11. Preferred Scheme – Infrastructure Sites

The POAR examined four technically viable options carried forward from the Options Working Paper, it set aside two of them involving abstraction from Lough Derg, on environmental grounds, and it established that, of the remaining two options, abstraction of water from the Shannon at the Parteen Basin, or Lower Lake, was emerging as preferable to the alternative which involved Desalination of seawater from the Irish Sea in North Fingal.

The earlier chapters of this FOAR have carried out an interim review of water demand, and have also examined how the proposed abstraction at Parteen Basin can be accommodated, within the normal operating water level band on Lough Derg/Parteen Basin. Additional modelling work has been carried out, which supports the basis for identification of the 'Emerging Preferred Option'.

The review of water demand (Section 5), and the proposals for phasing, have both confirmed the requirement for a scheme to meet the increasing demands of the Eastern and Midlands Region, and have addressed how capacity can be matched to growing demand. Additional modelling work has been carried out, which supports the basis for identification of the 'Emerging Preferred Option', (Section 7). The economic factors in cost-benefit analysis have been considered (Section 8) for the preferred option of abstraction at Parteen, vis-à-vis the other alternative options of Desalination or the 'Do Minimum' scenario. 'Do Minimum' is the default scenario which is most likely to persist should the proposed investment, or investments, in a new source option are not undertaken.

On the basis of these assessments, Option C (Parteen Basin Reservoir Direct), or the 'Emerging Preferred Option', is affirmed as the Preferred Scheme, on environmental grounds, on cost-benefit grounds, and in terms of meeting the fundamental objectives of the Water Services Strategic Plan and of the WSP itself (refer to Section 9).

In this regard, the issue of best water source option is confirmed at this point, and the question turns to selection of the preferred sites for the different components of the Preferred Scheme.

The Preferred Scheme will comprise a number of constituent components of infrastructure that collectively make up the water supply system (Figure 11.1). These can broadly be defined as:

> Non – Linear Infrastructure, including the Raw Water Abstraction Works, Water Treatment Plant, Break Pressure Tank and Termination Point Reservoir(Section 11.2) and
>
> The Transmission Pipeline (Linear Infrastructure).

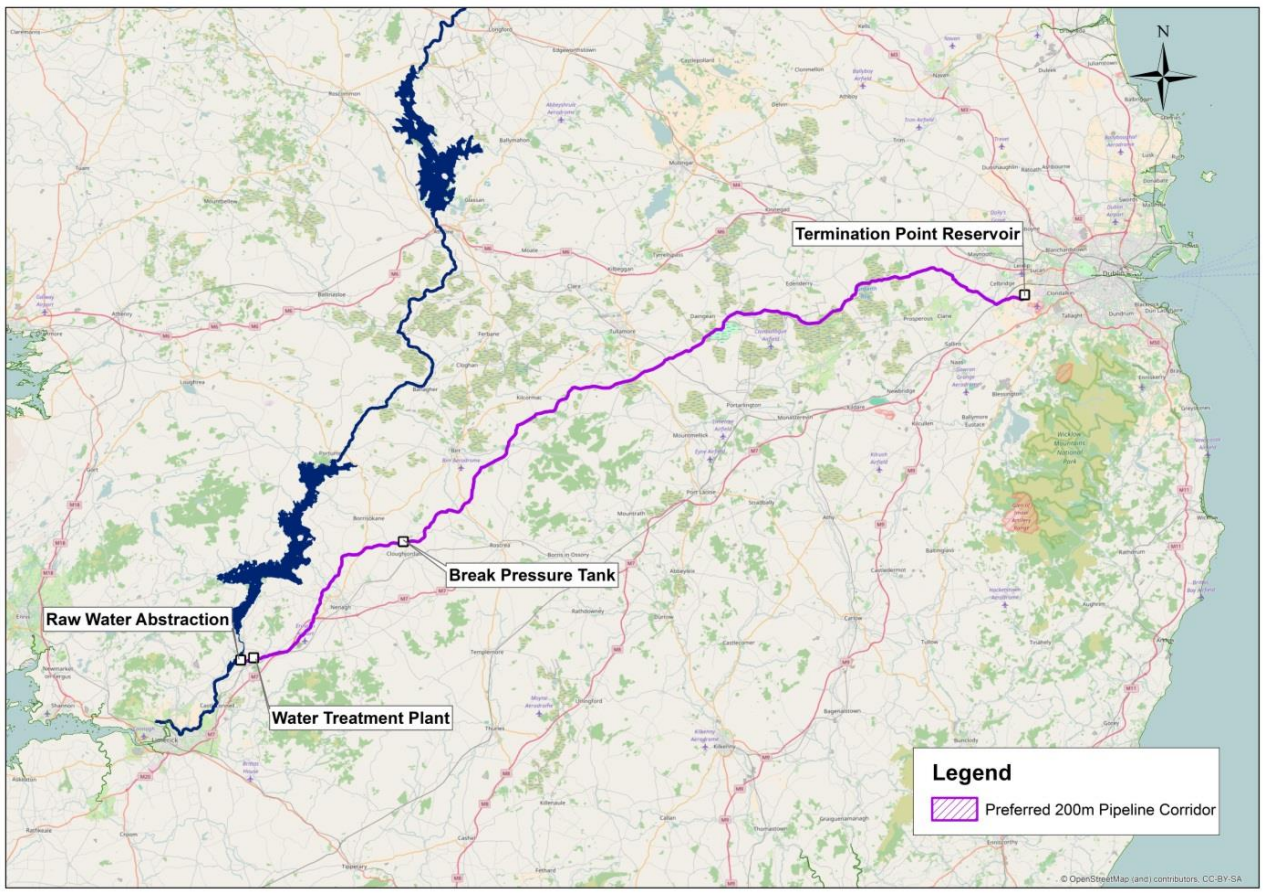

Figure 11.1 The Transmission Pipeline (Linear Infrastructure) and Other (Non – Linear Infrastructure)

Sections 11 and 12 discuss how the different siting options for these components were developed to minimise impact on their environment and, taken with Appendices E to I, they detail the appraisal of these site and route options. They set out multi-criteria analyses (MCA) of the options available, to identify a preferred site for each component from the multiple sites considered (Section 11), and to identify the preferred pipeline route corridor in a similar way (Section 12), with recommendations on preferred sites and pipeline routes.

Before proceeding to development of site options and site option appraisal, it should be recalled that the Options Working Paper consulted upon the appraisal criteria, and on the list of environmental datasets which have been used to define land areas of different degrees of constraint. The positioning of site options for the proposed raw water intake, water treatment plant, break pressure tank, termination point reservoir, and linear pipeline, has been done with the aim of least environmental impact, through good positional design from the outset, avoiding, where possible, known areas of environmental and technical constraint from the many datasets published in the Options Working Paper.

The sequence of work has been to position site and route options, in the 'white space' or less constrained areas. These are then evaluated by the specialists in a workshop structure to identify the 'least constrained'. This is followed by fieldwork surveys to verify conditions on the ground, and by review of consultation feedback, to determine the 'preferred site' in each case. The Environmental Impact Statement and Natura Impact Statement are then prepared on the Scheme incorporating the preferred sites and pipeline route.

11.1 Multi Criteria Analysis (MCA) – Methodology

Comparing alternative options calls for a framework to integrate the views of the different specialists on the options. Multi criteria analysis (MCA) is a mechanism that explicitly considers multiple criteria within a decision-making environment. The fundamental approach is to utilise Specialist expertise to conduct the analysis. Comparing alternatives against multiple objectives and criteria through MCA allows for a collective balancing of

different impact types, understanding of the merits of each option, and the establishment of a preference ranking, in a collective way; informing and justifying the decision making process. In the assessment of sites to identify one of least constraint (for each main infrastructure component), the following specialisms and disciplines were involved. Appendices E to I inclusive set out the detailed considerations of the specialists in forming their views.

i. Ecology – the consideration of impact on animals, plants and their environment.

ii. Water – the consideration of impacts on the surface water environment.

iii. Air and Noise - the consideration of air and noise pollution.

iv. Cultural Heritage - the consideration of existing archaeological and built heritage.

v. Soils, Geology and Hydrogeology – the consideration of impact on soils, geology and hydrogeology.

vi. Landscape and visual – the consideration of landscape and visual impact.

vii. Agronomy – the consideration of impact on land based enterprise.

viii. People – the consideration of impacts on people.

ix. Planning – the consideration of planning and land use policy in relation to proposed works.

x. Engineering - the consideration of technical challenges associated with proposed works.

xi. Traffic - the consideration of impact on traffic and road network.

The following methodology was employed:

1. Each of the specialist disciplines (identified above) assessed the site options against the criteria of Table 11.1 to determine the site option for each ancillary component with the overall least impact from their specialist perspective.
e.g. The ecology specialist assessed the four raw water abstraction sites against Biodiversity, Flora and Fauna, Fisheries criteria to determine the site option with least impact from an ecology perspective.

2. The preliminary position of each Specialist, on each ancillary component, presented in matrix format, was collated for each of the ancillary components and presented at a workshop where all the Specialists were represented.
e.g. The ecology specialist assessment for raw water abstraction sites was compiled with the assessments of Air and Noise etc. to present a complete MCA assessment of the sites.

3. In this workshop setting, the matrix of preliminary individual assessments for each individual component was presented to the collective specialist group. The position of each of the specialists was then discussed to reach a consensus of agreement on a preferred site for each main infrastructure component, from the various alternatives.
e.g. The ecology specialist assessment was balanced against that of the other specialists to inform an overall ranking of raw water abstraction sites, and support preference towards one.

A breakdown of the criteria employed by each of the specialisms is presented in Table 11.1.

Table 11.1 Applicable Criteria for each Specialism

Specialism	Applicable Criteria
Ecology	Biodiversity, Flora and Fauna, Fisheries
Air and Noise	Air/Climatic Factors
Cultural Heritage	Cultural Heritage (including Architecture & Archaeology)
Soils, Geology and Hydrogeology	Soils, Geology and Hydrogeology
Landscape and visual	Landscape & Visual
Agronomy	Material Assets (Land use)
Water	Water and the Water Framework Directive
Engineering	Material Assets (Energy), Safety, Engineering and Design, Capital and Operational Cost, Sustainability, Risk
Planning	Planning Policy
People	Tourism, Population, Human Health

The Specialists, in completing the MCA, also incorporated feedback from the POAR consultation process, primarily to establish if the process had identified any new information which needed to be included in the assessment process for relevant individual specialists. This was to establish if the consultation submissions contained additional information relevant to the MCA and to determine any impact on the individual assessments, or collective arrangements facilitated by the workshop setting.

Appendices E to I inclusive contain the various MCA, and supporting Statements from each of the Specialists, that were completed on each of the various ancillary components of infrastructure.

A simple classification was used for the MCA - one of five categories of impact were applied to each of the locations of ancillary components under consideration; colour coded for ready identification.

These were:

Impact Category	Colour Code
Very high	**Dark blue**
High	**Blue**
Mid-range	**Green**
Low	**Light Green**
Very low	**Cream**

11.2 Non – Linear Infrastructure Components in Water Supply

The non – linear infrastructure components comprise of the followings assets which are explored individually in the following sections:

Intake and Raw Water Pumping Station (Section 11.3 and Appendix E)

Abstraction of raw water will be from the Lower Lake (Parteen Basin) via a submerged pipeline or open channels, which will extend a relatively short distance out into the basin. The abstraction works will incorporate a raw water pumping stations which will deliver raw water to the proposed water treatment plant.

Water Treatment Plant (Section 11.4 and Appendix F)

The water treatment plant will treat the raw water from Parteen Basin to Drinking Water Standards for human consumption in accordance with relevant legislation. The water treatment plant will also incorporate a high lift pumping station to deliver treated water to a Break Pressure Tank.

Note: The transmission pipeline is discussed in Section 12.

Break Pressure Tank (Section 11.5 and Appendix G)

A Break Pressure Tank (BPT) will be located at the highest elevation of the transmission pipeline and is required to manage the water pressures that will be generated in the operation of the transmission pipeline. The tank is the point at which the transmission line will change from a pumped to a gravity flow. In practice, treated water will be pumped from the water treatment plant to this tank, and the water will flow by gravity from the tank to the termination point reservoir. It will act as a balancing tank for pumped flows, e.g. from the WTP, it will help to limit variability in operating pressures, and it will provide sufficient storage such that there is adequate reserve flow to maintain the on-going pipe full after the pumps have stopped or tripped.

Termination Point Reservoir (Section 11.6 and Appendix H)

Located at the end of the transmission pipeline, the Termination Point Reservoir (TPR) acts as storage facility for the treated water; providing capacity to serve the varying demand profile of the Dublin Water Supply Area. The TPR will be integrated with the existing water distribution system (Section 11.7) at Peamount in south Dublin, ensuring onward transmission to end users.

11.3 Raw Water Abstraction Site

A preliminary screening of potential Raw Water Abstraction (RWA) sites on Lough Derg and Parteen Basin was conducted as part of the preparation of the POAR. The POAR identified Parteen Basin as the preferred location for raw water abstraction. An assessment of possible sites for raw water abstraction works at Parteen Basin is set out in Sections 11.3.1 and 11.3.2.

11.3.1 Identification of Raw Water Abstraction Sites

Abstraction will constitute an open channel or intake pipe along the shoreline of the Parteen Basin. Based on the preferred location at the Parteen Basin, or the Lower Lake, a number of potential RWA areas were identified. Collectively, these areas cover the available perimeter on both sides of the Basin, and also a small area downstream of Lough Derg on the eastern bank which is not designated as a Natura 2000 site. These areas are presented in Figure 11.2 and included the following:

- Western shore of Parteen Basin (RWA1)
- Eastern shore of Parteen Basin (RWA2)
- Eastern bank of River Shannon, immediately downstream of Lough Derg (RWA3)

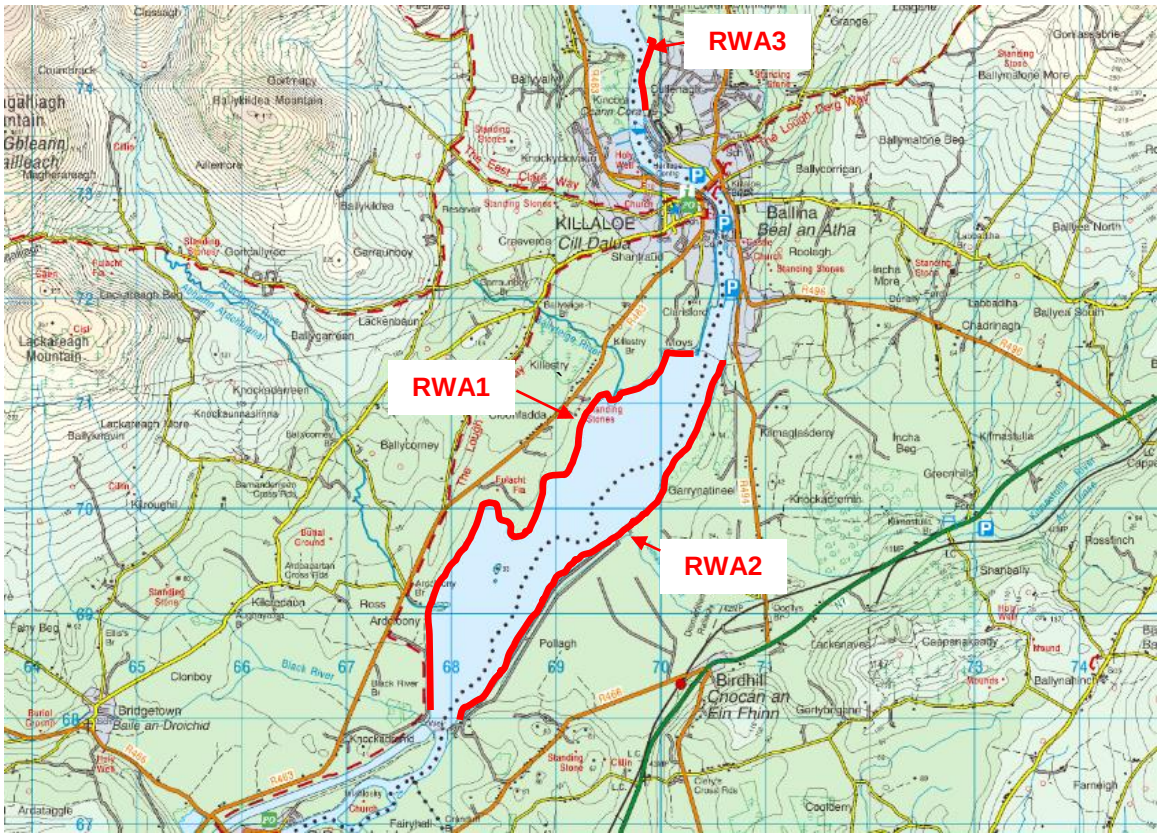

Figure 11.2 Potential Raw Water Abstraction Areas in Parteen Basin

Note: the identification of a likely suitable site within the confines of the urban areas of Killaloe and Ballina precluded these from consideration.

In broad terms, the eastern bank offers potential for siting raw water abstraction infrastructure best aligned with the treated water pipeline route; the western bank is feasible but is impacted by the additional works which would be required to convey, via tunnelling, raw water through a pipeline beneath Parteen Basin. *The disruptive impacts, of alternatively routing a large diameter pipeline from the western bank northwards to cross the river in the Ballina/ Killaloe urban area, have been taken into consideration*. RWA3 covers an area of the eastern bank

which is outside the Natura site designation, and which offered some advantage in that regard, but it also has challenges in routing a pipe through Ballina and its environs. Consequently, due to the extent of the existing urban development, and steep terrain, RWA3 was discounted from any further consideration.

With regard to RWA1 and RWA2, any identified site would be constrained by the presence of the ESB embankments[35], (refer to Section 6) and the requirement to avoid potential impact on these through construction activities.

A detailed assessment was undertaken of RWA1 and RWA2 and four potential sites were identified (refer to Appendix E), which were considered potentially suitable having regard to available size, bathymetry, clearance from the engineering embankments, land topography and position with respect to environmental features and receptors; two sites on the eastern shore of Parteen Basin and a further two sites on the western shore, as shown in Figure 11.3.

The proximity to the ESB embankment along the eastern shore ruled out a number of potential locations for sites; other considerations included nearness to existing developments, the requirement to minimise the impact on designated sites and archaeological sites, local topography, access, etc. Further details are provided in Appendix F.

Figure 11.3 Potential Raw Water Abstraction Sites

[35] These are linear embankments which were constructed as part of the Shannon Hydroelectric Scheme (Ardnacrusha), and are managed by the ESB. These can be seen in Figure 6-1.

11.3.2 RWA Sites – MCA Comparison

The 4 RWA sites were subject to MCA analysis, employing the methodology outlined in Section 11.1. A summary of the analysis is presented in Table 11.2. For ease of reference the colour legend is repeated as follows:-

Impact Category	Colour Code
Very high	Dark blue
High	Blue
Mid-range	Green
Low	Light Green
Very low	Cream

Table 11.2 – MCA – Comparison between RWA Sites

Constraint	RWA Site 1	RWA Site 2	RWA Site 3	RWA Site 4
Terrestrial Ecology				
Aquatic Ecology				
Surface Water				
Air Quality				
Noise				
Cultural Heritage				
Landscape and Visual				
Agronomy				
People				
Soils, Geology & Hydrogeology				
Planning Policy				
Traffic				
Engineering & Design				
Overall Ranking	**4**	**3**	**1**	**2**

With reference to the appraisal criteria presented in Table 11.2, where the sites are ranked in order of preference and least constraint, RWA Site 3 represents the preferred location for the siting of a raw water abstraction facility for the following reasons:

- RWA Site 1 and 2 require additional pipeline construction through Parteen Basin which will incur higher potential for ecological/archaeological and technical constraints; while haulage routes to the M7 during construction would be forced through residential, commercial and industrial developments in Limerick city.
- RWA Site 4 is located within a wetter woodland broadly corresponding to the priority Annex I habitat, 'Alluvial forest'.
- RWA site 3 is well screened, south of the Fort Henry demesne lands and provides no obstruction to views of Parteen Basin from the western bank.

11.4 Water Treatment Plant Site

The POAR established that abstraction of water from the Shannon at Parteen Basin, with raw water treatment at source, was preferable to the alternative which involved Desalination of seawater from the Irish Sea in North Fingal.

For water abstraction from the Shannon, a conventional water treatment plant (WTP) would be constructed. It is desirable that the WTP site for the project be located in close proximity to the raw water abstraction point; to minimise the length of raw water mains required. These mains, since they carry raw water, may be subject to colonisation by invasive species present in Lough Derg, or to deposition of raw water sediments, and the maintenance burden would be proportionately larger with longer mains.

The WTP would be constructed under a number of phases. It is estimated that the final phase would bring the treated water output from the plant to 314 Mld by 2050. Four modular water treatment streams, each capable of producing approximately 80 Mld of treated water, would be needed to meet these output requirements.

11.4.1 Identification of Water Treatment Plant Sites

Based on a preferred location for abstraction along the eastern shore of Parteen Basin, as set out in Section 11.3.2, a number of potential WTP site areas were identified.

Figure 11.4 shows the preferred location of the raw water abstraction point and three potential areas for siting a WTP in close proximity (less than 3km) to it. Also shown on **Figure 11.4** are the extents of the Lower River Shannon Special Area of Conservation and other constraints that exist within each of these areas.

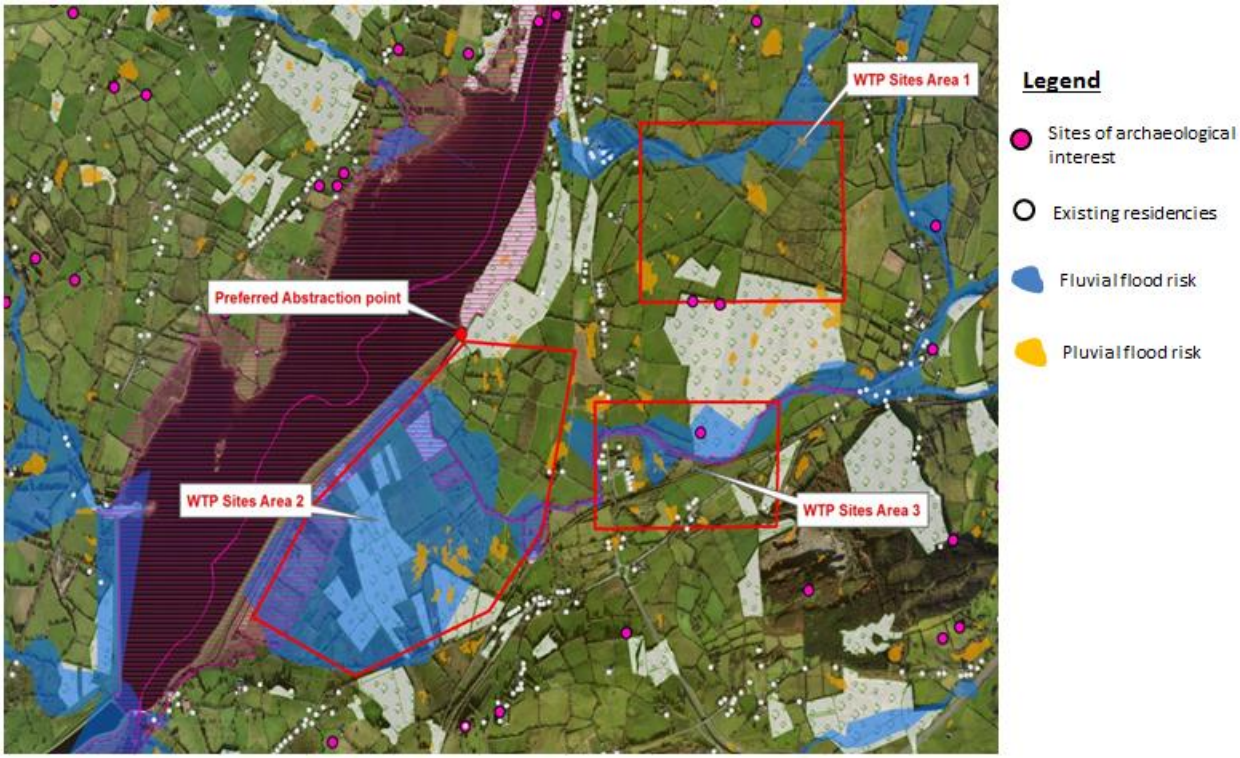

Figure 11.4 Potential Water Treatment Plant Site Areas

Area 1 was identified as the least constrained area for siting a WTP as it is largely composed of open farmland, with no direct impact on properties or priority habitats. Area 2 is environmentally constrained by the Lower Shannon SAC, including the Kilmastulla River; the area also lies within the flood plain of the Kilmastulla River. Area 3 encompasses considerable existing development, including residential properties. It also includes the Shannonside Business Park, and could therefore be considered as having an established use upon which a

large WTP would have a less significant impact than it would have on the more rural settings in Areas 1 and 2. However, the presence of the Kilmastulla River (which is in the SAC), the Limerick-Nenagh railway line and the R445 (old N7) road makes identification of a land parcel of adequate size for the WTP, and which does not infringe upon one of these constraints, difficult to ascertain.

A detailed assessment was undertaken of Area 1 and three potential sites were identified, as shown in Figure 11.5. Further details are provided in Appendix F.

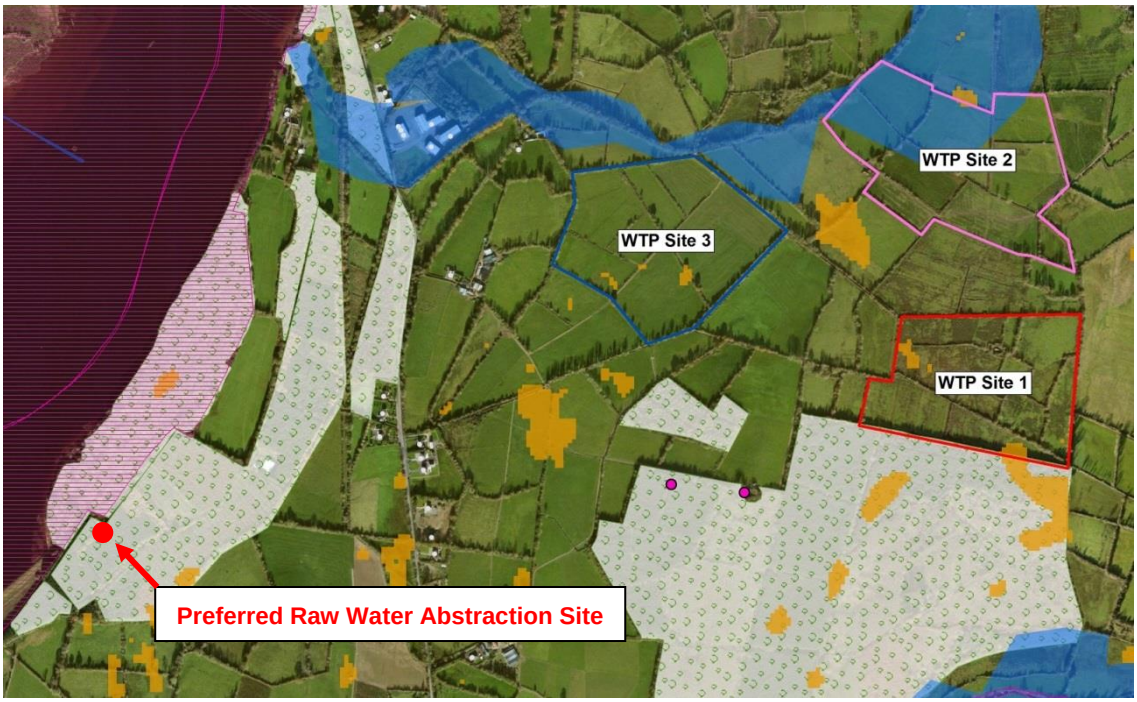

Figure 11.5 Potential Water Treatment Plant Sites

Sites were identified with reference to local constraints, including proximity to housing, the requirement to minimise the impact on designated and archaeological sites, local topography, access, etc.

11.4.2 WTP Sites – MCA Appraisal

The 3 WTP sites were subject to MCA analysis, employing the methodology outlined in Section 11.1. A summary of the analysis is presented in Table 11.3.

Table 11.3 – MCA – Comparison between WTP Sites

Constraint	WTP Site 1	WTP Site 2	WTP Site 3
Terrestrial Ecology			
Aquatic Ecology			
Surface Water			
Air Quality			
Noise			
Cultural Heritage			
Landscape and Visual			
Agronomy			
People			
Soils, Geology & Hydrogeology			
Planning Policy			
Traffic, Engineering & Design			
Overall Ranking	**1**	**2**	**3**

With reference to the appraisal criteria presented in Table 11.3, where the sites are ranked in order of preference and least constraint, WTP Site 1 represents the preferred location for the siting of a water treatment plant for the following reasons:

- WTP Site 1 benefitted from more favourable potential traffic connections to the N7 and ability to significantly mitigate, through avoidance, human health impacts associated with construction and haulage traffic employing regional and local roads in the area.
- WTP Sites 2 and 3 are more constrained by residential and commercial receptors, and proximity to a watercourse which is categorised as ‘moderate status’.

11.5 Break Pressure Tank

The Break Pressure Tank (BPT) is a critical component of the water supply infrastructure, strategically located along the transmission pipeline, for the management of the water pressures that will be generated during the operation of the system.

For the WSP, ideally it is located at, or near, the highest elevation along the transmission pipeline as this gives the greatest opportunity for harnessing the natural topography to convey water, by gravity to the termination point (see Section 11.6).

Initial hydraulic analysis determined that an elevation in excess of 125mOD presents this opportunity.

11.5.1 Identification of suitable elevation for BPT siting

Areas in excess of 125mOD on the transmission pipeline were mapped. In conjunction with other constraints, e.g. environmental (Section 12.3); three potential locations, or areas, were identified for the potential siting of a BPT; as shown in Figure 11.6.

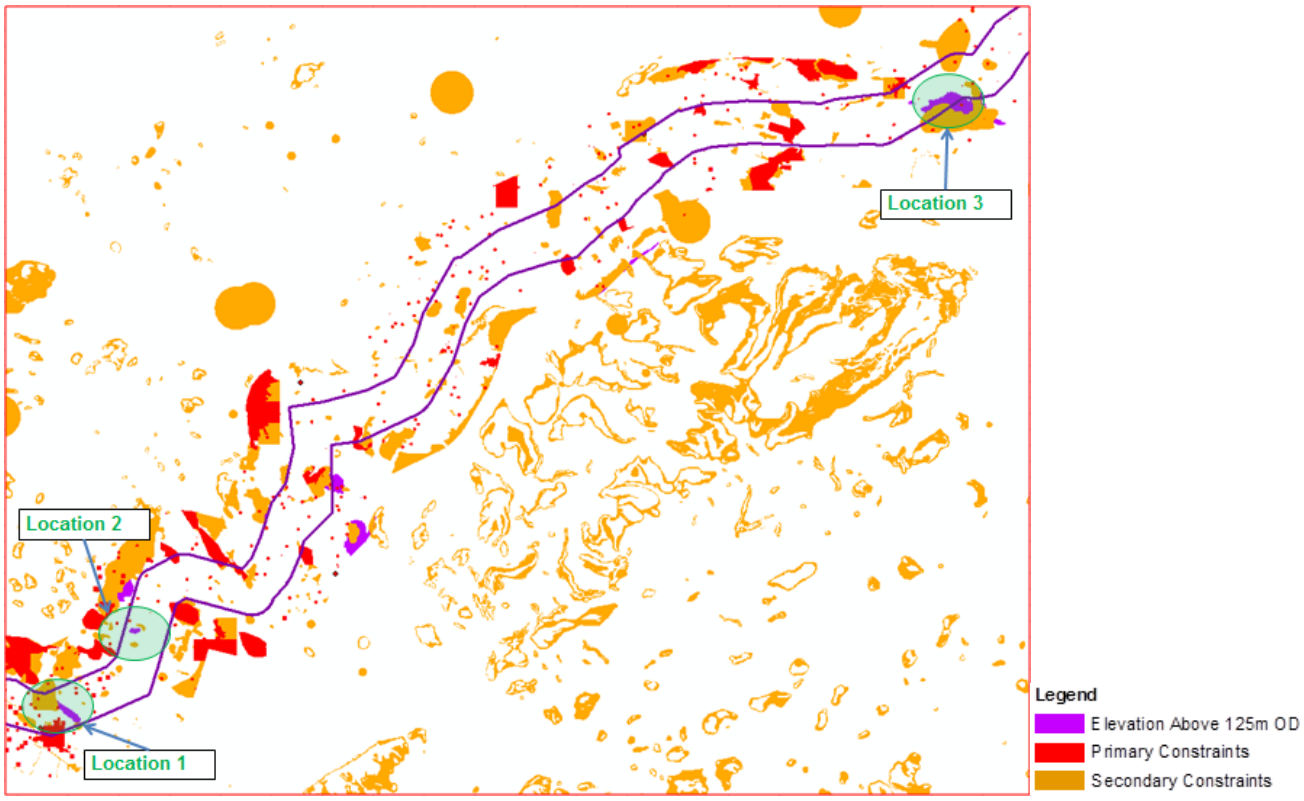

Figure 11.6 – Potential BPT Locations above 125mOD

Location 1 (near Cloughjordan) was deemed preferable to Locations 2 and 3; as it is at a higher elevation than the alternatives, where the additional potential energy head is technically important in the operation of the gravitational section. In addition, it offers the greatest flexibility for siting the BPT as this elevated area is relatively extensive, over 2,200m in width.

Location 2, at a lower elevation (134mOD), was characterised by a much smaller land extent limiting the available construction 'footprint'.

Location 3 is much farther east than either of the other two locations, approximately 65km beyond Location 1; and at an elevation of 145mOD. This would introduce greater operational complexity[36] into the water supply system without any obvious benefit; compounded by the fact that a pipeline would have to be routed through Location 1 in any event.

At Location 1 the highest elevation points (approximately 147mOD) are situated to the north on a prominent ridge; but do also contain a number of local environmental constraints, as shown in Figure 11.7. Siting a BPT in this northern area was investigated further as the increased elevation maximises the opportunity for routing a pipeline, by gravity, to the termination point whilst avoiding the various, and extensive, constraints en route.

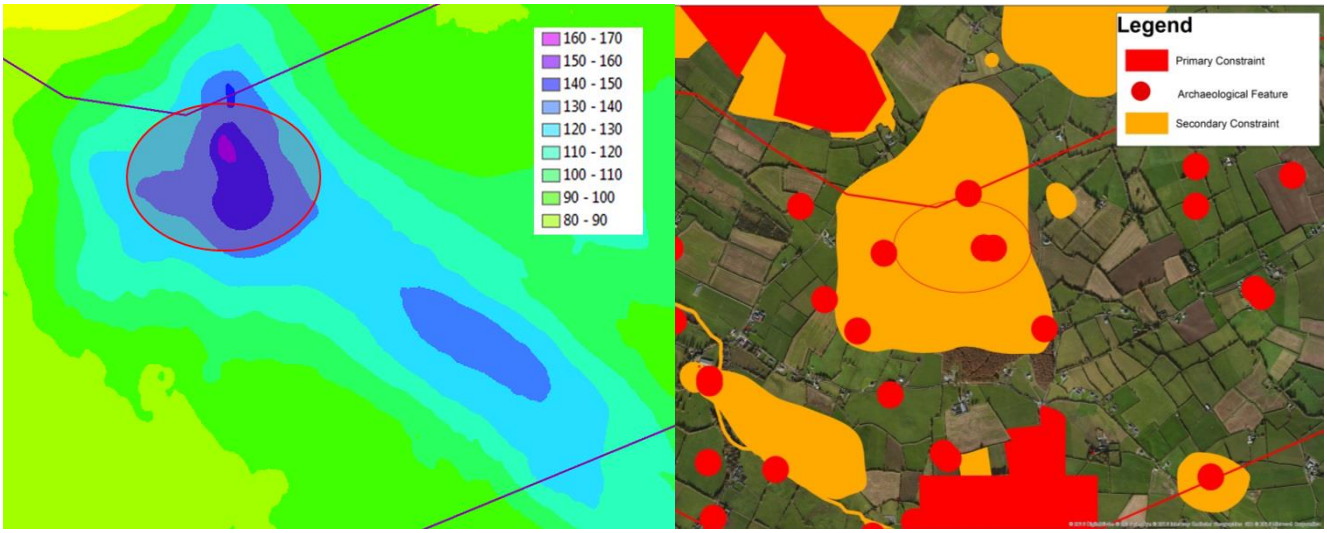

Figure 11.7 – Elevation and Local Constraints at Location 1 (Knockanacree)

An indicative ground elevation of the transmission pipeline, via Location 1, between the abstraction location and the termination point is shown in Figure 11.8. The highest elevation point is situated in the Knockanacree area, near Cloughjordan.

[36] The transmission pipe west of the BPT will be a pumped system whilst it will be operated by gravity to the east of it. Pumped systems are much more complex to operate than gravity systems.

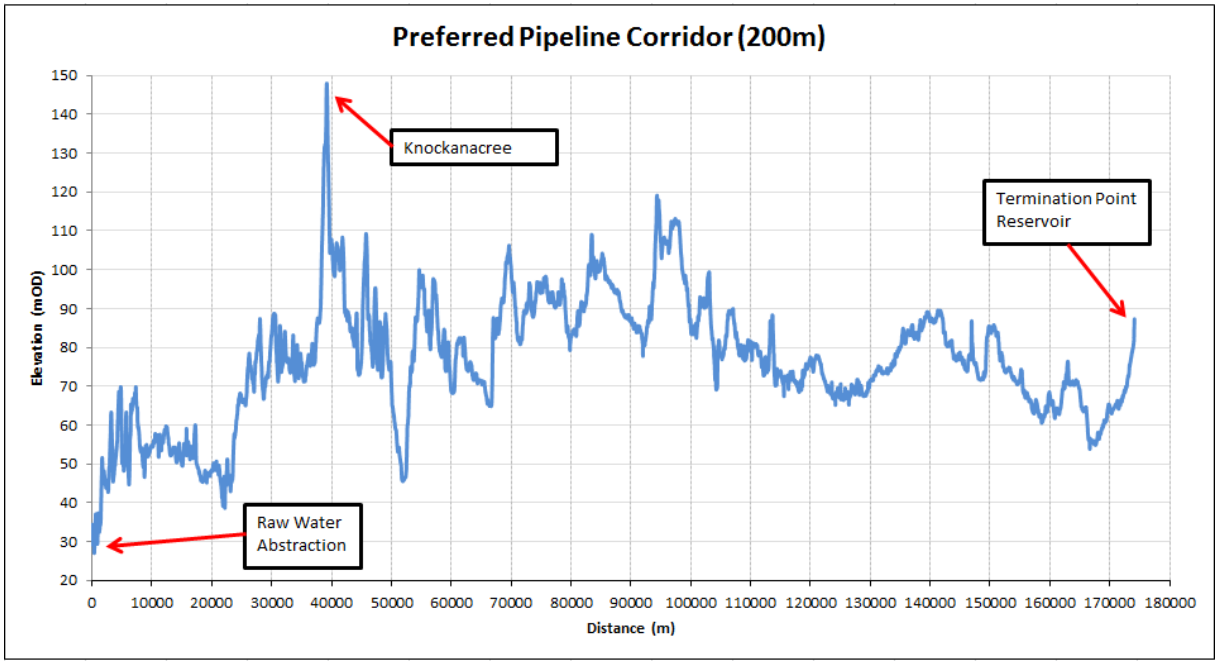

Figure 11.8 – Indicative Ground Elevation (Location 1) of Transmission Pipeline

11.5.2 Appraisal of BPT Sites

Local constraints were considered in the Knockanacree area, subject to satisfying the primary selection criteria (minimum elevation >125mOD). Three sites were identified, as shown in Figure 11.9 and a MCA undertaken for each of them.

Figure 11.9 - BPT Sites at Knockanacree

The appraisal of the three sites, in identifying a preferred BPT location, is presented in this Section.

11.5.3 BPT Sites – MCA Comparison

The 3 BPT sites were subject to MCA analysis, employing the methodology outlined in Section 11.1. A summary of the analysis is presented in Table 11.4.

Table 11.4 – MCA – Comparison between BPT Sites

Constraint	BPT Site 1	BPT Site 2	BPT Site 3
Terrestrial Ecology			
Aquatic Ecology			
Surface Water			
Air Quality			
Noise			
Cultural Heritage			
Landscape and Visual			
Agronomy			
People			
Soils, Geology & Hydrogeology			
Planning Policy			
Traffic			
Engineering & Design			
Overall Ranking	**3**	**2**	**1**

With reference to the appraisal criteria presented in Table 11 3, where the sites are ranked in order of preference and least constraint, BPT Site 3 represents the preferred location for the siting of the Break Pressure Tank for the following reasons:

- It is on a side of the ridge that is less inclined than the other two sites which will facilitate integration of the works into the existing landscape. It would also be screened by the forestry.
- The works associated with the communications mast appear to have been completed whilst maintaining an access through this area. This may suggest previous investigations concluded that was an area of least constraint.
- It maintains its elevation relative to the termination point thereby giving greater flexibility for routing a pipeline whilst still retaining a delivery under gravity.
- Of the three sites it appears, from the various Specialist assessments, to have the least impact collectively.

BPT Site 1 was considered to have the most impact as it would have to be located on the more steeply inclined side of the ridge; and would be difficult to integrate sensitively into the landscape. The final elevation may have to be dropped to affect this, which impacts on the system operation to deliver a gravity supply.

Similarly to the other sites it is the effectiveness of siting this component of infrastructure within the landscape. Whilst the site topography would be more accommodating than BPT Site 1 it is not as favourable as BPT Site 3; the completed works would also have to be at a lower elevation.

Note: the ridge is prominent in the landscape and has a number of recorded archaeological sites. It is important that before a final site for the BPT is selected, in situ investigation be carried out to confirm, or otherwise, the extent of archaeological remains.

11.6 Termination Point Reservoir

A critical piece of infrastructure within the water supply and distribution system is the ‘reservoir’, where clean water is stored after it has been treated in a water treatment plant, and before it is delivered to the end users. Its main purpose is to provide a buffer within the water supply system so that water supplies can be maintained across periods of varying demand.

The ‘reservoir’ is the termination point for the WSP. As the main population centre in the Eastern and Midlands Region, the nation’s capital defines a significant proportion of the need within the region, and the focus for identifying a suitable site for the ‘reservoir’.

The dynamic, and balance, between hydraulic engineering and whole life cycle costs indicates that it would be preferable for the termination point site to be in an elevation range of between 70m and 80mOD. The POAR identified Peamount as the preferred site for the location of a Termination Point Reservoir (TPR).

11.6.1 Identification of TPR Site

The proposed TPR will be integrated with the existing facility at Peamount. To facilitate this integration, maintain system performance and operational flexibility, a termination point at Peamount would reflect the existing levels of the existing reservoir which has a top water level (TWL) of 87.5m. In addition, facilities adjacent to each other, or in close proximity, can benefit from less complex control systems, and minimise extent of likely construction ‘footprint’. On the basis of the foregoing a single location for the TPR site was identified; see Figure 11.10.

Figure 11.10 – TPR Site

The indicative location of this TPR site is gently sloping from east to west (see Figure 11.11); and could be readily integrated into its environs similarly to the existing facility.

Figure 11.11 –TPR Site Elevation Map

11.6.2 Appraisal of TPR Site

A summary of the MCA analysis for the TPR site is presented in Table 11.5 below.

Table 11.5 – MCA – TPR Site

Constraint	TPR Site 1
Ecology	
Surface Water	
Air Quality	
Noise	
Cultural Heritage	
Landscape and Visual	
Agronomy	
People	
Soils, Geology & Hydrogeology	
Planning Policy	
Traffic	
Engineering & Design	
Overall	N/A

The MCA assessment confirmed that the proposed TPR site was a suitable location.

There are a number of additional benefits:

a) A supply to Peamount, discussed further in Section 11.7, maximises the natural topography to bring water from the WTP; limiting the requirement for boosting of flows through other means, i.e. pumping plant;

b) The topography of Peamount allows a TPR site at this location to be readily integrated into its environs;

c) A site at Peamount facilitates integration with both the existing water distribution system, and future proposals being planned by Irish Water in the Dublin Water Supply Area (see Section 11.7).

11.7 Integration into Dublin Network

The Termination Point Reservoir is to be integrated with Irish Water's existing facility at Peamount, south Dublin.

Two of the principal water treatment facilities for the Dublin Water Supply Area (DWSA), both dependent on the River Liffey catchment, are:

- Ballymore Eustace (BME) Water Treatment Plant which abstracts water from an upper stretch of the River Liffey; and
- Leixlip Water Treatment Plant – which abstracts water from a middle stretch of the River Liffey

Whilst there is no direct interconnectivity between BME and Leixlip, Irish Water have proposals in place to rectify this; in order to improve the resilience of the greater supply and distribution system within the Dublin Water Supply Area. Peamount represents a strategic link in achieving this objective.

A Termination Point Reservoir at Peamount will facilitate the transfer of treated water into distribution; or for onward conveyance to other strategic parts of the DWSA network, to augment the supply/ demand imbalance and provide the necessary resilience.

Note: Resilience of a water supply system is its capacity to maintain levels of service to customers, through a prudent supply/demand balance of sources and treatment capacity, even when availability of a source is disrupted due to a pollution incident, or part of a treatment plant is unavailable, or a key section of arterial main suffers outage due to a burst.