

Following the non-statutory public consultation held in March 2022, we received a number of questions and observations on the information that we had shared. We have reviewed all that information and provided a response below.

Site selection / existing sites	
Why can't the existing sites be used / expanded?	All three existing sites, in particular Cantref and Pontsticill, are located in narrow valleys with steep heavily vegetated slopes to the east and west and the existing impounding reservoirs to the north. The Taf Fawr and Fechan respectively run south and adjacent to each site. None of the existing works have sufficient space to build the new water treatment works either at or adjacent to the sites. The existing buildings cannot be demolished to make way for new ones as the water treatment processes within them need to be kept operational 24 hours a day 7 days per week, to supply water to homes and businesses. The existing sites are also sensitive from both a landscape and heritage perspective with a number of existing structures being listed and all three sites being within the Brecon Beacons National Park. The listed status of structures means changes and expansions are impractical.
Why was this site selected?	<p>We have undertaken a thorough investigation to identify the most appropriate location for the proposed water treatment works. This has included a review of existing infrastructure and the consideration of 12 potential sites for the new treatment works. Following a detailed assessment, we identified the proposed site on land north of Merthyr Tydfil, beyond the Heads of Valleys (A465) trunk road and to the east of the River Taf and Trefechan. Gurnos Farm is considered the most appropriate site for the following reasons:</p> <ul style="list-style-type: none">• It is the site located closest to the existing reservoirs at Pontsticill, Cantref and Llwynon. The further away the site is located from the source of the water, the more expensive the water becomes to transport to customers.• The high elevation of the site compared to the majority of customers minimises carbon emissions from energy use associated with pumping water into supply for customers.• The site is large enough to develop the new works and treated water storage tank allowing buffer areas to incorporate ecological diversity and reduce visual impacts.• The proximity to the existing trunk main water network allows us to reuse existing pipework and minimise the amount of new pipework required to be built. This significantly reduces construction disruption and environmental impacts associated with laying large diameter pipework.• The site whilst adjacent, is located outside areas subject to international and national ecological, landscape and heritage designations.• Whilst the site is in a Special Landscape Area, it is outside the Brecon Beacons National Park.

- The site avoids areas designated for social and community purposes such as parks and golf courses. The connectivity of footpaths and bridleways across the site can also be retained.
- The site is not allocated for housing or employment, or subject to planning permission for another use such as minerals extraction.

Were other site options considered? What was the criteria for selecting this site?

Yes, extensive optioneering was conducted before the site was selected. Twelve sites were initially identified with potential to locate the new water treatment works. The criteria below formed the initial screening to identify the potential sites.

Stage	Criteria
Stage 1: Defining the Search Area	<ul style="list-style-type: none"> • The need to integrate the development within the existing raw and treated water trunk main network to avoid the construction and engineering works associated with new, lengthy pipework and use existing infrastructure as much as possible. Also need to avoid disruption of existing utilities as far as possible. • Avoidance of built-up areas to be able to provide a sufficient site size to enable the works to operate as required. • Topographic constraints, including the need for a large construction site and relatively flat topography.
Stage 2: Identification of Potential Sites	<ul style="list-style-type: none"> • Avoidance of urban areas and buildings. • Reducing the impact on sites designated for ecological, landscape and heritage purposes. • Avoidance of floodplain areas. • Minimising distance from the existing trunk main system to maximise use of existing pipelines. • Minimising impact of construction traffic on local roads. • Identifying suitable topography. • Identifying sites with a suitable height to minimise pumping.

Why can't a brownfield site be used?

The new water treatment works will provide water treatment and storage to serve approximately 400,000 people. This requires a large site. The site also needs to be located in relatively close proximity to the reservoirs at Cantref, Llwynon and Pontsticill and at an elevation that is not too far above or below those reservoirs. If the site is above the reservoirs the water will need to be pumped from the reservoirs to reach the water treatment works. Similarly, if the water treatment works is at a low elevation, the water will need to be pumped to all customers above that elevation. This means that small differences in the elevation of the works and distances from existing reservoirs can have a substantial impact on the size of pumping stations required, the electricity use, the carbon emissions associated with operation and the cost of water for customers. The existing pipework from Cantref, Llwynon and Pontsticill converges at Georgetown in Merthyr. Practically, these considerations mean that a site is needed that is large and north of Georgetown. Only one site containing brownfield land was identified that met these criteria, Vaynor Quarry.

In the early stages of site selection, the site to the west of Trago Mills was also considered. However, on further investigation this site was smaller, at a low elevation, a long distance from the reservoirs, sloping, close to numerous residential properties and had planning permission for a leisure use on the site. Connecting this site to the existing network would have also meant more complex pipework connections across the A470 and through the centre of Merthyr, with greater, long term traffic disruptions than with Gurnos Farm. It was therefore not considered a viable alternative site.

Why was the Vaynor Quarry site initially discounted?

Whilst the quarry is not currently operational, it does benefit from planning permission to extract and operate the works. The site contains significant permitted mineral reserves and forms a strategic company asset for the owner. The owner was approached initially and at that time they were not willing to sell.

The site is also adjacent to (and partially in) the National Park, at a high elevation, adjacent to the Cwm Taf Fechan Woodlands SSSI, adjacent to the Nant Y Glais River and Nant Glais Caves SSSI. It does not, therefore, avoid all the environmental constraints associated with the current proposed site.

Why has development in the National Park not been considered?

The potential for expansion and upgrading of the existing facilities in the Brecon Beacons National Park was considered but could not meet the criteria for the project as detailed above. National Parks have been set aside by the UK government to conserve and enhance their natural beauty, wildlife and cultural heritage and to promote opportunities for the understanding and enjoyment of their special qualities by the public (Environment Act 1995). Because of their importance, where practicable, options for DCWW's infrastructure developments will avoid nationally designated areas to support this protected status. Therefore, once it became clear that a single new water treatment works would be

required, sites were sought outside nationally designated landscape areas. The site selection similarly sought to identify sites that are not subject to national heritage or ecological designations.

Why did Welsh Water not submit the proposed development as part of MTCBC’s consultation on its Replacement Local Development Plan (RLDP) 2016-2031?

Until approval in December 2019, we did not know whether the scheme would be supported by Ofwat to proceed as part of the regulatory price review process. Work to commence development of the RLDP started in August 2016, with the Examination in Public Hearings on the RLDP taking place in June-August 2019. Therefore, by the time the project had received approval from the regulator there was no scope to engage with the Local Plan process.

The location of major infrastructure projects is strongly influenced by engineering requirements, such as in this case, the location and elevation of the reservoirs and customers. This means that there is less flexibility on site selection than there is for residential developments or more general employment uses and sites are therefore not generally allocated in the same way. Therefore, whilst engagement with local planning authorities is always advisable, there would not have been the same scope for the local planning authority to select a site in the way they do for other development types even if the timescales had been better aligned.

Landscape, visual, heritage

Has the designated Special Landscape Area been considered?

Yes. The proposed water treatment works site is situated within the Morlais and Cwm Taf Fechan Special Landscape Area which covers large parts of the area north of the A465 and smaller areas to the south of the A465. This designation is being considered in all stages of the design. We are undertaking a comprehensive Landscape and Visual Impact Assessment, with our landscape consultants working closely with our architect, engineers, ecologists, heritage specialists and other professionals to design a scheme that minimises landscape impacts wherever possible and proposes measures to mitigate impacts. We are seeking to:

- retain and strengthen existing landscape features where possible, for example by re-establishing remnant and degraded hedgerows and field boundaries;
- ensure the minimum functional building heights and dimensions;
- lower the floor level to sink buildings into the undulating topography of the site;
- minimise the need for external lighting;
- carefully select appropriate building materials; and
- create earthworks design and planting to enhance integration and reflect existing features and characteristics of the surrounding landscape.

<p>Has the impact on viewpoints from Pontsarn, Trefechan and Morlais Castle been considered?</p>	<p>Yes, and these views will continue to be considered as the design evolves. We recognise that the proposed water treatment works would have an impact on existing views. The landscape and visual impact assessment will include an assessment of potential visual effects from a number of locations, including Pontsarn Close, Trefechan and Morlais Castle. Photomontages will be prepared for these locations and the Taf Fechan Nature Reserve, Pontsarn Viaduct and Cefn Cil-Sanws.</p> <p>We are seeking to minimise visual impacts through:</p> <ul style="list-style-type: none"> • adjusting the water treatment works layout to remove structures from the northernmost fields, increasing the distance to the nearest residential properties at Pontsarn Close by nearly 100m and behind an existing tree line (this is a change that was made prior to non-statutory consultation); • robust woodland and tree planting, particularly to the north and west of the water treatment works structures, to reduce visibility from Pontsarn Close, Trefechan and nearby recreational routes; • earthworks design to aid integration within the landscape, reduce the impression of scale and enhance the effectiveness of screen planting; and • careful consideration of building forms, profiles, materials and colours to help integrate with and reflect the surrounding landscape context.
<p>Is the impact on the character and identity of Pontsarn, Trefechan and the surrounding area being considered?</p>	<p>Yes, and these impacts will continue to influence the final design of the project. The impact on residents influenced the decision to avoid development in the northernmost fields as far as possible to increase the separation distance to Pontsarn Close residents and reduce development in the most elevated areas of the site. The omission of development in these areas was shown during non-statutory consultation.</p> <p>The Landscape and Visual Impact Assessment includes the identification and defining of Landscape Character Areas on which the detailed landscape impact assessment will be based. This identifies the patterns and individual combinations of features – such as topography, scale, vegetation, land use, patterns of settlements and dwellings, and perceptual qualities – that make each type of landscape distinct. The existing characteristics of the landscape and assessment of potential impacts from the proposed water treatment works will assist the ongoing design approaches and potential mitigation measures. For example, this is influencing the final building design and materials selection.</p>
<p>Are the impacts on the Landscape of Outstanding Historical Importance and Archaeologically sensitive areas being considered?</p>	<p>Yes. A detailed cultural heritage assessment is being undertaken as part of the Environmental Impact Assessment (EIA) which includes all aspects of the historic environment.</p>

An Assessment of the Significance of the Impact of Development on the Historic Landscape is being undertaken which specifically looks at potential impacts on Welsh Historic Landscapes in accordance with Cadw Guidance (Cadw is the Welsh Government's historic environment service).

Consideration is also being given to potential impacts on Scheduled Monuments, such as Morlais Castle, including impacts on key views. The design is evolving through an integrated process involving heritage specialists, architects and landscape architects to ensure impacts are minimised through scale, massing and materials, alongside landscape mitigation.

Traffic/Access	
Where will the site access be located during construction and operation of the site?	<p>The access to the site has not yet been finalised. There was a strong preference expressed during consultation that the access to the site be from the south during the construction period to avoid construction traffic using Pontsarn Road to the north of the site. We are taking this feedback on board when determining the best access route. Sanatorium Hill is unsuitable for large construction vehicles, so it is not proposed to be used as the main access during construction.</p> <p>The Goitre Lane underpass that currently runs under the existing A465 is to be closed as part of the Heads of the Valleys Road works. We would like to create an access using proposed junction / roundabout arrangements off the new A465, but this requires agreement with landowners, Merthyr Council, Welsh Government and the developers of the A465 road widening scheme. Therefore, we cannot yet confirm the access route with certainty. We will seek to minimise the impact on existing trees, ecology, farming activities, the bridleway and residential amenity with the design wherever possible.</p> <p>There may be a need for an access from the north either as an emergency access or during the operation period. This has not yet been confirmed.</p>
How will the safety of walkers, cyclists and horse riders who use the local roads be considered with the extra traffic generated?	<p>The consideration is to create an access from the Heads of the Valleys Road to the south of the site so that traffic is guided to routes that minimise the impact on Pontsarn Road to the north.</p> <p>A Construction Traffic Management Plan will be prepared to manage traffic during the construction period and guide traffic to the most appropriate routes to the site and away from those used more frequently by walkers, cyclists and horse riders. During the operational period traffic to the site will be relatively limited.</p>
Will existing Public Rights of Way / bridleways in the vicinity of the site be considered?	<p>We recognise that the Public Rights of Way and bridleways in the area are important recreational routes to the local community. These routes have been identified and mapped, with the scheme design at all stages looking to minimise the impact on these routes. The impact on these routes is being considered as part of the Environmental Impact Assessment being carried out to assess the impact of the development.</p> <p>The routes along both sides of the Taf Fechan to Pontsarn are outside the proposed site boundary and are not proposed to be closed or diverted by our works. Landscaping will be designed to reduce the visual impact of the development from these routes also. The bridleway to the east of the ancient woodland is currently closed due to the Heads of the Valleys scheme. Post construction it is understood that this bridleway will be diverted by the Heads of the Valleys scheme with the final route not yet agreed between the developers and Merthyr Tydfil County Borough Council. We recognise the value of this bridleway to the community and will look to minimise the impact of the new water treatment works on this route when it is clear how and where it will be reinstated.</p>

Similarly, the nature reserve and blue pool will remain accessible using the current routes on either side of the Taf Fechan.

There may be temporary closures or diversions of public rights of way for the construction of pipelines and outfalls, but these would be short term and closures would only be considered where no diversion was possible.

Environmental Impacts of the Scheme During Construction and Operation

How is the cumulative impact of other construction projects being considered?	A cumulative assessment of the proposed water treatment works with other projects is being undertaken as part of the Environmental Impact Assessment and will include projects that are likely to be under construction at the same time as the proposed water treatment works. Any potential overlap between our project and the A465 Improvement Works will be considered as part of the cumulative assessment although as construction for the new water treatment works would not start until 2024 at the earliest, the overlap may be limited.
What will the working hours be during construction?	Core working hours would likely be from 08:00 to 18:00 on weekdays (excluding bank holidays) and from 08:00 to 13:00 on Saturdays. The working hours could be restricted using a planning condition applied to the consent if necessary. Any works that fall outside the agreed times would be subject to agreement in advance with the relevant Council.
What hours will the site be operational for once in use?	The water treatment works would be operational 24/7.
How long will construction take?	Construction of the proposed water treatment works is currently expected to take approximately 48 months.
Will there be road closures during the construction of the project?	It is likely that parts of the project will require temporary or partial road closures where we are proposing to undertake pipe laying in or close to the carriageway. Such requirements will be reported in our Construction Traffic Management Plan. Given that a new water treatment works would always require new pipework, temporary road closures are likely to be inevitable regardless of the choice of site.
What will the noise impacts be during construction and operation?	Noise and vibration assessment are currently being undertaken as part of the Environmental Impact Assessment (EIA) which will consider: <ul style="list-style-type: none"> • Noise and vibration due to construction activities at the proposed new water treatment works site and proposed ancillary infrastructure; • Change in traffic noise due to construction traffic; • Effects at nearby sensitive receptors (such as residential properties) due to noise from the proposed new water treatment works; and

- A qualitative assessment of noise benefits due to closure of three existing water treatment works.

Our planning application will be accompanied by an Outline Construction Environmental Management Plan that will set out the measures to be adopted by the appointed contractor to avoid, reduce and control adverse levels of noise and vibration through best practice measures, including: the selection of quiet and low vibration equipment, the location of equipment on site, control of working hours, provision of acoustic enclosures and local screening of equipment or perimeter hoarding. The appointed contractor would be required to submit a detailed Construction Environmental Management Plan to the relevant local Council for approval prior to the commencement of construction. During operation, most plant will be housed in buildings that would limit external noise.

<p>What impact will construction have on ecological designations including the Site of Special Scientific Interest (SSSI), ancient woodland, nearby SINC (Sites of Importance for Nature Conservation) and the local nature reserve?</p>	<p>A comprehensive assessment of terrestrial and aquatic ecology is currently being undertaken as part of the Environmental Impact Assessment (EIA) which considers potential impacts on the Site of Special Scientific Interest (SSSI), Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs) as well as other sensitive ecological habitats and species. A programme of ecological surveys has been agreed with the County Ecologist and National Resources Wales. These commenced in Spring 2021 and are ongoing.</p> <p>To minimise impacts we aim to maintain a 30m buffer between the Cwm Taf Fechan Woodland SSSI and the permanent works on the proposed new water treatment works. This buffer may be planted with appropriate native species to compliment the SSSI and will be shown on a Landscape Plan to be submitted with the planning application. We are also aiming to maintain a 15 m buffer around areas of ancient woodland and avoid affecting ancient or veteran trees. We are also avoiding the SINC and local nature reserve and looking to minimise any landscape and visual impact from footpaths through these areas during design and landscaping proposals.</p> <p>Measures to avoid any indirect construction impacts on the SSSI will be set out within the Outline Construction Environmental Management Plan (CEMP) to be submitted with the planning application.</p>
<p>How will flood risk from the site be managed?</p>	<p>In line with the Planning Policy Wales Technical Advice Note 15: Development and Flood Risk (TAN 15) 2004, a Flood Consequences Assessment (FCA) is being undertaken which will set out how flood risk from the site would be managed.</p>
<p>How will surface water run-off from the development be managed? Will this enter the SSSI or river?</p>	<p>A Drainage Strategy is being developed for the proposed new water treatment works site in accordance with the Sustainable Drainage Systems (SuDS) Standards for Wales. The intention is to adopt SuDS measures to achieve greenfield runoff rates before conveyance via existing drainage channels to the Taf Fechan. The objective will be to protect the watercourse from adverse morphological, water quality, and ecological damage effects.</p>

Will there be any odour from the water treatment works?	This is a water treatment works for clean water rather than wastewater. Therefore, there are no activities or processes involved in the proposed water treatment process that would result in significant odour emissions.
How many staff will be on site when the site is operational? Where will they park?	There would be approximately 8-12 staff operating the new water treatment works once it is complete. Parking for staff and visitors would be provided on the site.

Consultation	
Have Merthyr Tydfil County Borough Council (MTCBC), Brecon Beacons National Park Authority (BBNPA) and other statutory bodies been consulted?	<p>Yes. Consultation with the four affected local authorities started in February 2021 and has been ongoing since this date. In particular, regular meetings are held with Merthyr Tydfil County Borough Council (MTCBC) on the scheme including meetings on site. Less frequent meetings have been held with the other three local authorities given that less infrastructure is proposed in their areas.</p> <p>Prior to the non-statutory consultation, we also contacted MTCBC and Brecon Beacons National Park Authority (BBNPA) to request their views on the scope of the Environmental Impact Assessment (EIA) we would need to undertake. MTCBC and BBNPA consulted statutory bodies in developing their response (known as a scoping opinion). This also included consulting Caerphilly County Borough Council (CCBC) and Rhondda Cynon Taf County Borough Council (RCTCBC), who agreed that Merthyr should lead the Scoping process. The request for an EIA scoping opinion is an early part of the planning process and allows us to agree with local planning authorities what information is required as part of any future planning application.</p> <p>All the relevant local planning authorities and statutory bodies were also consulted as part of the non-statutory consultation. Conversations have also been ongoing with statutory bodies outside this process, including correspondence with both Cadw and Natural Resource Wales.</p>
Why did consultation not take place with the public earlier?	<p>Our aim for the non-statutory consultation was to share our emerging design once we had enough information for people to understand our proposals, but at an early enough stage to allow the consultation feedback to influence the design.</p> <p>Following feedback from the non-statutory consultation, our design is being amended and we will hold another stage of consultation before submitting our planning application.</p>

How were residents informed of the non-statutory consultation?	<p>We sent letters to residents in the vicinity of the proposed site, pipelines and existing water treatment works sites. We also sent a separate letter to properties near the proposed network pumping stations. After reports of properties in the Trefechan area not receiving a letter, we sent a further letter to addresses within Trefechan and extended the consultation period by 2 weeks to allow residents further time to respond.</p>
	<p>We also used local newspaper coverage, press releases, social media, our ‘in your area’ updates and we asked local authorities and elected members to share details of the consultation via their channels.</p>
Why wasn’t more time given to respond to the non-statutory consultation?	<p>We have just completed a 6-week non-statutory consultation period to provide the local community with an opportunity to view our initial plans and provide comments. This has included hosting information events locally and creating a virtual consultation room on our website with information about the project. People have been able to submit their comments either through feedback forms at the information events, through the virtual consultation room or by emailing us at the dedicated email address we have set up. Consultation periods on major infrastructure projects are often 4-6 weeks so the time allowed exceeds that allowed on many similar projects.</p>
	<p>There will be further opportunities for people to provide their views when we hold the statutory consultation on our draft planning application later in the year and again once the application is submitted.</p>
Why did the non-statutory consultation not provide more information? Why were maps not more detailed?	<p>This Frequently Asked Questions document is responding to the queries we received during the consultation period.</p> <p>The purpose of the non-statutory consultation was to share our developing design for the water treatment works, pipelines and pumping stations. The information and maps provided reflected the early stage of the design, which is now being amended following feedback from non-statutory consultation. To seek genuine input, consultation must be early enough for views to be taken on board. We feel that engaging before the design is finalised is therefore a beneficial element of the timing of our non-statutory consultation.</p>
	<p>We will hold another round of consultation once the proposals have been developed further, which will provide the draft planning application documents and drawings for consultation.</p>
When will visualisations from Pontsarn and Trefechan be available?	<p>We recognise that the viewpoints from Pontsarn and Trefechan are important. At the time of non-statutory consultation, the design was not sufficiently developed to show visualisations from Pontsarn and Trefechan. Visualisations are complex to develop accurately for a development of this nature given that visibility is strongly affected by building orientation, ground levels, layout, landscaping proposals, building size and so on. The Morlais Castle view was selected because it is a location from where you can see the majority of the site rather than providing the partial view that would be available from Pontsarn and Trefechan.</p>

We are currently amending our design following feedback received at the non-statutory consultation. Once the design has been amended, we will produce visualisations from Pontsarn and Trefechan and we expect to be able to share these during Summer 2022.

Have elected members been informed of the proposals?	Yes, relevant elected members were notified in advance of the consultation. We will continue to engage with elected members as the project progresses.
How has the impact of the development on the well-being of the community been considered?	As part of our Environmental Impact Assessment, we are assessing the potential socio-economic and health effects during the construction and operation of our proposed development. The findings of this will be reported in our Environmental Statement, a draft of which will be available at statutory consultation.

Design	
Can the size and height of the proposed buildings be reduced?	Following the feedback during our non-statutory consultation, we are reducing the size and heights of the proposed buildings. We are also adjusting the internal layouts of the buildings and relocating buildings within the overall site footprint, reducing their size, height and changing their appearance.
Can local and natural materials be used for the buildings?	Local and natural building materials will be used to make the buildings more acceptable in the existing rural landscape.
Can the buildings be designed to better integrate with the landscape?	We are working with Merthyr Tydfil County Borough Council's appointed landscape architect to incorporate these opportunities into the appearance of the above ground buildings.
Can green roofs / living walls be included?	This is an option for us in some locations. We need to ensure all of these considerations are carefully thought through so as not to put the water treatment process at risk of contamination.
Could the site generate renewable energy?	The new site will generate some of its own electricity, reducing the operational carbon footprint of the water treatment process and making the water cheaper to produce. The electricity will be generated through a combination of solar panels and hydroturbines.
Could buildings be buried underground / lowered into ground?	To a certain extent the ground levels on the site and use of measures such as embankments can make the buildings appear lower in the landscape. We are seeking to do this where possible with the site layout and landscaping proposals. For example, we have sought to locate larger buildings at lower elevations and lower the treated water storage tank partially

into the ground. However, the project is a major infrastructure project. It is not practical to bury all structures in the ground.

Could the development be located in the south of the site, to border the A465, to reduce visual impact?

The National Grid 132kV overhead power lines provide a constraint across the southern end of the proposed site. These are high voltage power lines so major development is not permitted under or in close proximity to the lines. Diversion of high voltage power lines is complex and very expensive, and a new location would have to be found for them, which would continue to leave a constraint on the site. Therefore, all the development is proposed north of these lines. The footprint of the actual development is approximately 40 acres (subject to completion of the final layout) compared with the 100 acre total site area. This has allowed us to choose the optimum location for each building and to incorporate as much planting and landscaping as possible to screen and reduce the visual impact of the project.
