

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1

30th April, 2025

**RE: STRATEGIC INFRASTRUCTURE DEVELOPMENT - WATER SUPPLY PROJECT (WSP) –
Abstraction of raw water from Parteen Basin on the lower River Shannon and various elements of
water supply infrastructure, which collectively would extend from Parteen Basin in County
Tipperary, through the Midlands, to Peamount in County Dublin. (ABP pre-application consultation
reference: PC0124)**

1.0 INTRODUCTION

Uisce Éireann¹ have retained Tom Phillips + Associates² to prepare this request for an Opinion from the Board under Section 37CC of the Planning and Development Act 2000, as amended ('the Act'), in relation to the forthcoming Water Supply Project Eastern and Midlands Region (WSP) Strategic Infrastructure Development (SID) application.

During pre-application consultations held on 18th February 2025 (Record of Meeting: PC0124), the Applicant discussed with the Board that there would be a need to allow for some design flexibility with regard to vertical and horizontal alignment of the proposed pipeline in order to deal with any onsite constraints which may occur during construction.

The Board's representatives advised Uisce Éireann to make a formal request for a Design Flexibility meeting with the Board under S.37CC of the Planning and Development Act 2000, as amended, in order to address the matter.

The Board have advised that there is no fee associated with the request as it relates to the existing WSP SID pre-application process.

1.1 Project Overview

The Proposed WSP project would comprise an abstraction of raw water from Parteen Basin on the Lower River Shannon and various elements of water supply infrastructure, which collectively would extend from Parteen Basin in County Tipperary, through the Midlands, to Peamount in County Dublin. The Proposed Project consists of the following main features:

- Abstraction of raw water from Parteen Basin on the Lower River Shannon downstream of Lough Derg and the towns of Ballina and Killaloe

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- Raw Water Intake and Pumping Station (RWI&PS) on the eastern shore of Parteen Basin, County Tipperary, and pumping from there via twin 1,500 millimetre (mm) diameter Raw Water Rising Mains (RWRM), approximately two kilometre (km) long to a Water Treatment Plant (WTP) near Birdhill, County Tipperary, which includes a High Lift Pumping Station (HLPS).
- Approximately 170km of 1,600mm diameter single steel pipeline, comprising:
 - Treated Water Pipeline from the WTP to a Break Pressure Tank (BPT) near Cloughjordan, County Tipperary, approximately 37km long.
 - Treated Water Pipeline from the BPT to the Termination Point Reservoir (TPR) at Peamount, County Dublin, approximately 133km in length. The TPR would have a capacity of 75 megalitres (MI)
- A Booster Pumping Station (BPS) east of Birr, County Offaly, a Flow Control Valve (FCV) near Newtown, County Kildare, valves and other ancillary apparatus along the length of the pipeline.
- Power connections to the infrastructure sites and Line Valves, including uprating of the existing Ardnacrusha – Birdhill 38 kilovolt (kV) overhead line to deliver adequate electrical power to the RWI&PS and WTP.
- Provision of Take-Off Points at strategic locations between the WTP and TPR to facilitate potential future connections to supply communities in the Water Supply Area. The connecting pipelines and associated infrastructure would be delivered through separate projects, yet to be designed, and subject to their own separate consenting processes.

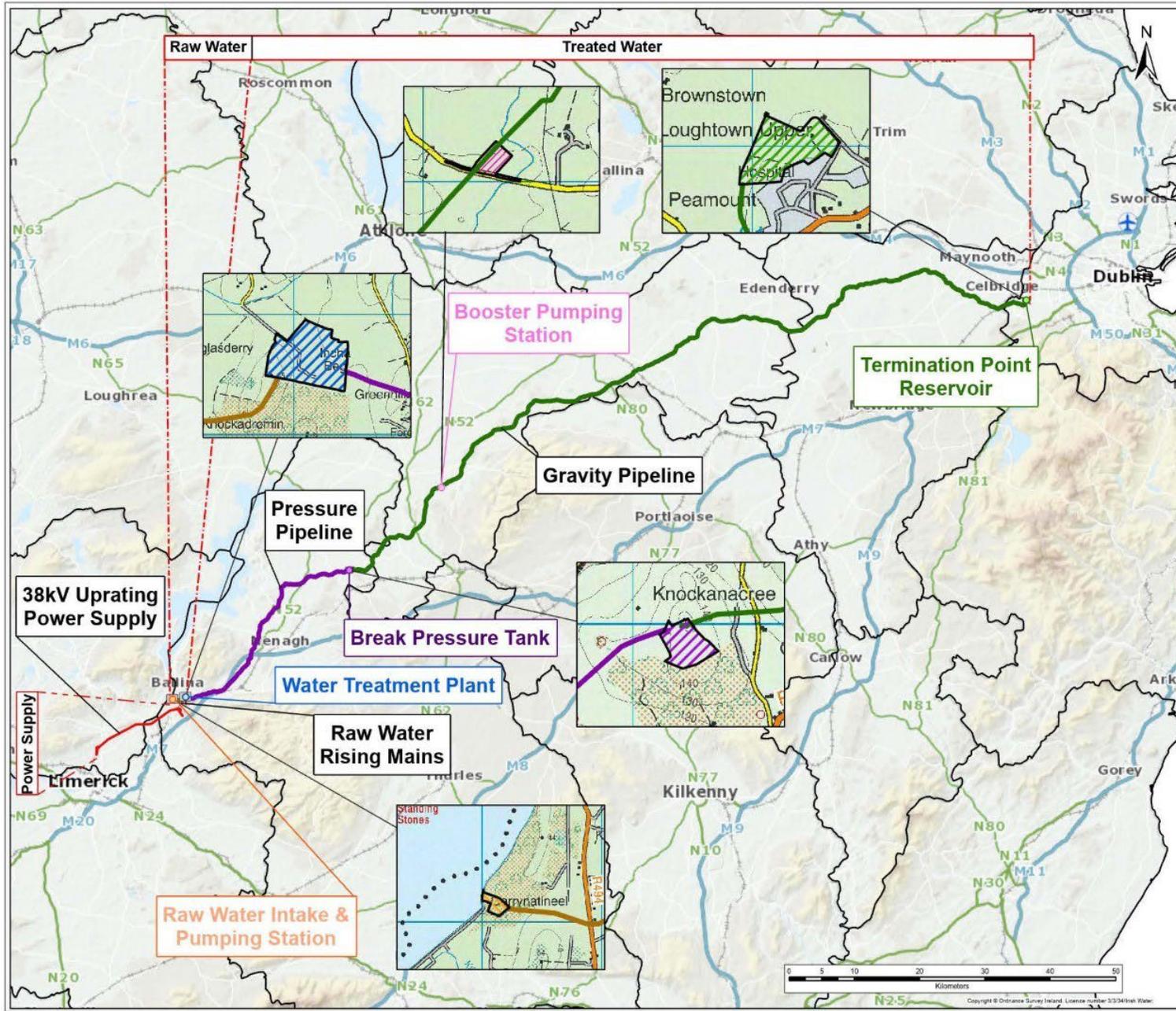
1.2 Locational Context of Site

We note the requirements of Section 37CC(2)(b) in this regard. Given the extensive nature of this linear project, the SID application will be accompanied by a series of Site Location OS Maps across the entire extent of the proposal. For the purposes of this submission we have included Figures 1 and 2 below, providing an overview of the extent of the proposed pipeline.

The Board will also note that the full project redline area can be viewed in the interactive GIS mapping at the link below.

The pipe and all associated infrastructure will cross six local authorities (Clare, Limerick, Tipperary, Offaly, Kildare and South Dublin).

<https://experience.arcgis.com/experience/202acb2dff3648f1a58c55f3fd6c2108>



- Legend**
- Gravity Pipeline
 - Pressure Pipeline
 - Raw Water Rising Mains

Rev.	Date	For Approval	PW	PW	SC	SW
		Purpose of revision	Drawn	Checked	Revised	Asptd
JACOBS TOBIN CONSULTING ENGINEERS						
Client: Uisce Éireann						
Project: Water Supply Project Eastern and Midlands Region						
Drawing Title: Figure 4.1 Overview of the Proposed Project						
Drawing Status: For Approval						
Scale @A3	1:550,000	Client No.		9318		
Jacobs No.	32105801					
Drawing No.	32105801/700/06001					
This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.						

Figure 1- Annotated Map showing Route of Pipeline. (Source: Uisce Éireann)

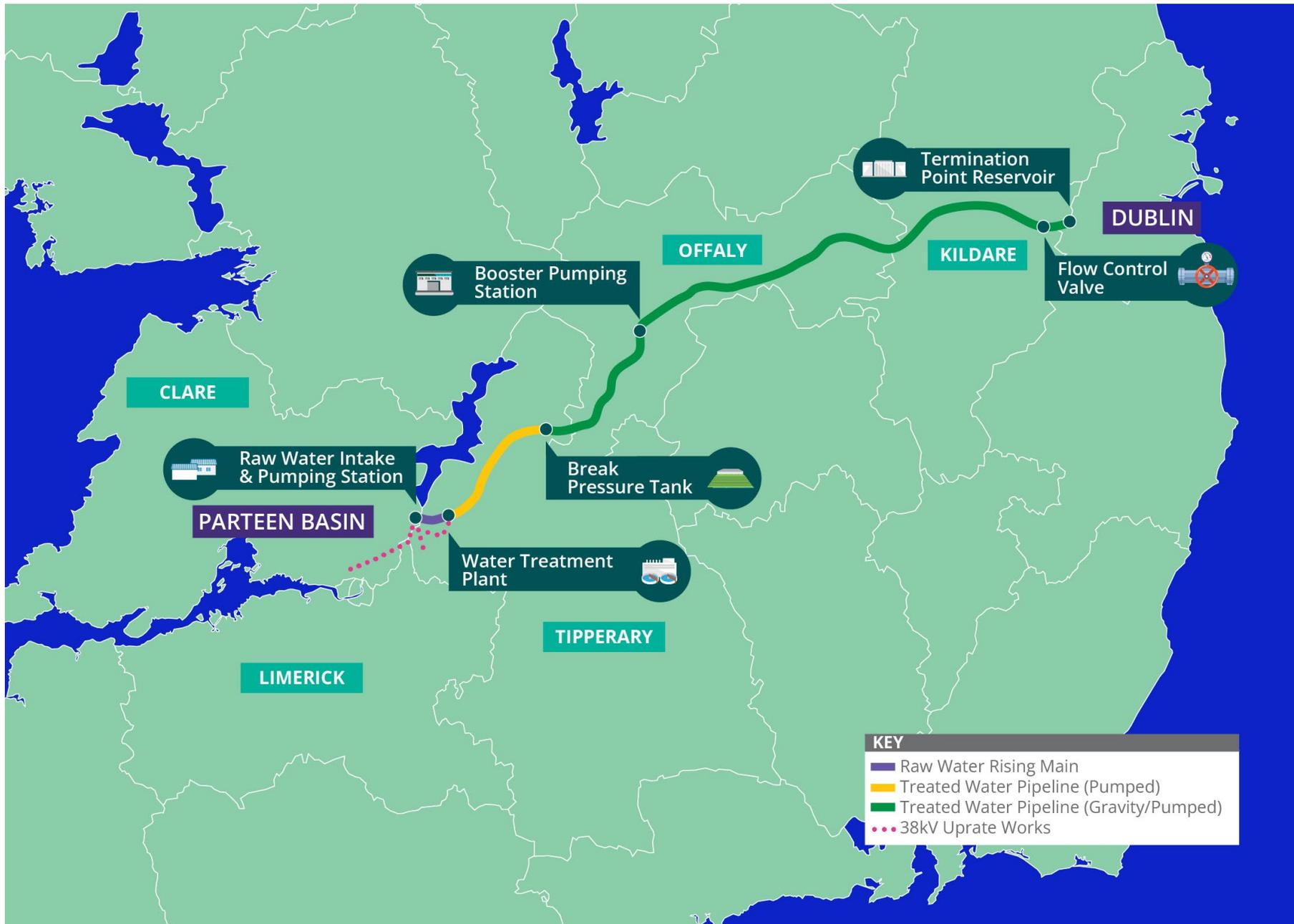


Figure 2- Diagram showing route of WSP Pipeline. (Source: Uisce Éireann 2025)

1.3 Accompanying Documents

Section 37CC(2)(d) requests that a submission be accompanied by a Draft Layout Plan of the proposed development. We refer the Board to a sample set of draft plans and longitudinal section drawings prepared by Jacobs & Tobin Consultant Engineers and enclosed with this request. The board will note that the flexibility requirements to be discussed relate solely to the pipeline works and exclude the various infrastructural sites included in the project.

1.4 Purpose of Proposed Project

The aims of the proposed project are to

- Provide a sustainable water supply from a New Shannon Source
- Address critical supply issues in the Greater Dublin Area with provision for future supplies to multiple Water Resource Zones in the Region
- Increase resilience of supplies and Levels of Service
- Deliver a flexible, future-proofed solution that is responsive to change.

1.5 Possible Effects on the Environment

The applicants are in the final stages of preparing a comprehensive Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) that will accompany the SID application. The EIAR presents a comprehensive assessment of the baseline environment along the route of the project, an assessment of the likely significant environmental effects and applicable mitigation measures associated with the proposed Water Supply Project Eastern and Midlands Region.

While it is expected that there will be a degree of unavoidable residual impact arising from the project following implementation of mitigation measures, the EIAR will demonstrate that for the most part the the proposed project can be successfully delivered without significant impacts on the environment. In addition, the NIS accompanying the application and in final stages of preparation is expected to demonstrate that the Proposed Project would not adversely affect the integrity of any European site either alone or in combination with other plans or projects in view of best scientific knowledge and in view of the conservation objectives of the sites.

1.5.1 Environmental Impact Assessment

The scope of the EIAR has been developed over the course of the design process informed by pre-planning meetings with the Board. The EIAR presents the environmental impacts predicted from the Proposed Project For each environmental topic chapter. The chapters are as follows:

1. Introduction
2. The Environmental Impact Assessment (EIA) Process
3. Consideration of Reasonable Alternatives

4. Project Description
5. Construction & Commissioning
6. Noise & Vibration
7. Traffic & Transport
8. Biodiversity
9. Water
10. Soils, Geology and Hydrogeology
11. Agriculture
12. Air Quality
13. Climate
14. Population
15. Human Health
16. Landscape & Visual
17. Cultural Heritage
18. Material Assets
19. Resource & Waste Management
20. Risk of Major Accidents and or Disasters
21. Cumulative Impacts and Environmental Interactions
22. Mitigation and Monitoring
23. Summary of Significant Residual Effects

The assessment of likely significant environmental effects has been conducted in accordance with the guidance set out in Section 2.3, including the EPA (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports and other topic-specific guidance where relevant.

In addition to the applicable EIA legislation and guidance, relevant EU Directives and national legislation relating to the specialist areas have been considered as part of the assessment process. The overall assessment approach has included the following steps:

- Inclusion of design measures to 'avoid' likely significant effects within the Proposed Project (i.e. embedded mitigation)
- Desktop data gathering and field survey to establish baseline conditions
- Assigning the receptor sensitivity
- Assessing and characterising the magnitude of impacts and significance of effects
- Incorporating mitigation measures to avoid and/or reduce likely significant effects
- Reporting the residual significant effects after mitigation.

1.6 Natura Impact Statement

Jacobs TOBIN is in the final stages of preparing an NIS in accordance with the provisions of the relevant legislation, providing information to enable the competent authority to perform its statutory function to undertake AA in respect of the Proposed Project. This NIS includes an examination and analysis of the best available scientific knowledge and data in the field to identify and assess the implications of the Proposed Project for any European sites in view of the conservation objectives of those sites. It considers whether there are ex situ implications

for any European sites, for example from impacts which occur via upstream pathways at a remote but connected location, or from impacts on populations of ex situ species located outside of European sites, or from impacts on ex situ supporting habitats. It considers whether the Proposed Project, by itself and in combination with other plans or projects, would adversely affect the integrity of any European sites. In reaching a conclusion in this regard, consideration has been given to any mitigation measures necessary to avoid or reduce any potential adverse effects.

Following the completion of the NIS and implementation of the mitigation measures prescribed in Section 7 of the document, it is expected that the proposed Project will not, individually or in combination with other plans or projects, adversely affect the integrity of any European sites in view of their conservation objectives, and there is no reasonable scientific doubt as to that conclusion.

2.0 DETAILS UNLIKELY TO BE CONFIRMED AT THE TIME OF THE PROPOSED APPLICATION

Section 37CC (2) (e) requires that the applicant provide:

a description of—

(i) the details, or groups of details, of the proposed development that, owing to the circumstances set out in subparagraph (ii), are unlikely to be confirmed at the time of the proposed application, and

(ii) the circumstances relating to the proposed development, including such circumstances as the Minister may prescribe in relation to any class or description of development for the purposes of this subparagraph, that indicate that it is appropriate that the proposed application be made and decided, before the prospective applicant has confirmed the details referred to in subparagraph (i) including, in particular, whether the prospective applicant may be able to avail of technology available after making the proposed application that is more effective or more efficient than that available at the time of the application,

Despite extensive surveying and ground investigations, given the nature and scale of the project, it is inevitable that certain obstacles or unidentified constraints will arise during construction that may affect the preferred route for the pipeline, as outlined in the accompanying sample layout drawings.

It should be noted that any design changes at the subsequent design stages would be thoroughly reviewed to ensure that there would be no material changes to the planning application and that the design changes would not alter any conclusions reached regarding the effects on the environment reported in the EIAR.

2.1 Limits of Deviation

Section 37CC (2) (f) requires that the applicant provide:

an undertaking to provide with the proposed application, either—

(i) two or more options, in respect of each detail or group of details referred to in paragraph (e)(i), containing information on the basis of which the proposed application may be made and decided,

(ii) parameters within which each detail referred to in paragraph (e)(i) will fall and on the basis of which the proposed application may be made and decided, or

(iii) a combination of subparagraphs (i) and (ii),

(g) such other information, drawings or representations as the prospective applicant may wish to provide or make available, and

Given the nature of the proposed pipeline works and the variables that may result in the need for flexibility, the Applicants intend to set out the parameters within which the potential deviations will fall in accordance with (ii) above.

Within the defined red line boundary of the Proposed Project, the planning drawings identify an indicative centreline for the pipeline located within a 20m Permanent Wayleave. This represents the preferred location for the pipeline. However, there may be circumstances at construction stage when unforeseen obstacles or ground conditions are encountered and a degree of flexibility in the pipeline location is required to enable its construction.

Therefore, the planning application seeks permission for flexibility in the location of the pipeline from the indicative centreline.

The EIA to be submitted with the application identifies the likely significant impacts that will arise from the construction and operation of the project. This takes into account the potential impacts due to works within the envelope of the 50m Construction Easement, and therefore, takes account of the practicable scope for flexibility due to the Limits of Deviation.

2.1.1 Pipeline Construction (Vertical Alignment)

The engineered rise and fall of the pipeline along its longitudinal length would generally follow the existing ground profile to limit depths of excavation. The pipeline would be laid at a minimum depth of cover of 1.2m above the crown of the pipe. Maximum depths of excavation are generally 6m, except where peat is encountered where the maximum depth of excavation has been constrained to 4m as far as reasonably practicable. However, at trenchless crossings the depth of cover would exceed these depths as required by the local site conditions/constraints.

The vertical alignment of the pipeline can vary between 1.2m and 4.4m to the crown of the pipe. The exception is where the alignment is already below 4.4m to the crown (for example for a trenchless crossing) and then it can only be made shallower (subject to any other requirements such as the minimum cover under rivers and roads/railways).

2.1.2 Pipeline Construction (Horizontal Alignment)

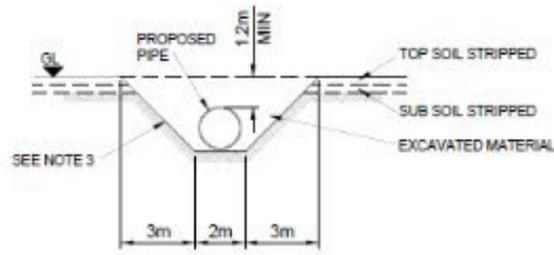
It is proposed that the pipeline within this planning application has a maximum horizontal Limit of Deviation dictated by the maximum construction working width. The Limit of Deviation is constrained so that the construction works, including the 20m Permanent Wayleave are



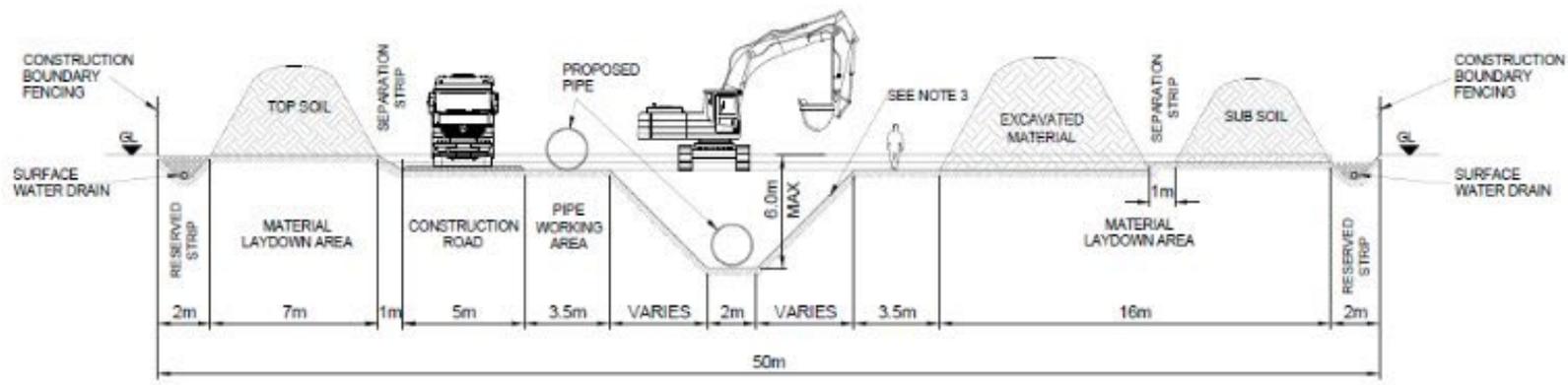
located within the planning application boundary of the Proposed Project i.e. within the typical 50m Construction Easement which does not change. (See Figure 3 below). .

A permanent 10m wide wayleave is needed for the pipeline connections between washout valves and washout outfalls. The outfall pipeline alignment could be anywhere within the 10m permanent wayleave.

The outfall headwalls and discharge point would have to move with the alignment of the outfall pipeline, as set out above, and so the discharge point could move within the same 10m permanent wayleave.



TRENCH DETAIL (MINIMUM COVER 1.2m)
SCALE 1:200



TYPICAL CONSTRUCTION WORKING WIDTH
SCALE 1:200

- NOTES:**
- DO NOT SCALE FROM THIS DRAWING.
 - NOMINAL COVER TO THE PROPOSED PIPE IS 1.2m MEASURED FROM ORIGINAL GROUND LEVEL. (MAX TRENCH DEPTH (EXCEPT AT CROSSINGS IS NOMINALLY 6M).
 - THE 45 DEGREE ANGLE OF BATTER IS INDICATIVE ONLY AND THE ACTUAL BATTER ANGLE WILL BE DETERMINED BY LOCAL GROUND CONDITIONS. WHERE NECESSARY TRENCH BOXES OR SHEET PILING WILL BE EMPLOYED TO LIMIT THE WIDTH OF THE TRENCH AT GROUND LEVEL.

PREVIOUS DRAWING NUMBER WAS 32105801/SK/004-D

Rev	Desc	Proposed by	Checked	Rev'd	App'd	
1	Issued	SECTION 3 END NUMBER UPDATED	WJS	SPH	DS	CCW
2	Issued	TO SHOW MAXIMUM DEPTH OF TRENCH	WJS	SPH	DS	CCW
3	Issued	TOP SOIL AND SUBSOIL SEPARATED	LD	DS	DS	MS
4	Issued	FOR INFORMATION	LD	DS	DS	MS
5	Issued	FOR INFORMATION	LD	DS	DS	MS



Client: **UISCE WATER**

Project: **Water Supply Project Eastern and Midlands Region**

Drawing Title: **TYPICAL CONSTRUCTION WORKING WIDTH**

Drawing Status: **FOR INFORMATION**

Scale (m): 1:200 DO NOT SCALE

Drawing No: 32105801 Drawing No: 0018

Drawing No: 32105801/600/00256

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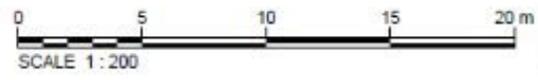


Figure 3 - Illustration of Typical Construction working width (Jacobs Tobin)

2.1.3 CPO vs voluntary land transfer

The application of the Limit of Deviation will differ between the circumstances of voluntary agreement with affected landowners and where CPO applies. The permanent wayleave would be 20m in width and has been provisionally centred on the pipeline, however in practice, the location of the permanent wayleave may differ depending on how land is to be acquired, through voluntary sign up or by CPO.

At the time of undertaking the EIAR associated with the project it was not certain which lands would be subject to a voluntary acquisition agreed and which would be subject to CPO. Therefore, on a precautionary basis the maximum level of deviation, that being the voluntary agreement, has been assessed for the whole length of the pipeline, which means that for the purpose of the assessment in the EIAR the final horizontal pipeline alignment could be anywhere within the Construction Working Width (which is typically 50m wide)

In the case of lands subject to voluntary sign up, Figures 4 and 5 below illustrate a potential scenario whereby an as yet unforeseen obstacle may require a horizontal realignment of the proposed pipeline.

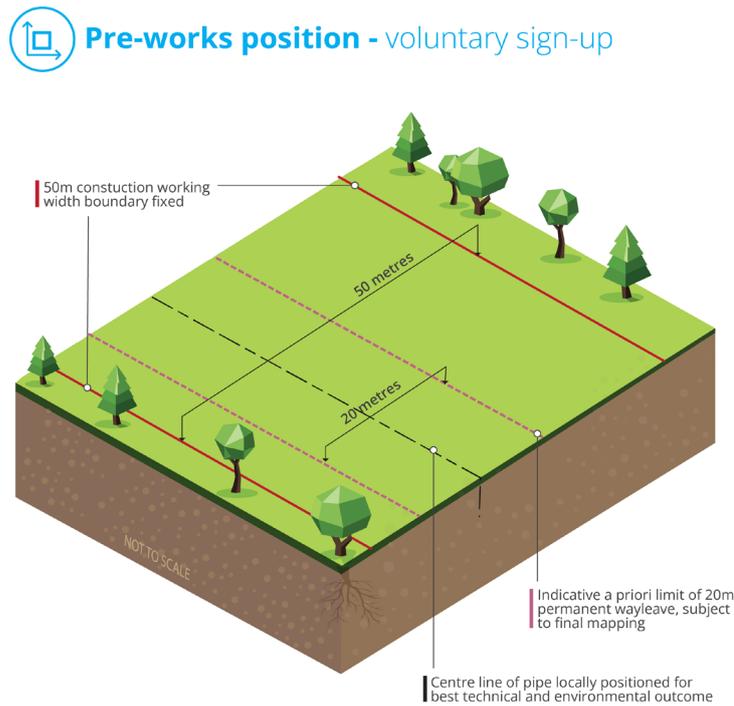


Figure 4 - Diagram showing Pre Works Position- Voluntary Sign-Up (Source: Jacobs)

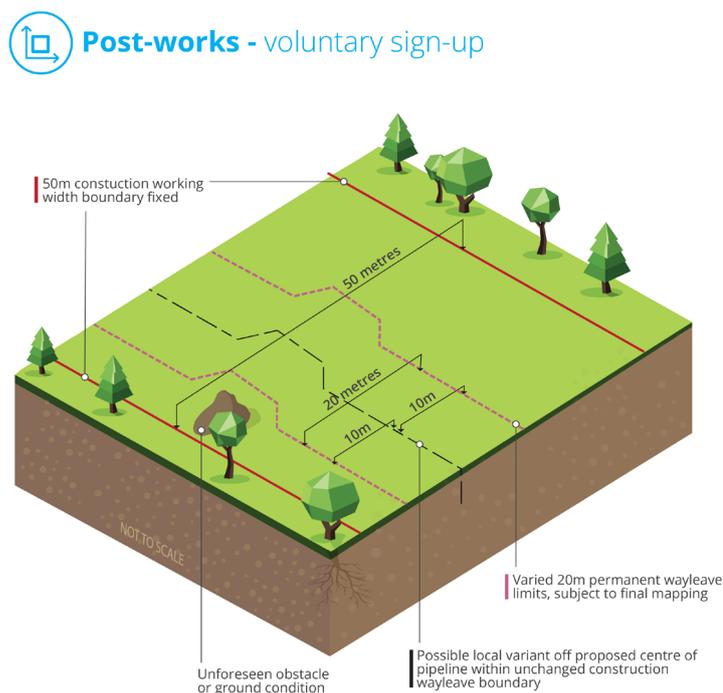


Figure 5 - Diagram showing Post Work Position - Voluntary Sign-Up (Source: Jacobs)

Where voluntary agreements are made with the affected landowners, this results in a maximum of 20m horizontal deviation with an associated movement of the Permanent Wayleave. This is subject to maintaining an adequate construction working area on either side of the amended location of the pipeline.

An illustrative scenario in circumstances where deviations are required on lands subject to Compulsory purchase Order is outlined in Figures 6 and 7 below.

Pre-works position - compulsory wayleave position

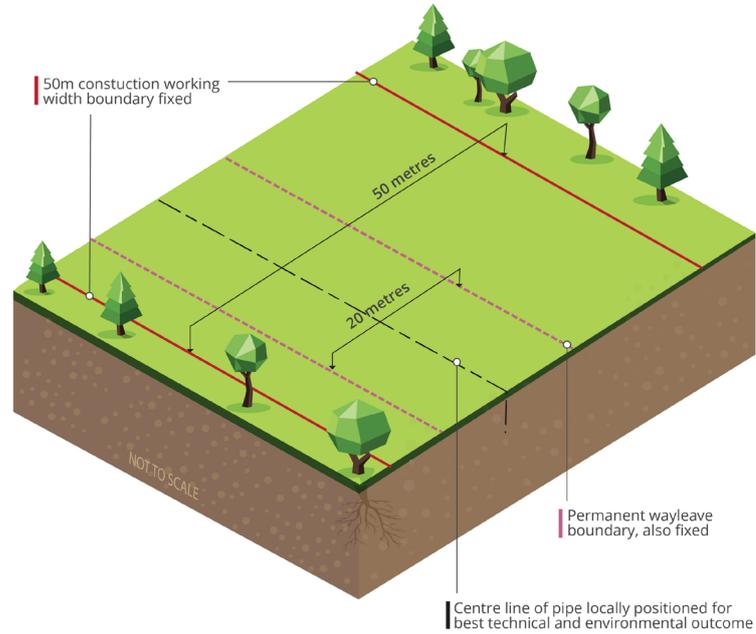


Figure 6- Diagram showing Pre Works Position - CPO (Source: Jacobs)

Post Works - compulsory wayleave position

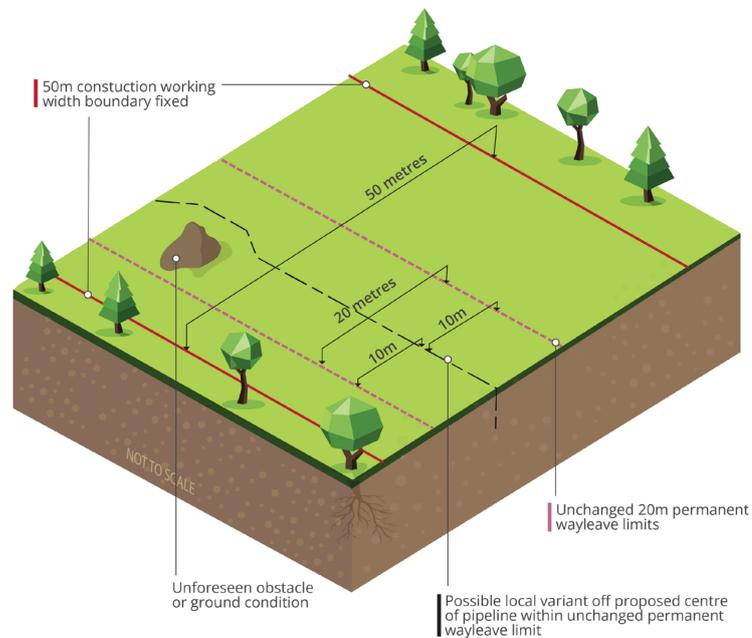


Figure 7- Diagram Showing Post Works Position - CPO (Source: Jacobs)

Where the lands affected are subject to a CPO, the Permanent Wayleave is not changed and the potential movement of the pipeline can only occur within the boundary of the 20m Permanent Wayleave subject to the CPO.

2.2 Worst Case Approach

The layouts as shown within the defined site boundaries set out clearly defined parameters within which the framework of development must take place, including the maximum extent of development on each site as well as the operational limits on activity in terms of water throughput.

Within those defined parameters of the project, the level of detail of the proposal is such as to enable a proper assessment of the likely environmental effects. In assessing the likely effects, the EIAR adopts a cautious 'worst case' approach. Such an approach feeds through into the mitigation measures proposed. These mitigation measures are adequate to deal with the worst case, in order to optimise the effects of the development on the environment.

3.0 CONCLUSION

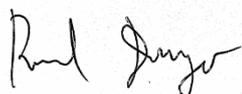
The details of the Proposed Development which are unlikely to be confirmed at the time of the proposed application are the vertical and horizontal alignment of the pipeline. The circumstances under which the details are unlikely to be confirmed would be unforeseen obstacles or due to ground conditions.

There could be different outcomes based on the method of land acquisition. The lands where voluntary agreements were made could result in a maximum deviation of 20m with associated movement of the permanent wayleave (maintaining adequate space either side of the amended pipeline for construction and maintenance).

The permanent wayleaves for the lands acquired via Compulsory Purchase Order would not change and the movement of the pipeline would be limited to within the 20m permanent wayleave.

We trust that the above information is sufficient, please do not hesitate to contact us if you have any queries on the above.

Yours sincerely,



Bernard Dwyer

Associate

Tom Phillips + Associates