropriate notices for this will be in place prior to undertaking any works.

2.7 Community Consultation / Involvement

As part of the project we will initiate early engagement with all external stakeholders and our customers. This engagement will continue throughout the project lifecycle and will include communication methods such as:

- Public exhibitions – to enable stakeholders/customers to ‘meet the team’ so that the project can be explained in greater detail. This will be done either face to face or virtually depending on the government restrictions that are in place at that time.
- Distribution of printed brochures/leaflets to explain the project in detail and the phasing of the work together with a contact telephone number should additional information or clarification be required.

- Letter drops to those customers who may be affected by the project, update letters as the work progresses – with contact details
- Site hoardings and signage will have information about the project – with contact details.
- Face-to-face visits will be made as appropriate to customers, businesses and stakeholders.

3 TYPES AND CHARACTERISTICS OF THE POTENTIAL IMPACT

The following section summarises the potential impacts of the proposal in respect of the requirements of Schedule 3 of the EIA Regulations, giving regard to the following factors:

- the magnitude and spatial extent of the impact;
- the nature of the impact;
- the transboundary nature of the impact;
- the intensity and complexity of the impact;
- the probability of the impact;
- the expected onset, duration, frequency and reversibility of the impact;
- the cumulation of the impact; and
- the possibility of effectively reducing the impact

3.1 Ecology

3.1.1 Designated Sites

The site lies outside of any statutory designated sites, and there are none within 2km of the proposed development and temporary working areas.

The works are located within close proximity of two ponds which form Whittingham Mires & Ponds Biological Heritage Site.

Construction method statements incorporating current best practice construction guidance will be adopted to ensure robust controls are installed and maintained throughout works to safeguard any potential impact on the BHS. Particular attention will be paid to dewatering activities, management of any potential pollution pathways and work that could impact drainage to the BHS.

3.1.2 Protected Species

An Extended Phase 1 Habitat Survey of the proposed works has been undertaken by Bowland Ecology Oct – Nov 2020. An earlier eDNA survey of potential amphibian breeding habitat was undertaken May-June 2020. A summary of ecology constraints identified, potential impact and proposed mitigation is provided in the supporting reports: *Alston / Spade Mill Pipeline, Longridge: Ecological Constraints and Target Notes* and *BOW20_345 Longridge eDNA, Alston / Spade Mill Pipeline*.

The following table provides a summary of Priority, Protected and other notable species and habitats identified and proposed mitigation.

Ecological feature	Potential impact of the proposed development	Mitigation
Habitats – hedgerows Priority Habitat	Numerous hedgerows are located throughout the survey area, most of which are located along field boundaries and roadsides. Some are species-rich, whilst others dominated by one species and scattered mature trees were located in many of the field boundary hedgerows. Temporary loss of short sections of hedgerows is anticipated to facilitate crossing of the pipeline easement and access routes.	Any section of hedgerow removal would be minimised to as far as practical and, wherever possible, targeted to avoid high value features or sections. Any affected sections of hedgerow would be replaced upon completion with native species of local provenance. Pre-construction surveys of any affected hedgerows would be undertaken to inform replanting proposals and to identify 'Important Hedgerows'. Measures to safeguard the canopy and Root Protection Area (RPA) of hedgerows to be retained would be in line with BS 5837:2012 (British Standard: BS5837).
Semi-natural woodland Priority Habitat	The majority of woodland areas are not located in proximity to the route. However, minor pruning / felling and works close to trees may be required, such as in the west of Section 10.	Tree works would be minimised to as far as practical and, wherever possible, targeted to avoid high value specimens. Any affected trees would be replaced upon completion on a 2:1 ratio. Pre-construction surveys of any works close to or affecting trees would be undertaken. Measures to safeguard the canopy and Root Protection Area (RPA) of hedgerows to be retained would be in line with BS 5837:2012 (British Standard: BS5837).
Watercourses Priority Habitat	Several watercourses are present throughout the survey area. These comprise a few main brooks and several smaller streams and drains along field boundaries. A number of watercourse crossings are anticipated to facilitate crossing of the pipeline easement and access routes. Although temporary in nature, works do have the potential to result in habitat loss and damage, including indirect effects of a pollution incident.	Works affecting watercourses would be minimised to as far as practical and, wherever possible, targeted to avoid high value features. Any affected watercourses would be fully reinstated upon completion of works with any necessary erosion control measures. Construction method statements incorporating current best practice construction guidance would be adopted to ensure robust controls are installed and maintained to safeguard all watercourses. Particular attention would be paid to silt management, dewatering activities and management of any potential pollution pathways.
Water voles & Otters	All watercourses within the survey area were fully inspected for signs of otter and water vole and assessed for their suitability. Camera traps were also employed. No otter holts were identified however, evidence of activity	Further surveys to confirm presence/absence of water vole and otter will be undertaken in spring/summer 2021. These surveys will also inform any necessary mitigation, impact reduction, licensing and reinstatement requirements. Works affecting watercourses would

	(footprints & sightings from camera traps) were recorded on Savick Brook (scheme section 10). Suitable otter habitat was also identified on Dean Brook (Sections 4 & 5), Blundel Brook (Sections 6, 7 & 8). The smaller streams and field drains were considered sub-optimal for otter. The brooks and many of the smaller streams and field drains provide suitable habitat for water vole. Burrows were observed in a few locations that had a size and shape consistent with water vole. Although some displayed field signs indicative of water voles, no confirmed evidence was identified. Camera traps utilised in these area were also unable to confirm presence/absence. Without confirmation, these watercourses are assumed to support water voles.	minimised to as far as practical and, wherever possible, targeted to avoid habitat and features that may be utilised by otters and water voles. Construction method statements incorporating current best practice construction guidance would be adopted to ensure robust controls are installed to protect any watercourse and especially any utilised by otter or water voles.
Badgers	Two badger setts were identified within Sections 7 and 9 of the route and evidence of badger including latrines, hairs and old, inactive setts were also recorded elsewhere within the survey area.	Works affecting badger setts would be minimised to as far as practical and kept to >30m of any active sett. Where this is not possible, consultation with Natural England would be undertaken with regard to any licensable activities. A pre-commencement walkover survey would also be undertaken to confirm current badger activity and identify any further mitigation requirements.
Roosting bats	Semi-mature to mature trees throughout the survey area provide potential roosting habitat for bats. These trees are predominantly located within hedgerows, along field boundaries or within areas of woodland.	Tree works would minimised to as far as practical and, wherever possible, targeted to avoid trees with roosting potential. In the event any tree works are required, a ground level assessment of bat roost potential would be undertaken. If any trees with moderate / high roosting potential are identified, an aerial inspection would be undertaken to confirm presence/absence. Compensation for the loss of suitable bat roosting habitat would be provided in the form of bat boxes where trees are to be felled. Where unavoidable disturbance of a confirmed roosting site is required, consultation with Natural England would be undertaken with regard to any licensable activities.
Great Crested Newts and other amphibians	eDNA surveys were conducted of 59 ponds identified within at least 250m of proposed works. 10 were confirmed to have GCN present. 3 additional unmapped ponds were	Construction works and clearance of suitable terrestrial habitat within 250 m of breeding GCN ponds would be minimised. In the event of any GCN habitat loss or disturbance is required, this would be fully

	discovered during ex-phase 1 survey (Target Notes 24, 25 and 33) which require survey. Surveys of these ponds are scheduled for spring 2021. Until results are confirmed, for the purpose of design, it is assumed these support GCNs. No direct works to any GCN ponds will be required however, work within 250m of breeding ponds is anticipated. No specific survey for common amphibian species has been undertaken however, it is anticipated these will likely be present in areas of suitable habitat within close proximity to any ponds.	reinstated upon completion of works. A full review of any activity within 250m of any confirmed or potential GCN breeding pond would be undertaken to confirm potential mitigation and licensing requirements. If any works are required within habitat potentially utilised by GCNs and is outside the threshold for licensing, Reasonable Avoidance Measures would be employed. For any works within close proximity to any pond or habitat that could support common amphibian species, Reasonable Avoidance Measures will be employed during site establishment and clearance activities.
Nesting birds	Damage and destroying of nests, killing or injuring nesting birds, possible loss of nesting and foraging habitat.	Vegetation removal would take place outside of bird nesting season where possible. If this is not possible, clearance would only take place following a breeding bird survey by a suitably experienced ecologist that confirms absence. Loss of any habitat, including any that offer potential bird nesting potential, will be fully reinstated upon completion of works.
Invasive Species	Himalayan balsam (<i>Impatiens glandulifera</i>) is widespread across the survey area, predominantly located around watercourses and field boundaries. Montbretia was identified within Section 8 within an arable field. Cotoneaster is also present within some residential gardens and adjacent to an access track. Himalayan balsam, montbretia and certain species of cotoneaster are listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).	In the event any works are required with close proximity to any INNS, a detailed construction method statement would be developed to identify the necessary control measures to prevent transmission or spread. In addition, the Contractor would employ best practice 'Check- Clean & Dry' guidance for any watercourse works.

Table 1 – summary of ecological mitigation and avoidance measures

On review of the ecological constraints present, it is acknowledged the proposed works, if unmitigated, has the potential to result in significant adverse impacts to a variety of valuable species and habitats. However, given of the temporary nature of works, outline mitigation strategy proposed, adoption of current best practice construction techniques and reinstatement proposals, it is considered any impacts will be short term and reversible.

3.2 Landscape

The proposed pipeline will run from Broughton WTW in the west to White Bull WTW in the east to the northeast of Grimsargh, through a predominantly rural and agricultural area, to the north

of Preston. There are no landscape designations in the study area. The Forest of Bowland Area of Outstanding Natural Interest (AONB) is approximately 5km to the north east at its closest point to the proposed pipeline.

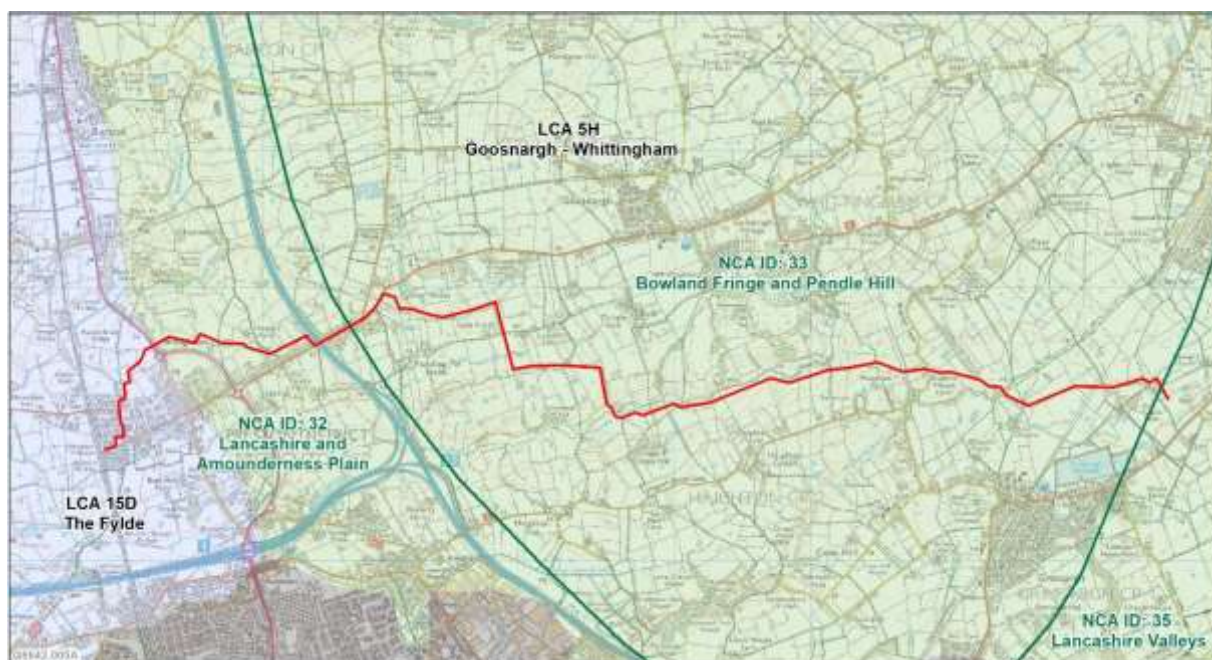
The proposed pipeline route passes through three National Character Areas (NCA):

- Lancashire and Amounderness Plain (NCA ID 32)
- Bowland Fringe and Pendle Hill (NCA ID 33)
- Lancashire Valleys (NCA ID 35) at the very eastern extent of the proposed pipeline

At a more local level in the Lancashire County Council Landscape Character Assessment the route is within the following LCAs:

- LCA 15D The Fylde
- LCA 5H Goosnargh-Whittingham

The national and local landscape character areas are shown on Inset A below followed by a description of the baseline landscape character.



Inset A: National and County Landscape Character Areas

3.2.1 Baseline Landscape Character and Visual Amenity

Review of Published Landscape Character Assessments

The majority of the proposed pipeline lies within NCA 33 Bowland Fringe and Pendle Hill which is described as an undulating, rolling landscape strongly associated with numerous river valleys. Land cover is varied, incorporating hay meadows, pastures, broadleaved woodland (which often occurs in valley bottoms and sides), parkland and water bodies. The principal land use is pastoral, and the areas long farming history, including well-maintained field boundary hedgerows, contribute significantly to its character.

The western extent of the proposed pipeline, to the west of the M6 motorway, lies on the edge of NCA 32 Lancashire and Amounderness Plain which is described as high-grade agricultural land extending southwards from Morecambe Bay in the north to the outskirts of Liverpool in the south. Land cover is predominantly pastoral in the north with more arable land to the south and there is a high density of relict pastoral field ponds on the eastern side of the NCA. The area is relatively well populated, particularly at the coast and it is well

connected by roads, rail, canals and long-distance footpaths. Many of the features of this character area relate to the coastal plain where there are extensive views across the coastal landscapes.

The very eastern extent of the proposed pipeline is at the transition with NCA 35 Lancashire Valleys, which broadly follows the wide vale of the rivers Calder and Ribble and their tributaries. Field boundaries are regular and are well formed by hedgerows with few hedgerow trees and the landscape is subject to strong urban influences including stone quarrying, coal mining, mill towns, industrial development and transport links.

In the Lancashire County Council Landscape Character Assessment 2000, the majority of the proposed pipeline is within the Undulating Lowland Farmland Landscape Character Type (LCT). This is a well-wooded landscape comprising woodlands, copses and hedgerow trees. The Undulating Lowland Farmland LCT is sub-divided into a number of Landscape Character Areas (LCAs) with the majority of the proposed pipeline within LCA 5H Goosnargh – Whittingham. This LCA is described as undulating lowland farmland which forms a transition between the Bowland Fells to the east and the Amounderness Plain to the west. It is an intensively farmed pastoral landscape of open character however the landscape generally appears to be well-wooded from ground level views due to the numerous hedgerow trees, wooded river corridors and small copses. Agricultural intensification has resulted in the loss of some field boundary hedgerows, however hedgerow trees along the network of hedgerows and minor roads remain important landscape features.

The western end of the proposed pipeline lies within the Coastal Plain LCT. Generally below the 50m contour, this landscape type is characterised by gently undulating or flat lowland farmland divided by ditches in West Lancashire and by low clipped hedges elsewhere. This landscape has been subject to agricultural intensification and the loss of hedgerows has resulted in long reaching views, sometimes punctuated by woodland and plantation shelter belts. Settlement is dense and there is a strong infrastructure network including rural lanes and major roads and motorways. The proposed pipeline is within LCA 15D The Flyde where field ponds are a characteristic feature and provide important wildlife habitats. The predominant land uses are dairy farming and lowland sheep farming. Field boundaries are defined by low clipped hawthorn hedges, although hedgerow loss is extensive and shelter belts are a frequent feature of the landscape.

Baseline Landscape Character of the Pipeline Route

The character of the landscape of the pipeline route is very typical of that described above in LCA 5H: Goosnargh – Whittingham. It is a predominantly pastoral landscape with well-defined field hedgerows with hedgerow trees. On the whole the hedgerows are well maintained and intact. The dominant hedgerow species is hawthorn but native mixed hedgerows are also a common occurrence with oak, ash and sycamore being the widespread tree species. Field ponds are a widespread feature and they are particularly numerous to the immediate east of the M6. The land is gently undulating increasing in elevation from west to east from around 30mAOD to 70mAOD. Blundel Brook and Savick Brook run through the area and introduce some further gentle local topographic variation. The topography of the area is illustrated on Inset 2 below. There are few woodlands in the area, there are, however, numerous hedgerow trees and trees along the watercourses and around field ponds which combine to create wooded farmland character.

The area is more urbanised in the western extent around Broughton, west of the M6 motorway. To the east of the M6 the landscape becomes increasingly rural with large farmsteads and small scale development along the minor road system and the villages of Goosnargh and Grimsargh. The former Whittingham hospital lies to the southeast of

Goosnargh set within extensive grounds of woodland, mature trees, open spaces and an internal road system. This closed in 1995 and has since been demolished and the site has been subject of a number of planning applications to redevelop the area whilst retaining its mature landscape framework.



Inset 2: Topography

Visual Baseline

The main views in the area are from the minor road network, from the PRoW network, from individual properties and farms and from the edge of properties in the closest settlements. The extent of visibility in the area is relatively contained due to the relatively flat to rolling topography with few elevated vantage points and widespread mature hedgerows and trees which reduce longer views.

The B5269 and Houghton Green Lane are the main roads in the area running in an east-west direction broadly parallel with the proposed pipeline to the north and south respectively. Mature hedgerows line the roads and foreshorten or filter many views.

Several roads run in a north-south direction crossing the route of the proposed pipeline including Garstang Road (A6), Broughton Bypass, the M6, Whittingham Lane and Brabner Lane. The pipeline route also runs along a section of Woodplumpton Lane (340m) and Whittingham Lane (950m) where it would be installed directly into the road.

National Cycle Route 6 runs from London to the Lake District. It runs along the minor road network in this area from Broughton Fulwood along Houghton Green Lane, Brabner Lane, Cumeragh Lane, the B5269, and north through Goosnargh. Mature hedgerows line the roads and filter many views although there are views across the adjoining farmland where there are breaks in hedgerows such as field access points.

There are no long distance footpaths in the area. There are numerous PRoW in the study area with 11 being directly crossed by the proposed pipeline (6-3-FP25, 6-9-FP13a, 6-9-FP14, 6-9-FP16, 6-9-FP18, 6-7-FP6, 6-6-FP27, 6-6-FP19, 6-6-FP17, 3-2-FP100, and 3-2-FP109) and one bridleway (6-3-BW26). Other footpaths run in the vicinity often close to the pipeline route. Views from footpaths range from open views across pastoral fields to views being filtered or obscured by vegetation including hedgerows, hedgerow trees and trees along water courses or around field ponds.

Properties along Woodplumpton Lane and properties to the north of Broughton have views over the area of the proposed pipeline route. Existing views are of Woodplumpton Lane and from the northern most properties north over pastoral fields with filtering by trees and hedgerows and garden vegetation. Views from other properties in Broughton are obscured by intervening built form.

The proposed pipeline runs to the south of properties along Whittingham Road and Goosnargh and Cumeragh. Views are across flat to gently undulating pastoral land which falls away towards Blundel Brook. Views are filtered in places by intervening hedgerows, hedgerow trees and garden vegetation. The mature trees around the former Whittingham hospital site also restrict views south east particularly from the eastern parts of Goosnargh and Cumeragh.

Haighton Green Lane and Grimsargh lie to the south of the proposed pipeline. Views from properties on the northern edge of Grimsargh north are across relatively flat pastoral land with filtering in places by intervening hedgerows, trees and garden vegetation although the landscape boundaries are less infrequent in this area.

There are numerous large farm properties dispersed through the area accessed by farm tracks off the minor road system. Views vary but generally are across undulating pastoral fields with filtering by hedgerows and hedgerow trees and vegetation along water courses and around field ponds.

The M6 runs north-south through the western part of the study area. It is raised at this point just north of junction 32. Fleeting views east of over the study area are likely from the raised section of the road.

3.2.2 Effects on Landscape Character and Visual Amenity

Pipeline Installation

The majority of the pipeline (around 8.3km) will be installed through farmland with the remaining length (1.2km) installed in the public highway. Where the pipeline is installed in fields a working width of 25-30m is required which will allow space for installing the pipeline, the temporary storage of excavated material and access along the route for construction traffic. The majority of crossings (ditches, hedgerows and access tracks) will be installed using an open cut technique with two crossings installed using a trenchless technique. These are at the A6 Garstang Road to protect the use of the road and at Savick Brook to protect the watercourse and associated vegetation.

The pipeline will be installed below ground at a depth of approximately 900mm. Topsoil and subsoils will be carefully excavated, stored locally and replaced to ensure the soil structure is not damaged. The majority of the pipeline route is improved pasture which would be reinstated to match the existing on completion. Where hedgerows are removed they will be replaced with new hedgerows to match the existing hedgerow species. The proposed pipeline installation will require the removal of some trees as detailed in the arboricultural survey. Any replacement tree planting will need to be planted outside the pipeline easement in positions to be agreed with the landowner.

Inspection and maintenance access covers are required at intervals along the length of the pipeline with the exact location and number of to be confirmed during detailed design and following discussions with landowners. As far as possible these will be positioned at the edges of fields.

Where the pipeline is installed in the highway a lesser working width will be required which will be agreed with Lancashire County Council Highways to minimise the traffic impacts. Road surfaces will be reinstated on completion to the required standard.

The proposed pipeline would result in localised disturbance to the landscape character during the construction period. The route has been designed to be reasonably direct whilst avoiding or minimising the effects on characteristic landscape features such as field ponds, hedgerows, mature hedgerow trees and water courses and associated vegetation. The working widths have been minimised as far as possible to reduce the extent of temporary effects on the landscape, whilst allowing space for access to undertake the works and for the appropriate storage of excavated soil to protect its structure. All accommodation works will be completely removed on completion and shockproof fences and hedgerows removed as part of the works will be reinstated with species chosen to correspond with that removed. All new planting will be suitably protected during establishment.

The majority of the pipeline route is through improved pasture which can be quickly returned to its current appearance in a short period (a single growing season). The hedgerows would take longer to establish vertical height and density of foliage (approximately 5 years). Mature trees cannot be replaced. Tree loss has been minimised in routeing where possible, however, some tree loss is anticipated as detailed in the arboricultural assessment. Any replacement tree planting will need to be planted outside the pipeline easement in positions to be agreed with the landowner. Tree planting will mature over the longer term.

On completion of the works, the pipeline corridor would be barely discernible in the landscape once the new seeding and planting has re-established. The character of the landscape would be consistent with that prior to the pipeline installation.

Views of the pipeline installation works would be largely restricted to the receptors in closest proximity to a particular section. Longer distance views are limited by topography and intervening vegetation due to the nature of the development being at ground level combined with the gently undulating landscape and intervening vegetation including hedgerows and vegetation along water courses, although there would be views along the cleared swathe of the pipeline as hedgerows are removed.

Receptors include residents in properties and users of PRow and the greatest effects would be experienced from receptors closest to particular sections with effects reducing with distance. There would be views of the pipeline installation works in close range along Woodplumpton Lane and Whittingham Lane where the pipeline is installed within the road, and to areas of the pipeline installation closest to receptors for example to the north of Broughton, to the north of Whittingham Lane and north of Grimsargh although intervening hedgerow and garden vegetation provides some filtering of views. Views from most of the minor road network (including NCN Route 6) are largely filtered by mature hedgerows along the roads with glimpses where there are breaks in hedgerows such as field access points. There are numerous PRow in this area which run close to the proposed pipeline route although those PRow which cross the pipeline route would be temporarily diverted during the works. There are also scattered farmsteads close to the pipeline route from where there would be views.

In terms of what will people see will include the movement of workers and vehicles, plant and machinery including cranes and tipper lorries, the removal of landscape features including trees and hedgerows, the visibility of bare ground and trench excavation, windrows of stored soils, construction welfare compounds, material lay down areas, temporary site

safety fences with solid hoarding where required to ensure welfare and public safety, tree protection and working easement definition fences. The works would have a temporary effect on views during installation and in the longer term effects on views would rapidly reduce as the vegetation is reinstated and matures in the short term (approximately 1 year for grasslands) to medium term (approximately 3-5 years for hedge replacement)

Associated Works including Compounds, Laydown Areas and Access Tracks

Three compound areas would be required during the proposed works. These are anticipated to be on Whittingham Lane adjacent to the M6, off Whittingham Lane near short Lane and adjacent the White Bull WTW. These compound locations are indicative as they are still be agreed with landowners. The compounds would have stone surfacing for site cabins, office, welfare and parking with storage for machinery and materials contained with secure fencing.

A number of smaller laydown areas would also be required along the route to provide space for the storage of small quantities of pipe and other materials as well as for small-scale welfare facilities and to provide car parking close to where the works are being undertaken.

A number of temporary access routes will be required during construction as detailed on drawings. The majority are existing access roads and tracks requiring minimal works. Two new temporary haul roads will also need to be constructed to provide access to the laydown areas: one off Houghton Green Lane to the west of Houghton Service Reservoir approximately 400m long and one off James Towers Way approximately 150m long. All construction related damage to tracks will be made good.

The establishment of the compounds, laydown areas and temporary haul roads would result in temporary localised disturbance of the landscape character during the construction period where pastoral land would be replaced with hardstanding for storage or access. The compounds will be fully removed shortly after completion of the construction period (or earlier if no longer required) with all hardstanding removed off site and soils replaced and re-seeded in the first available season to return the area to its original state. The character of the landscape will be reinstated and there will be no long term effects.

There would be localised views of the compound areas, laydown areas and haul roads where the delivery and storage of materials and welfare facilities would be visible along with the movement of workers and equipment between the compound and the works. Views generally would be restricted to the receptors closest to a particular site with wider visibility largely limited by topography, built form and intervening vegetation. Receptors include residents in properties and users of PRow and roads and the greatest effects would be experienced by the closest receptors for example from properties on the northern edge of Broughton closest to one of the laydown areas and from properties on Whittingham Lane opposite a proposed compound. There are also several PRow and roads which run close to these temporary compounds and laydown areas from where there would be views in close range.

The enabling works would have a temporary effect on views and would be removed and reinstated on completion of the works (or earlier if no longer required) and effects on views would reduce as the groundcover is reinstated. There would be no effects following establishment in the short term.

3.2.3 Summary

The proposed development would lead to temporary effects on the landscape character and views and would be barely discernible in the landscape once the new seeding and planting has re-established and matured. The character of the landscape would be consistent with

that prior to the pipeline installation and views of the pipeline swathe will reduce in the short term. The proposed development would not lead to significant environmental effects with regard to impact on landscape character and visual amenity.

3.3 Trees and Hedgerows

Tree surveys were undertaken between 15th October and 6th November 2020 in accordance with BS5837:2012. All trees and hedgerows within influencing distance of the working areas, access routes and the proposed pipeline, inclusive of canopy spread and Root Protection Areas (RPA), were plotted on drawing references D8462.001 to D8462.020. A summary of feature number and canopy spread is detailed in Table 1 on D8462.001.

The tree survey identified 37 Category A (high quality), 163 Category B (moderate quality), 134 Category C (low quality) and 16 Category U (unsuitable for retention) trees and tree groups. It also identified 99 hedgerows that are not categorised within BS5837.

Desktop searches of the proposed pipeline route found no trees protected by Conservation Area and no Ancient Woodland or Veteran trees. Searches identified 4 Tree Preservation Orders (TPO), 3 of which contained trees within the Order Schedules that are associable with trees surveyed. 1 TPO (ref: TPO/1951/0001) covers a large area of land north and north-east of Broughton (between Broughton and the M6 motorway). A schedule of features (the First Schedule of The Order) is available for this TPO, but unfortunately there is no definitive mapping is included within the Order itself and online mapping available is also not definitive. Trees affected by the proposed works that may be included within the TPO would need to be identified by the LPA prior to any works being undertaken.

The proposed pipeline was routed to avoid constraints including trees wherever possible. The majority of crossings (fields, ditches, hedgerows and access tracks) will be installed using an open cut technique with two crossings installed using a trenchless technique to avoid significant tree loss. These are at the A6 Garstang Road and at Savick Brook.

Tree and hedgerow removals required to install the proposed pipeline and temporary working areas are shown on drawing references D8462.021 to D8462.040 in accordance with the proposals on drawing reference 80062958-01-ADP-MISCE-NA-M2. Tree removals equate to the full or partial removal of 8 Category A, 28 Category B, 29 Category C and 4 Category U features however this will be further minimised during detailing design as far as possible. 48 hedges will also be affected by the proposals and will necessitate some sectional removal. A summary of features that are proposed for removal by feature number and canopy spread is detailed in Table 2 on D8462.020.

Suitable tree protection will be detailed on Tree Protection Plans that will be created and approved during the next phase of the scheme design. All protection measures will be installed prior to the commencement of any enabling or construction works. Supervision will be undertaken by a qualified arboricultural consultant where specified within the Tree Protection Plans.

Phased mitigation planting will take place following the completion of each section of construction as described in the landscape and visual section of this report and detailed planting proposals will be prepared to achieve no net loss of trees or hedgerows.

It is considered that with mitigation planting, the proposed development would not lead to significant environmental effects with regard to impact on trees in the long term and that mitigation in the form of new tree and hedgerow planting will result in no net loss of canopy cover by the time new planting is mature.

3.4 Public Rights of Way

The route of the proposed pipeline crosses or runs along circa 16 Public Rights of Way. They will each be impacted during the proposed works and we will work with Lancashire County Council Public Rights of Way Team to ensure that we have the appropriate permissions in place for any temporary closures / diversions as required.

We will seek to ensure that the duration and extent of any closures are minimised as far as possible and will look to provide temporary diversions around our works where it is feasible. There will be no need for any permanent diversions or closures of the rights of way and they will be reinstated back to their existing line and condition following completion of the works.

3.5 Flood Risk

The majority of the pipeline route and working areas are located in Flood Zone 1 which indicates a risk of flooding of greater than 1 in 1000 years.

There are two short sections of pipework where it crosses watercourses where the works are located in Flood Zones 2 and 3 which indicates the risk of flooding is greater than 1 in 100 years.

The works across these watercourses within Flood Zones 2 and 3 will be short term in duration and the methodology to avoid any flood impacts will be detailed in the Ordinary Watercourse Consent to Lancashire County Council. Following installation of the pipeline the areas impacted will be returned to their existing condition and ground level so there will be no long term flood risk impacts associated with the proposed works.

A flood plan will be produced and detailed within the Construction Environmental Control Plan detailing adequate controls that will be put in place during construction in the event of a flood.

3.6 Heritage and Archaeological Impact

The works are located outside of any statutory designated heritage sites.

There is one Scheduled Monument located within 1km of the proposed works, which is Chingle Hall Moated Site which is located over 350m from the proposed works. The access route goes past the site however it will use an existing access road and will therefore not impact on the Scheduled Monument.

There are a number of Listed Buildings within 250m of the proposed works however none of them will be directly impacted by the proposed works. The closest one is Haighton Hall Farmhouse at NGR 357555,435209 which is a Grade II Listed Building and located around 50m from the working area. There will be temporary impacts on the setting of this due to the temporary works associated with the construction of the pipeline but these will be short term in nature and following the completion of the reinstatement there will be no long term impact on the setting of any Listed Buildings close to the route of the proposed pipeline.

There are non-designated heritage assets which have been identified during a search of the Lancashire County Council Historic Environment Record (HER) and are listed below.

- As the pipeline goes under the A6 it crosses Roman Road 70d which runs between Preston to Lancaster.
- Crosses the edge of Barton Hall Walled Garden which dates back to the 18th Century
- Goes under the Preston Bypass which was built in 1958 which was Britain's first motorway
- Crosses two old railways Whittingham Mental Hospital Railway which stopped being used in 1957 and the Preston and Longridge Railway which stopped being used in 1967.

As the solution and construction techniques develop further discussions will be had with the Lancashire County Council Historic Environment Team to agree on any archaeological assessments and mitigation where required. Where possible the pipeline will be routed as to avoid any heritage impacts. The recommendations of the Historic Environment Team will be implemented in full and specialist archaeological contractors will be in place throughout the scheme to provide support as required.

As such, the potential for the works to impact previously unknown archaeological remains is considered to be negligible.

4 POLLUTION AND NUISANCES

4.1 Contaminated land

A desk based assessment has not identified any previous land uses along the pipeline which would be likely to cause contamination.

Geo-environmental testing will be carried out and any contamination will be managed following relevant waste legislation..

4.2 Production of Waste

The works will require excavation the construction of the pipeline and associated chambers. This will create approximately 35,000m³ of excavated waste, which will include the material from around the pipeline as well as from excavations in the highway and temporary haul roads / compounds and lay down areas. There is little opportunity to re-use the material due to the location of the works in third party land and the requirement to reinstate the land to the existing levels following completion of the works.

A Site Waste Management Plan will be completed, updated and reviewed throughout the detailed design and construction phase. This will detail waste types, expected amounts, and options to implement the waste hierarchy.

4.3 Traffic and Transport

Traffic numbers throughout the scheme will vary on a day by day basis depending on the works being undertaken and the location of the works. The works in the highway will generally require significantly less vehicle movements of around 10 HGV's per day. At peak during the construction of the temporary haul roads HGV movements will be in the region of 35 per day.

It is currently anticipated that there will be two working areas at any one time, with separate teams undertaking land drainage and reinstatement works following completion of the works.

4.4 Noise, Vibration, Mud, and Lighting

There will be noticeable noise disturbance during the works at local receptors due to the nature of works being carried out. The route of the pipeline runs in close proximity to a number of residential properties near Broughton WTW and where the pipeline crosses under the M6. The works in the highway adjacent to these properties will only be a short duration and best practice measures will be used to minimise noise and vibration impacts on local residents. Vibration impacts arising from the construction works in agricultural land are unlikely due to distance to nearby receptors as well as ground conditions.

The works are due to commence during a period with shorter daylight hours, and as such, task lighting will be required. The lighting will be directional, and it will not be left on outside of core working hours.

Mitigation measures for noise, vibration, mud, and lighting, detailing best practice measures, will be reflected in method statements and a Construction Environmental Control Plan for construction activities to ensure effective implementation.

4.5 Run Off and Silt Control

A pre-commencement drainage survey along the pipeline route will be undertaken which will include CCTV of existing drainage where required. Silt fencing will be installed along various points along the route when in close proximity to watercourses or sensitive receptors and this will be kept in place until the works have been completed and the ground reinstated to its previous condition.

Drainage will be installed along the easement of the pipeline as required and the scope of this works will be developed by a specialist contractor. Records of the existing and post completion drainage will be provided to the landowners and their tenants as required.

5 CONCLUSIONS

Through appropriate design, construction methods and proposed mitigation, United Utilities considers that there will not be a likelihood of significant environmental effects associated with this proposed development.

This statement has outlined and considered the likely environmental effects of the development relative to any sensitivities within the local environment. In considering any effect to the local environment, United Utilities has noted the presence of important characteristics for example, impacts on protected species, trees and hedgerows and local residents and users of the area.

The design of the proposed works have been informed from the outset to be mindful of the local environment and the likely effects of mitigation measures can be predicted with confidence, meaning it is not considered that this development would create impacts or affect local sensitivity with respect for the need for EIA.

United Utilities is therefore seeking confirmation from Preston City Council and Ribble Valley Borough Council that an EIA is not required in this instance.

6 APPENDICES