

# Monmouthshire and Brecon Canal

## Crumlin Arm Action Plan

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## Background

The Crumlin Arm of the Monmouth and Brecon Canal is of historic significance constructed over 200 years ago to transport cargo that helped the coal and steel industries to flourish. However, with the advent of railways its use declined and roadways were built which blocked the canal creating 7 short sections of navigable waterways, the longest section is 1.2 km.

In 2001 the council considered the future of the Crumlin canal and it was agreed that there would be no further in-filling of the existing canal. Instead, work to improve the canal's safety together with entering partnerships to explore canal improvements would be the priority.

In 2005 the Canal Corridor Study identified a minimal intervention option to only make further safety enhancements to the canal as well as identified the engineering requirements and benefits of restoring full navigation to the Crumlin canal together with creating a tourism, leisure hub at Adams Quarry which linked with Cwmcarn Forest Drive.

In 2005 there was no realistic prospect of restoring full navigation from Brecon to 14 locks and then onto Caerphilly's boundary, so the minimum intervention option was chosen. This option has cost approximately £3.5M over the years with reactive action to leaks in the canal and improvements to the towpaths and signage.

Canal usage in the form of cyclists and walkers has increased, but only one boat remains on the canal due to silting of the canal and the short navigable stretches.

Since 2005 considerable restoration work has begun on the Monmouthshire & Brecon Canal, within neighbouring Local Authorities, with restoration works planned from Pontypool to Newport and then on to the 14 locks.

The Monmouth & Brecon canals regeneration partnership, of which CCBC is a partner, is the driving force behind this restoration and it has been previously successful in obtaining heritage lottery funding.

Representatives of this partnership have also joined the Network of Inland Waterways Europe, so that the partnership can apply for future funding opportunities that are trans-national across Europe.

The Mon & Brecon Canal regeneration Partnership has a vision of full restoration of navigation to the canal, including the Crumlin arm and the partnership intends to apply for EU funding as a regional proposal.

The Crumlin canal remains a viable tourism attraction and consideration should be given to agreeing a formalised strategic direction/plan for its future, which will then be supported by the Mon & Brecon Canal Regeneration Partnership Trust in future funding opportunities. In setting a strategic plan for the canal consideration should also be given to how the plan is to be managed, a dedicated project officer should be assigned, to co-ordinate between departments, partners, and funding opportunities so that the project can gain momentum and make a real difference to the local area and Wales as a whole.

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## Geography

Caerphilly's section of the Crumlin Canal is at the southern limit of the Valleys Regional Park and is on a key route from the M4 corridor. It follows the natural contours of the land at a relatively constant level.

Its northern most point, the canal terminus as at Pontywaun, is adjacent to Cwmcarn Forest Drive entrance.

It travels south alongside a disused quarry then through Pontywaun, Crosskeys and Risca to the Newport County Boundary at Harry Roberts Bridge.

It has six listed Canal Bridges, and is in close proximity to two Ancient Monuments namely the Abercarn Viaduct and the Twmbarlwm Hill fort.

The canal passes through urban development, and has rural stretches with fantastic views, of pasture fields, hills and mature trees.

Five roadways break the navigation of this canal, where the canal has been culverted. The culverts, often back fill with rubbish and slows water flow causing canal silting.

The resurfaced towpath is part of the National Cycle route linking Newport to Blackwood, which is used by cyclists, walkers and fishers.

The canal provides an environmental haven for over 150 species of Flora (5 of which are designated rare), dragonfly, butterfly, birds and at least 8 different variety of fish<sup>1</sup>.

The canal consists of three distinct sections.

- The Upper section runs from Cwmcarn Forest Drive to Whysom's Wharf.

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<sup>1</sup> 2005 Crumlin Arm-Monmouthshire & Brecon Canal Corridor Study –commissioned by CCBC and the Welsh Development Agency—conducted by British Waterways

- The middle section commences after a considerable break in the canal and runs from Darren Road to Manor Road, where the canal is in 4 small navigable sections connected by culverts under roads and
- The lower section runs from Manor Road to Harry Roberts Bridge.

The middle section of the canal runs through the town of Risca alongside residential housing and a primary school. Users of the canal can access Risca town centre via a number of road routes, the shortest being along Moriah Hill and Station Place.

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## Strategic Context

The Crumlin Canal is cited in the Local Development Plan as a potential tourism development,<sup>2</sup> but the strategic direction of the canal's development and future has never been formalised. In the 2001 census 1.5m people lived within 20 miles of the canal, so the potential for day visitors is huge. When combined with the canal's proximity to Cwmcarn forest drive, Navigation Colliery, the Crumlin viaduct and the M4 corridor it creates the opportunity to develop a tourism hub destination, a substantial landmark for Wales attracting overnight visitors from the UK, Europe and Worldwide.

The Crumlin Canal is located within the South East Wales Capital Region of the Wales Spatial Plan. It lies within the Connections Corridor and links with the City Coastal Zone at Newport. It links the coastal Zone with other regions at Brecon after travelling through the local authorities of Newport, Torfaen, Powys, Monmouth and the Brecon Beacons National Park.

As early as 2000 the government recognised the importance of the inland waterways of England and Wales in its Waterways for Tomorrow policy document. It recognised the benefits of restoring disused waterways to navigation and states that restoration of canals to navigation has revitalised key parts of the country's transport and industrial heritage, generated jobs, and development and increased opportunities for leisure, recreation and tourism.

Caerphilly County Borough Council is a partner in the Mon & Brecon Regeneration Partnership, which has been a driving force in significant development and financial investment in the restoration of the canal in other partner authorities e.g. The Cwmbran canal quarter and the Newport 14 Locks visitors centre. The Trust's ultimate aim is to restore full navigation of the canal from Brecon to Cwmcarn.

In 2013 the American Huffington Post ranked the Mon & Brecon Canal 6<sup>th</sup> in the top canals of the world to visit<sup>3</sup>, which indicates that if full navigation can be realised that the canal would be of considerable national significance to Wales.

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<sup>2</sup> TM1.6 – Monmouthshire & Brecon Canal, Crumlin Arm - Tourism and in the Risca and Pontymister Town Centre Action Plan 2014-19

Potentially the Monmouthshire & Brecon Canal is a valuable tourism resource, not only as a working route for boats but for its likely links into a wider waterways network. It is also a thriving nature corridor with towpaths and the Celtic Trail cycleway running alongside. As such there are attractive amenity areas, which are linked together by the proposed route of the canal that will make it an attractive development for tourists.

<sup>3</sup> Mon & Brecon Canal Regeneration partnership Steering group minutes 10th October 2013, item 3.

It is worth noting that UK National tourism and Hospitality supports around 20% of all employment. Developing an enhanced tourism destination has the capacity to increase employment opportunities within the region. This should be factored into the future skills analysis for tourism and Construction in the region.

A strategic direction for the future of the canal and its surroundings as a sub regional initiative under the New Planning (Wales) bill would require the involvement of ministers.

In 2005 Llangollen as a major waterways attraction brought in an estimated £200,000 in visitor spend per year.

Regeneration of the canal could contribute to the “20/20/20” Climate/Energy targets<sup>4</sup>, through use of cycle networks, safe walking routes to schools and energy generating outdoor gym equipment.

Any strategic direction should give due consideration to “Caerphilly Delivers” CCBC’s Single Integrated Plan 2013-2017.

A learning Caerphilly could utilise canals as a multifunctional space, making use of educational opportunities such as bio diversity research through FE establishments, linking with local schools for environmental education and using seating as storyboards to educate canal users on the historical use of the area. The construction and tourism jobs created would offer opportunities to provide skills training through apprenticeship and volunteer programs.

A Greener, healthier and safer Caerphilly could utilise the canal and its surroundings (including Cwmcarn Forest Drive) for Sport and outdoor activities, using the towpaths for walking, cycling and exercise trail, as well as using the waterway itself for canoe and boat hire, and annual events which encourages community involvement. This would create a pride in the community, which would discourage minor crimes like vandalism. The exercise trail could include green energy exercise equipment, which could power light along safe routes, and feed back into the local energy grid.

A prosperous Caerphilly would benefit from jobs created by enhanced activity and tourism on the canal. Regeneration of the area by restoring navigation to the Caerphilly section of the canal would create employment in the activity itself. The area including the towns of Crosskeys, and Risca would be desirable to more tourism, both day and overnight visitors

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<sup>4</sup> The EU’s Lisbon Strategy for Growth and Jobs, the Europe 2020 Strategy adopted in June 2010

with the associated job growth in that industry. The canal corridor would become a more attractive place to live, encouraging housing, SME businesses and tourism economy into the area.

The development of the canal corridor should include

- Town centre development Risca, Crosskeys
- Tourism attractions including Forest drive, Adams Quarry and Navigation Colliery
- Restoration to full navigation of the Crumlin Arm linked to restoration of the remainder of the Mon & Brecon Canal, from Cwmcarn to Brecon, via Newport.

Together with the European links of the Mon & Brecon Regen Partnership, this would fulfil the criteria and guidance of WAG, WEFO and INTERREG to have viable regional developmental proposals in the next round of European Funding.

The Mon & Brecon Canal should be included in any destination management considerations, for prioritising through Visit Wales<sup>5</sup>.

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<sup>5</sup> Visit Wales (welsh Government)



## Asset Value

The value of the Crumlin Canal is difficult to estimate because it is not just a capital asset, it has natural beauty and 6 listed bridges which means that the canal has an intrinsic value over and above its monetary value. If the canal was built in the present day, the capital cost would have been in the billions.

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## SWOT Analysis

The Crumlin Arm of the Mon & Brecon Canal is an underutilized resource that requires ongoing maintenance expenditure to protect what we currently have. Investment in the form of time and funding has the potential to create a unique

### Strengths

- Proximity to Risca (a principle town within CCBC)
- Purpose built event site in Risca
- On National Cycle Network Route
- Close Proximity to M4 Corridor
- Good Public Transport Links, bus and Rail
- Rural and Urban Backdrops
- Proximity to Cwmcarn Forest Drive
- Proximity to Navigation Colliery
- Partnership approach across the Monmouthshire and Brecon Canal Region
- Newport LA canal relies on CCBC water feed.

### Weaknesses

- Flood risk sites
- Reliance on 14 locks to release excess water
- No Wi-Fi in Risca Town
- Limited existing overnight tourist accommodation
- Stretches on navigable canal are obstructed by roads.
- Silting of canal/Low water flow reduces water use
- Limited signage linking the canal to Risca Town Centre.
- Adams Quarry is the only adjacent land that would be suitable for mooring points.

### Opportunities

- Regional approach to canal restoration and canal corridor development.
  - To apply for relevant funding.
- Improve Canal to Town route

- Improve Link with Cwmcarn Forest Drive
  - Safe Crossing point at terminus of Canal
- Improve recreation both on and off water.
  - More canoes, private boats
  - Fitness walks
  - Health rehabilitation groups
  - Safe walking routes
- Replace culverts with Tunnels to increase navigable stretches
  - Rerouting canal through Adams Quarry to restore navigation (see risk)
  - At manor road an aqueduct would provide a tourism focus
  - Navigable tunnels increase interest to canal water users.
  - Opportunity to reduce flood risk by keeping water moving through the canal.
- Potential Footbridge and outdoor community/classroom area to rear of Ty-sign school
  - Safe school walking route, reducing emissions as walking encouraged and quicker than car routes.
  - Community involvement
- Potential Marina, or mooring points (see Risk)
- Potential ecological and heritage educational opportunities
- Better environment
  - For Health
  - For ecological improvements
  - For Business investment in tourism and canal related services
- Housing at A3 on Risca town centre plan
  - Would be more attractive to investors-canal restoration can be linked to house price increase.
- B3 Risca Town Centre Plan.
  - Movement along Moriah Hill encouraged by improving Bridge with Canal imagery and links to Risca park, town centre and Bethany Chapel.
- Improve cycle network from Town centre to canal and National cycle routes

- Encourage annual events to raise the profile of canal and Risca.
- Potential to site Energy generating outdoor gym equipment.
- Potential to collaborate with fibre broadband providers. (Utilising towpaths).

### Threats

- Weather
  - Can affect outdoor tourism
- Cwmcarn Forest Larch tree felling due to Ramorum Virus
- Lack of Funding
- Planning constraints
- 14 locks not releasing excess of water
- Sale of Adams Quarry
  - This could impact on the ability to [re-route](#) the blocked section of the canal
  - This would impact on the [potential marina](#), although a potential new owner could apply for planning permission for a marina.

## Vision and Objectives

The Crumlin Arm of the Mon & Brec Canal is an underutilized resource that requires ongoing maintenance expenditure to protect what we currently have. Investment in the form of time and funding has the potential to create a unique destination within Wales, that forms part of a larger regional approach of the Mon & Brec Regeneration Partnership to restore full navigation to the entire length of the canal and developing the wider canal corridor.

## Short Term Opportunities

These opportunities build on the existing facilities with minimal financial outlay

Continue with existing partnership with Mon & Brec Regen Partnership

Encourage more volunteering

Monitoring foot traffic and environment surveys

Increasing foot traffic along the towpaths

- Increase Marketing of the canal
- Improve the link with Risca Town Centre
- Exercise equipment (energy generating)

Increasing water traffic on the existing canal

- Approaching canoe and boat clubs to encourage use

Forging links with Education Establishments and education programs

Forging links with Local Community Groups

Improving canal side leisure provision

Link with Cwmcarn Forest Drive as a tourism attraction.

Explore energy generating options from water and wind

Explore Fibre Cabling along the towpath as a possible fundraiser.

## Medium Term Ambitions

The medium term proposals will build on the existing canal infrastructure to create a safer more desirable location, which will attract more waterway users, assist flood control and create a tourist destination hub with Cwmcarn Forest Drive.

Engage with volunteer, skills and jobs programs

Creation of safe crossing points where the road obstructs the canal

Creation of a safe crossing point linking the canal terminus with Cwmcarn Forest Drive.

Creation of a turning circle, mooring and parking at the [canal terminus](#)

Enhancement of the activity provision at Forest Drive

Creation of a community area and safe walking route to [Ty Sign Primary School](#).

Creation of a canoe/boat store near the [hall road car park](#)

Restoration of the middle section of the canal to full navigation

- Creation of a tunnel to remove the [Gelli Road obstruction](#)
- Creation of a two way tunnel to remove the [Thistle Road obstruction](#)
- Creation of a tunnel removing the [Navigation road obstruction](#)

Encourage more private investment in business and housing

## Long Term Vision

The restoration to full navigation of the Monmouthshire and Brecon canal from Brecon to Newport and then on to an activity hub at Cwmcarn Forest Drive would create a substantial landmark for Wales attracting overnight visitors from the UK, Europe and Worldwide.

Restoration of the full length of the CCBC canal to Navigation

- Creation of an Aqueduct (or tunnel) removing the [Manor Road Obstruction](#)
- Re-routing the canal through Adams Quarry to remove the [Darren Road obstruction](#).

Restoration of full navigation down to 14 Locks (Newport LA)

Restoration of 14 locks (Newport LA)

Restoration of full length of Mon & Brecon canal from 14 Locks to Brecon (partnership)

In collaboration with Cwmcarn Forest Drive,

- Construction of a Cable Car as a major tourist attraction.
- Creation of a Marina at [Adams Quarry](#), or Zip Wire attraction

- Creation of an Aerial Ropes Course
- Creation of an Alpine Roller Coaster
- Reopen Cwmcarn Forest Drive following the tree felling.

## **Proposals**

This is a draft document and a work in progress.

The implementation plan on the following pages

## **Estimated Costs**

Some costs are included in the following detailed table

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## Implementation Plan

**C=Compulsory**

**R=Realistic**

**V=Visionary**

Implementation Plan							
Plan	Actions	Action description/ Recommendations	Potential Funder/Partners	Priority			Cost
				C	R	V	
Engineering	<a href="#">Structural Integrity</a> <a href="#">Flooding prevention</a> <a href="#">Safety of areas</a>	The canal requires regular monitoring to ensure the structural integrity of the canal to ensure that flood risks from overspill and leaks are minimised. The operation of in flow and overflow methods needs to be operational and activated as required.	CCBC	Yellow			
	Dredging of Canal De weeding	Significant investment to make the seven separate sections of the canal navigable was required and dredging to remove silt and invasive species control is required to maintain its navigational status. (To protect what we have now). The silt is classed as waste and is expensive to dispose of due to its biological content. (see farm diversification)	CCBC	Yellow			
	Removal of rubbish	The removal of rubbish in the form of tree branches and discarded waste items is required to keep culverts clear to prevent culvert blockage which increases flooding risk. Partnership with enforcement department in relation to dog fouling and littering would be best practice.	CCBC	Yellow			
	Volunteering Skills programs	The Waterways project in Cwmbrian has benefitted from a significant level of volunteer time, through formal sources such as help into work schemes/skills schemes as well as local residents. Volunteers can assist in the regular maintenance and development projects. Skills based work projects can also provide qualifications and experience for NEET.	CCBC MBC Regen Partnership Passport/Jobs Growth Wales/Apprenticeships (Peoples Postcode Trust?)		Green		
	Regional maintenance team	As volunteers at the waterway project and potentially in the Crumlin Arm area are trained and gain experience in maintenance in Canal restoration and maintenance, there is potential for the future maintenance of the canal to be outsourced or managed by a regional team of volunteers and employees.	CCBC MBC Regen Partnership			Purple	



	Tree survey Tree management Plan	The offside of the canal is lined with trees many of which overhand the canal waterway. The towpath side also has trees as part of the towpath hedge. The maintenance of trees is essential as trees can damage the lining of the canal and can be a health and safety issue with a danger of fallen trees/branches onto users of the towpath and waterway. In addition, fallen branches can cause culverts to block and become an unseen barrier to any boat users. Dense trees can also prevent marginal vegetation, which helps bind the canal edges.	CCBC			
			MBC Regen Partnership			
			Dedicated regional Waterways maintenance team/Volunteers			
	Safe Road Crossing points	Cycle and pedestrian safe crossing points should be constructed at the 5 canal obstructions where the road breaks the canal, as well as at the origin of the canal where a safe crossing point should be located to link the canal with Cwmcarn Forest Drive. Disabled users should also be provided for.	CCBC			
Fibre Optic	Broadband cable	The canal towpath has been identified in other regions as a potential site for expanding broadband and TV cabling into hard to reach areas as the towpath offers a direct route through both urban and rural areas. Finance raised through such a venture could be used to fund some of the other initiatives.	CCBC Cabling companies			
Monitoring	Traffic counter	To count number pedestrians, cycle users, etc, to provide data for where we are now and to monitor the impact of strategic direction.	CCBC			
	Surveys	Traffic counters provide a dry statistic and don't provide the full picture as to where the data lives, works and why they are visiting. Links with schools who could do surveys which at primary level could numeracy/counting and secondary level could provide geography project data.	CCBC/schools			
	Walking logs	Canal users could use APP's or websites to record geographical location, mileage etc. Competitions and events could be run nationally for the lost canal mileage per age group, family group etc.	CCBC Canal users Communities 2.0			

Plan	Actions	Action description/ Recommendations	Partners/Funding	Priority			Cost
				C	R	V	
Town Centre Links	Town centre Canal links	<p><b>P27 B3 of Risca and Pontymister Town Centre action plan 14-19</b> Increase movement of pedestrians from the National Cycle Network and Monmouthshire and Brecon Canal to the town centre encouraging cyclists/walkers to spend time in the town. The route along Station Place and Moriah Hill could be enhanced with interpretation to make it interesting and provide a resting point along a steep route. There is also opportunity for interpretation in Tredegar Grounds Park Risca to promote the Canal.</p> <p><b>P37 1.21 of Risca and Pontymister Town Centre action plan 14-19.</b> The Town is located in close proximity to Cwmcarn Forest Drive and the canal. However, visitors to the town do not benefit from this proximity as the town lacks any signage and visibility to promote these assets.</p>	CCBC Town Centre Highways				
	Refreshment grocery stops	Work with local businesses to provide canal side advertising and directions to local restaurants, pubs, and grocery and tourist/curiosity shops. Attracting more visitors to the canal will bring a desire to eat, drink and buy souvenirs. The Fish and chip shop may be suitable for expansion/change of use to a cafe/grocery point especially if navigation down to 14 locks is restored.	CCBC SME business investment Partnership with existing business				
Tourism	Marketing Raising the profile	<p>Engage with local schools</p> <ul style="list-style-type: none"> <li>Regular feature on Risca schools Radio Cuckoo FM</li> <li>Column in schools news letter</li> <li>Canal group attend new school entrants parents evenings</li> <li>Canal ambassadors to be elected at schools</li> </ul> <p>Engage with FE establishments</p> <ul style="list-style-type: none"> <li>Suitable for environmental and geography surveys</li> </ul> <p>Engage with local community groups e.g. Anglers, cyclist clubs</p> <p>Encourage businesses to sponsor parts of a heritage trail, and art boards.</p> <p>Treasure trail leaflets at Cwmcarn Forest Drive, CADW sites and other strategic locations.</p> <p>Publicise pictures of what we have, run events etc.</p> <p>APP and Blog –see below</p>	CCBC Schools Community groups Local Business Cwmcarn Forest drive CADW MBC Regeneration Partnership Newspapers				
	Treasure trail leaflets/events	Leaflets designed similar to a treasure map could ask the user to solve riddles/use a compass to locate certain objects. There could be several ability levels and events staged around teams racing to find items first. Events could be run in a similar way to orienteering events with card clickers to punch cards required or numbers similar to bar codes to be engraved into static objects which participants would need to record in correct spaces on the treasure leaflet.	CCBC Orienteering groups MBC Regeneration Partnership Cwmcarn Forest Drive				

Crumlin Arm APP Blog.	Develop an APP and Blog were Treasure trials, heritage trail, events, walking logs, volunteer opportunities, photos etc can be found. This could be linked to a wider tourism initiative for all major tourism destinations.	CCBC MBC Regeneration Partnership Everyone!! Communities 2.0?				
Art Exhibitions Art boards	Walkers and waterway users pass slowly through the area. So an outdoor exhibition which could be static or rotated would provide focal points throughout the stretch of the canal. Static art could take the form of sculptures and/or mosaics permanently fixed while display board could provide points for rotated art and business advertising points. Local schools and community groups and/or national competitions could provide the material for these exhibitions, focal points.	CCBC School Community Gallery in Caerphilly Existing on line competitions				
Restaurant boats Static	There is a possible mooring site in the middle section where it may be possible to moor a long boat that could be converted to a restaurant boat. This could be as a new business investment, a partnership with a nearby fish and chip shop, or as a community group purchase scheme, (using local labour teaching catering skills) If the canal channel in this middle section was extended by removing the road obstructions this boat could offer dinner cruises.	CCBC SME business investment Partnership with existing business Community group Skills for employment				
Mobile Restaurant Dinner cruises	If the canal channel in this middle section was extended by removing the road obstructions this boat could offer dinner cruises.	CCBC SME business investment Partnership with existing business Community group Skills for employment				
Events	The Mon & Brecon Reg Partnership arrange an annual Canalathon involving cycling, canoeing and walking over a 35 mile route. The Crumlin arm could arrange a similar event, with cycling starting in Forest Drive down to the canal, where canoes can be used and carried over the roadway obstructions till the boundary with Newport. It could be extended to 14 Locks where walking can commence on toward a further location. Other events such as a duck race could be arranged on a smaller scale depending on community engagement.	CCBC MBC Regeneration Partnership Cwmcarn Forest Drive				

Leisure	Cycle hire Stations	Cycle hire stations similar to those in major cities to encourage visitors to hire cycles and visit Cwmcarn forest drive, the six listed canal bridges and 14 Locks in Newport area. Cycle stations at Manor Road, Hall road car park and in partner LA such as at 14 Locks Newport, 5 locks Cwmbran and at other strategic points on route to Brecon. This could be part of a wider network of hire and return stations, meaning that returning to the point of origin is not required.	CCBC MBC Regeneration Partnership Cycle hire businesses SME investment. British Waterways Cwmcarn Forest Drive				
	Canoeing Rowing	Encouraging the use of the canal waterway itself through use of canoe and rowboats should be encouraged as regular movement through the water helps with reducing the silt build-up. Engage with local clubs and SME to set up canoe and hire stations, linking with Forest Drive to make it an activity hub. Facilities for disabled canoeist should be made available. Canoe trips with overnight camping could be possible at Cwmcarn and if full navigation was restored canoes travelling 6-8 miles per day could leave Beacon and travel to Cwmcarn, which would benefit local campgrounds and businesses (pubs and shops)	CCBC Cwmcarn Forest Drive Local boat clubs SME/ business investment MBC Regeneration Partnership				
	Waterway regulation/advice boards	There are H&S advice and regulations applicable to waterway users, e.g. No movement of boats after dusk. Informational boards advising canoeist, motorised boats etc should be erected. Directions to showers, restroom etc should be included where applicable.	CCBC Local boat clubs				
	<a href="#">Canoe/boat Store</a>	The Hall Road car park has been identified as a possible development site with a strip of land that could house a small storage canoe or boat store. This is near a boat slipway for ease of canal access. There is a metal church adjacent to this part of the canal which could offer a partnership opportunity between SME boat owner investment and the church where, restroom, and dry tuition could be negotiated within the church. A similar hire point could possibly be sited at Manor Road where if full navigation to the upper and middle sections	CCBC Metal Church SME/ business investment Local canoe/boat clubs				
	Angling clubs	There are existing angling clubs using various sections of the canal. CCBC should encourage closer links with the clubs, and regular cyclists and residents. Consideration should be given to engaging with National Fishery in relation to the fish stock in the canal	CCBC Angling clubs Residents National Fishery				
	Segway Tours	The canal towpath would lend itself to novice Segway users. Tours could be run by SME businesses to link up with heritage, educational, Art exhibitions as well as linking with an off road segway track that could be developed at forest drive	CCBC SME/ business investment Cwmcarn Forest Drive				
	Motorised boats	Privately owned and business boats should be encouraged to the area as their waterways licence brings in revenue. The more attractive and longer	CCBC Business investment				

		the navigable sections the more boats that will be attracted to the area. At present, a trip boat may be viable on the lower (southern section) from Manor Road to Harry Roberts Bridge. Motorised boats on the canal should attract micro business investment in the form of boat repairer/mechanic workshops. Trip boats, day hire, overnight timeshares, boat hotels, and sea going craft will all be attracted to the area if full navigation could be restored.	Local canoe/boat clubs				
	Horse drawn trip boats	In addition to motorised trip boats. Horse drawn trip boats would provide an added attraction.	CCBC Business investment Local canoe/boat clubs				
	Exercise trail	Exercise equipment at suitable points alongside the towpath, such as pull up bars, hand bikes and cross trainers. Sighting individual pieces throughout the stretch of canal would encourage movement throughout the canal not just at one location. Equipment can be family and disabled friendly as well as pieces for the serious athlete.	CCBC Community groups Business investment				
	Green Energy Exercise equipment	Exercise equipment such as the cross trainer, rowing machines and hand bikes, amongst others can generate 50-100 watts of energy depending on the fitness of the user. This equipment can be used to charge mobile phone and power canal sidelights, and possibly depending on location send power into the local grid.	CCBC Community groups Business investment Green energy grants.				
	Walking tours Health tours	In partnership with local GP and NHS walks, exercise programs and walks can be developed to offer patients such as cardiac recovery and other physiotherapy patients opportunity to recover in the outdoors.	CCBC NHS Local GP				
	Boat Taxi	Encourage boat taxi from Whysoms Wharf to Forest Drive. As canal is lengthened boat taxis could operate along the full stretch of CCBC's canal and also from 14 Locks in Newport. Stopping at strategic points for tourism and business links.	CCBC Mr Whysom Mon & Brec Regen partnership.				
	Energy schemes	Both Aqua and wind could be researched					

Plan	Action	Action description/ Recommendations	Partners/Funding	Priority			Cost
				C	R	V	
Cwmcarn Forest Drive	Enhanced attractions at Cwmcarn	<p>In addition to the existing facilities which include cycle trails, walking trails, picnic areas, glamping and the visitor centre, the site would lend itself to other attractions which would blend with the natural contours of the land and have little environmental impact. For example</p> <ul style="list-style-type: none"> <li>• Zip Wire</li> <li>• Zip Wire Canopy tour</li> <li>• Zip Wire rollercoaster</li> <li>• Aerial bikes</li> <li>• Leap of faith</li> <li>• Alpine rollercoaster</li> <li>• Aqua ball dry track</li> <li>• Aqua ball on canal/lake-aqua ball football</li> <li>• Aerial bikes (cycle suspended on wire and propelled by rider).</li> </ul> <p>Business investment could create such activities, either on an ad hoc individual attraction basis or investment sort from large enterprise to create and develop it as a whole.</p> <p>An approach to such an attraction by canal all the way from Brecon would enhance the appeal of both Forest Drive and the canal.</p>					
	<a href="#">Safe crossing point to Forest Drive</a>	At the northernmost end of the canal a crossing point on Twyncarn Road would link the canal to the entrance of Cwmcarn forest Drive.	CCBC Forest Drive				
	Cwmcarn Activity Hub	This will provide a general sense of arrival and anticipation of what the site will offer, clear signage and banners reflecting the sites varied use. Clear and welcoming site interpretation and directional signage located in two new areas at each end of the car park. Soft landscaping and removal of wooden fencing to be replaced with natural stonework.	CCBC				£100-120K
	Rationalise layout of valley floor	The main proposal involves the moving of the existing campsite as detailed below, the former campsite can then be developed into a family friendly area including family cycling trail, maze, adventure play area, picnic and entertainment space. This will provide much needed recreational space within the valley floor.	CCBC				£300-£500K



Amphitheatre and Viewing Platform	An events space located further up the valley floor and serviced by the new improved parking at the pit wheel. A number of recreational improvements could be incorporated in this area including access to exiting walking network, outdoor natural play and picnic facilities.	CCBC			£80-100K
New Campsite location	It has been proposed that the campsite be re located to the slopes further up the valley. This would free up space within the valley floor for further recreational facilities. This development would require major engineering works to create and develop the new site. The new location would provide a better view than the existing valley floor location and hold the sun longer into the evenings. Further study required for exact costs	CCBC			£2-2.5m
New pit wheel car Park	Parking on site is limited during the summer months with the main car park occupied with mountain bikers. New enhanced parking facilities have been planned for the existing pit wheel location that can link into other proposed enhancements in this area. An estimated additional 40 parking spaces could be created within this quieter part of the site that is a perfect location to access to many walks around the site.	CCBC			£85K
Additional/ Improved car parking	Resurface and existing main car park	CCBC			£70K
Landscape Management	Various improvements throughout the valley floor with regards to persevering the natural environment and control of natural invasive species. Removal of non-required fencing, improvements to surfaces on footpaths (to encourage all use) standardise fencing and furniture around the site & improved signage.	CCBC			£150-200K
Zipwire Risca Quarry	This is a current proposal that it in negotiations with a private sector organisation.  <b>Please note that if the sale of Adams Quarry proceeds it will affect the viability of a number of opportunities in this proposal namely:- the <a href="#">potential marina</a> and the <a href="#">re-routing of the canal to restore full navigation of the Crumlin Arm</a></b>	Private sector			£750k
High ropes facility	The nearest similar attraction to that proposed at Cwmcarn is Margam Park that operates with Go Ape. A similar style site could be constructed at Cwmcarn although the site offers the opportunity for longer zip wire length due the heights involved. This could also link into the Zip Wire concept with one of the longest UK zip wire proposed previously.	CCBC Business investment			£1-1.5M

	Alpine roller Coaster	It is believed that there is currently no Alpine Coasters constructed in the UK, making the construction at Cwmcarn a UK first and therefore a great attraction. It would require some sort of uplift, which would link it to the above cable car project.	CCBC Business investment				£1.5m
	Green cycle route from the centre to the Canal.	Cycle route 47 is the nearest current route to Cwmcarn forest though this leaves the canal at Crosskeys. The towpath is of good quality and can be rode to the end of the canal opposite the entrance to Cwmcarn Forest. Cyclists would then need to use the access road to get to the site. We have proposed the construction of a new cycle route to link from the canal to the visitor centre. (See safe crossing point above)	CCBC Business investment				£50-70
	Cable car	The 2005 canal study suggested a cable car to run from a marina in Adam's Quarry to Cwmcarn Forest Drive bear the Twmbarlwm Hill Fort (an ancient Monument. This cable car would be 30% longer and twice the height of the "Heights of Abraham" cable car which in 2004 received almost 200,000 visitors. While the development of a cable car would require funding at a minimum of £6M it would provide jobs and skills growth in the construction itself, together with approximately 12 FT jobs to run and maintain the cable car without the associated growth of other business and tourism activities. In 2005 the canal corridor study without the marina and cable car estimated over 100,000 visitors each year, so a cable car and marina would be expected to increase that number considerably. A conservative estimate at 100,000 visitors to the cable car each paying £10 which would include entrance to Forest Drive has a possibility to yield £1m in revenue income. The running costs (maintenance, staffing etc) estimated at £0.5M would indicate a possible profit of £0.5M annually. This attraction would appeal to cyclists who would utilise the cable car to avoid any up hill cycling.	CCBC Business investment Forest Drive CADW National Heritage Adam's Quarry owners				£4-6M estimate
Agriculture	Farm Diversification	There is a narrow belt of land between Crosskeys and Darren Bridge, which is designated as a special landscape area. It has the potential subject to the necessary permissions to house a farm diversification scheme as long as it is well integrated within the existing landscape. If this becomes viable then the farm could consider making use of the silt dredged from the canal as fertiliser which will reduce the LA costs on waste disposal of the silt. (There maybe grant funding if a young farmer (under 40) is setting up for the first time as head of holding)	CCBC Business investment				



Plan	Action	Action/Descriptions	Partner/Funding	Priority			Cost
				C	R	V	
Canal Restoration	Nant Carn Feeder Pontywaun Overflow	The Nantcarn Feeder and Pontywaun overflows would need to be improved to ensure sufficient water enters the canal for navigation to be achievable all year. These developments would also provide enhanced flood protection for the length of the canal.					
	14 Locks procedures	Formalise procedures should be agreed with Newport LA who have ownership of the 14 Locks to agree flood and guaranteed flow procedures. Both CCBC and Newport LA rely on each other to regulate water flow in both the CCBC and Newport canal areas.	CCBC Newport LA				
	<a href="#">Tunnel replacing the Gelli Road Obstruction</a>	Navigation Road to Moriah Chapel Bridge is the highest floor risk area. Removal of the Gelli Road obstruction by creating a tunnel to improve water flow and accommodate a long boat would prevent the build up of rubbish at the culvert which has been slowing water flow and causes silt build up. This would help to reduce the flood issue and increase the navigable distance in the middle section.	CCBC Mon & Brec Partnership Skills development Community engagement				2005 £0.5M
	<a href="#">Two way Tunnel Thistle Road obstruction</a>	Removing the Thistle Road obstruction will increase the flow of water out of the higher risk areas. The creation of tunnels that would create a two way traffic system would benefit the long term navigational possibilities for the canal	CCBC Mon & Brec Partnership Skills development Community engagement				2005 £1.2M
	<a href="#">Tunnel Replacing the Navigation Road obstruction</a>	Removing the Navigation Road obstruction would create a middle section of canal fully navigable from Manor Road to Darren Road. Which would be of sufficient length to run a Dinner cruise boat, and encourage other private and commercial boat use.	CCBC Mon & Brec Partnership Skills development Community engagement				2005 £0.3M
	<a href="#">Removing the Manor Road Obstruction</a>	Removing this obstruction would link Risca to Newport LA by water transport. Newport has two bridges that need to be raised within their boundary, which would allow navigation from 14 Locks to Manor road. Removing the Manor Road obstruction would make navigation from Newport LA to Darren road possible. Removing this obstruction would also encourage water flow into the rural areas to the south of Risca, which would significantly reduce the flood risk to the urban areas. In 2005 a tunnel was considered more appropriate, due to engineering issues with an aqueduct, however with advances in technology an aqueduct may now be viable. An aqueduct would attract more visitors as opposed to a tunnel. So the difference in cost of an aqueduct should be compared to the possible increased tourism revenue from an aqueduct.	CCBC Mon & Brec Partnership Skills development Community engagement				2005 Tunnel £1.5M 2014 Aqueduct £?M

<a href="#">Removing the Darren Road obstruction</a>	The Darren road obstruction would require the canal to be redirected into Adams Quarry, as it is the longest break. It would require substantial funding, but it would open up Adam's Quarry as a possible development site for a marina and other linked tourism needs, so large business enterprise may wish to invest in this. Removing this obstruction would restore full navigation to the full length of the canal with CCBC control	CCBC Mon & Brec Partnership Skills development Community engagement Business investment Owners of Adam's Quarry				2005 £4.5M
<a href="#">Canal Turning point</a>	Design and build a canal turning point, with mooring points and a parking area opposite the entrance to Forest Drive to provide a destination for boat users. (A winding hole?) and a link to Forest Drive	CCBC Mon & Brec Regen Partnership				
<a href="#">Adam's Quarry Marina and car Parking</a>	Adam's quarry subject to planning and land ownership could be a potential site for a marina to house 30 boats and provide parking for 100 cars. This marina could site hire boats, amenities, grocery, tourism shops and encourage local B&B, Restaurant and curio shop activity. This could provide sustainable jobs for the locality.	CCBC Mon & Brec Partnership Skills development Community engagement Business investment Owners of Adam's Quarry				2005 £3M

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Appendix- Site of proposed canoe store

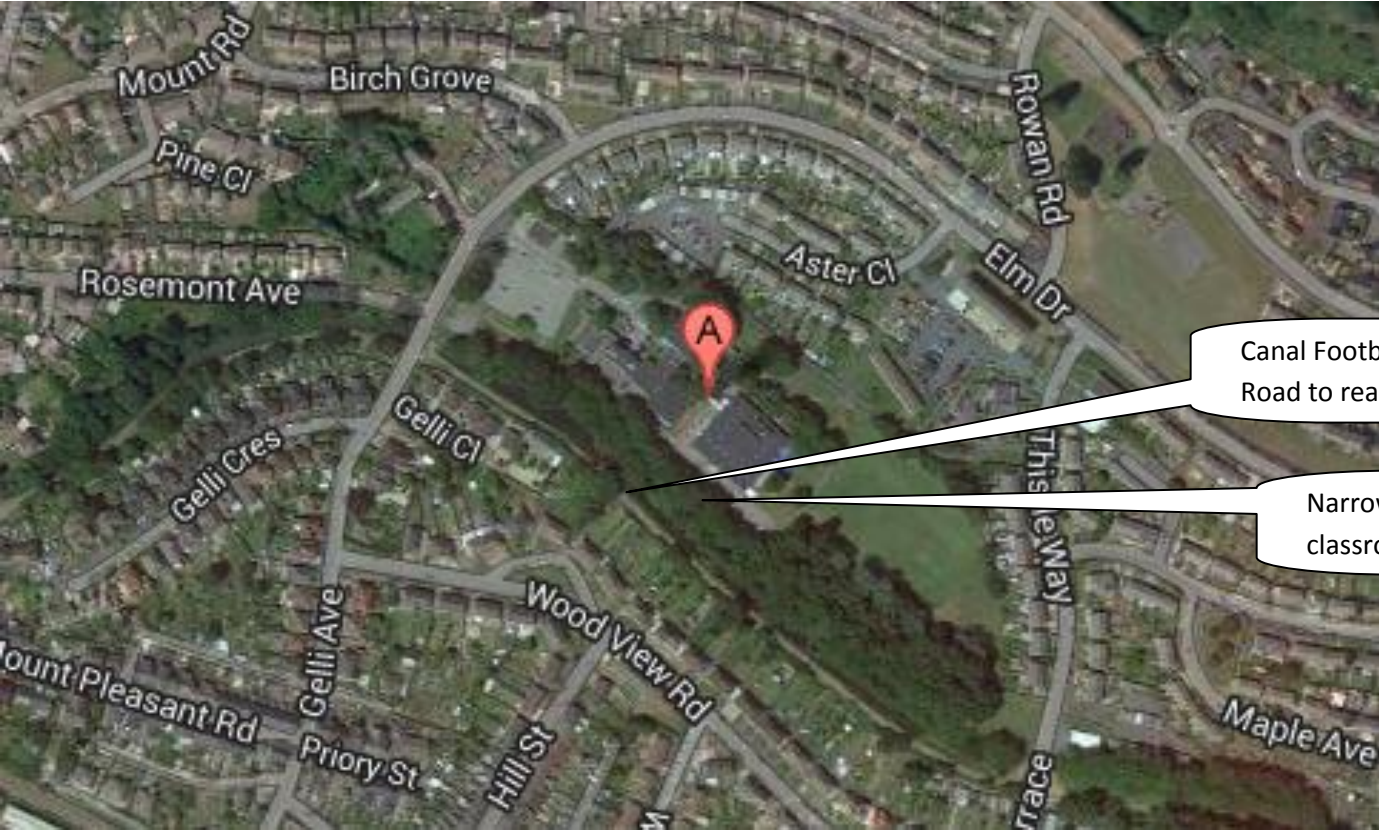


Site of proposed canoe/boat store

Possible partnership with church



Appendix-Proposed site of community area, footbridge, safe walk to Ty Sign School route

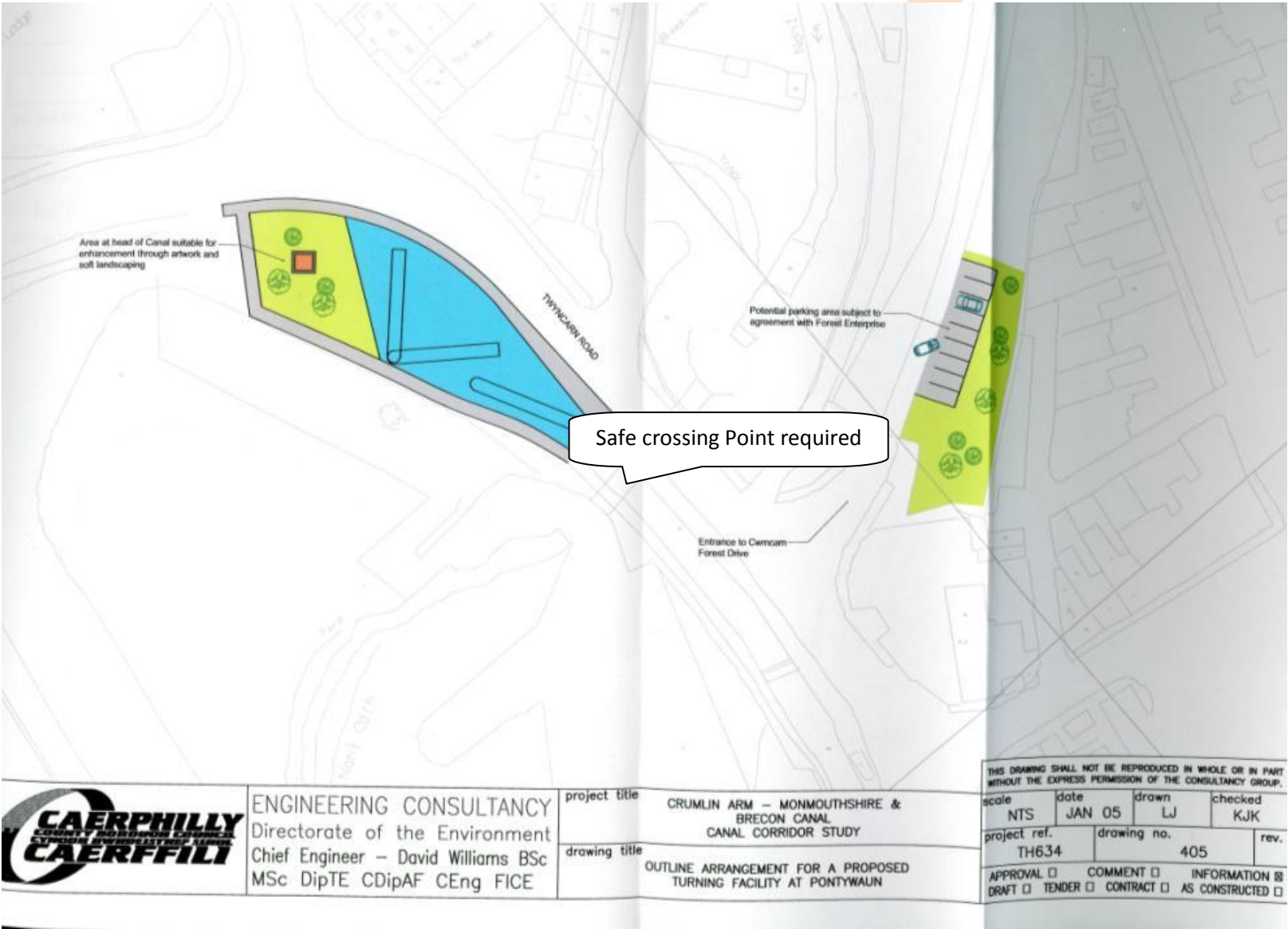


Canal Footbridge would connect walkway from Wood View Road to rear Ty Sign School

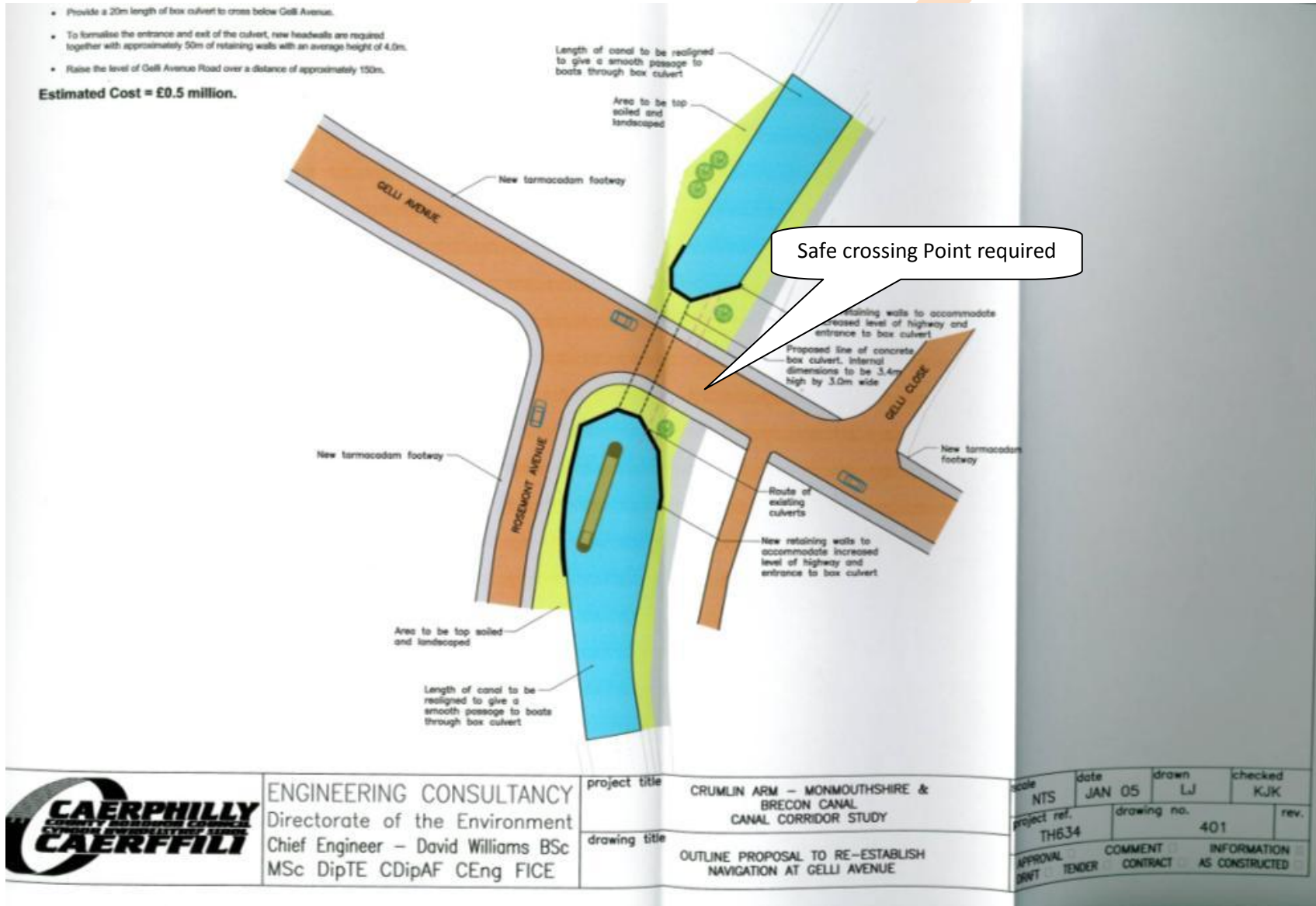
Narrow wooded strip of land has potential as an outdoor classroom, wooded play area, community BBQ site.



Appendix-Turning circle and car park to link the canal to Cwmcarn Forest Drive

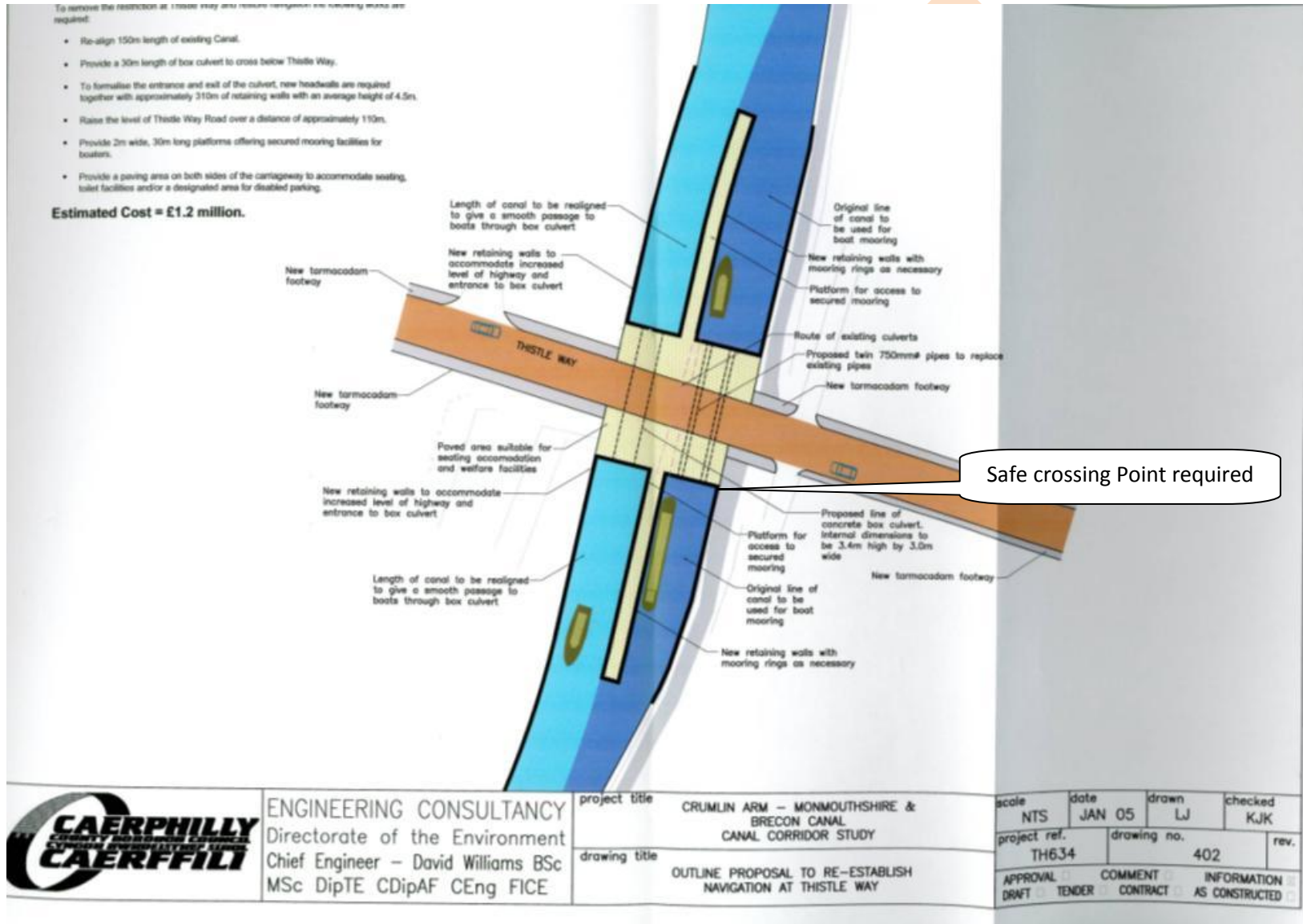


Appendix—Gelli Avenue Road Obstruction 2005 estimate £0.5M

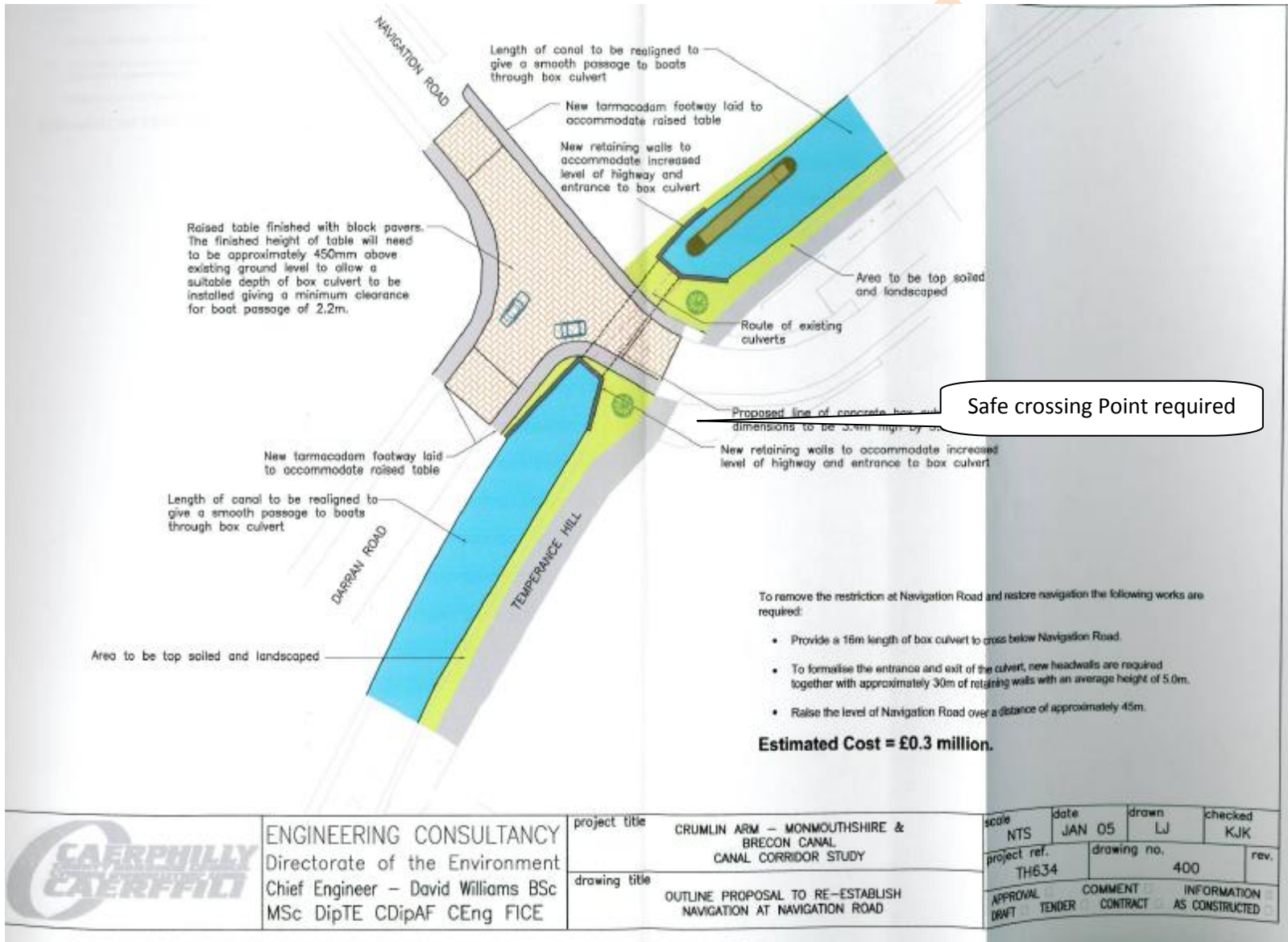




Appendix –Thistle Way Road Obstruction 2005 estimate £1.2M

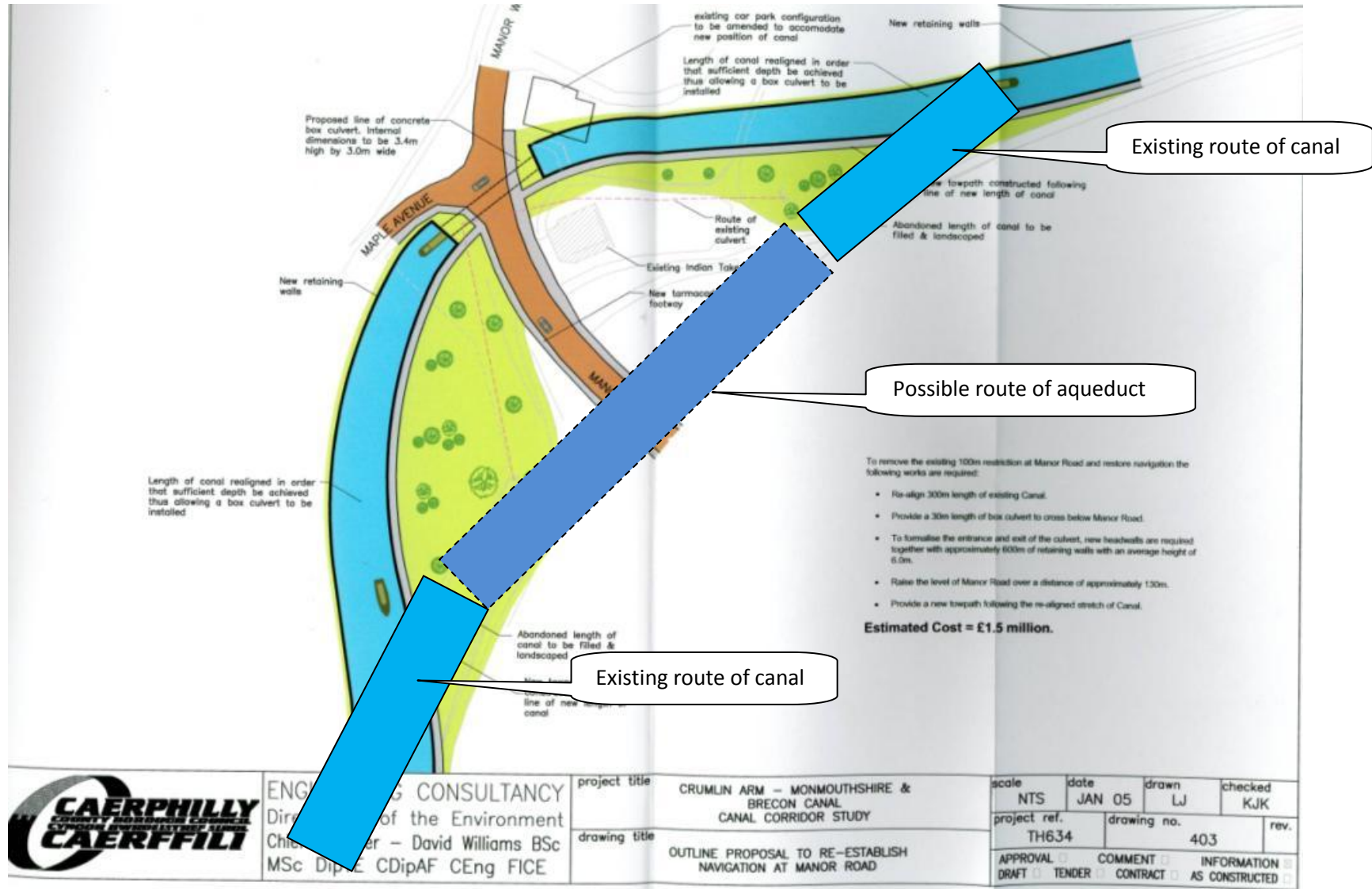


Appendix—Navigation Road Obstruction 2005 estimate £0.3M

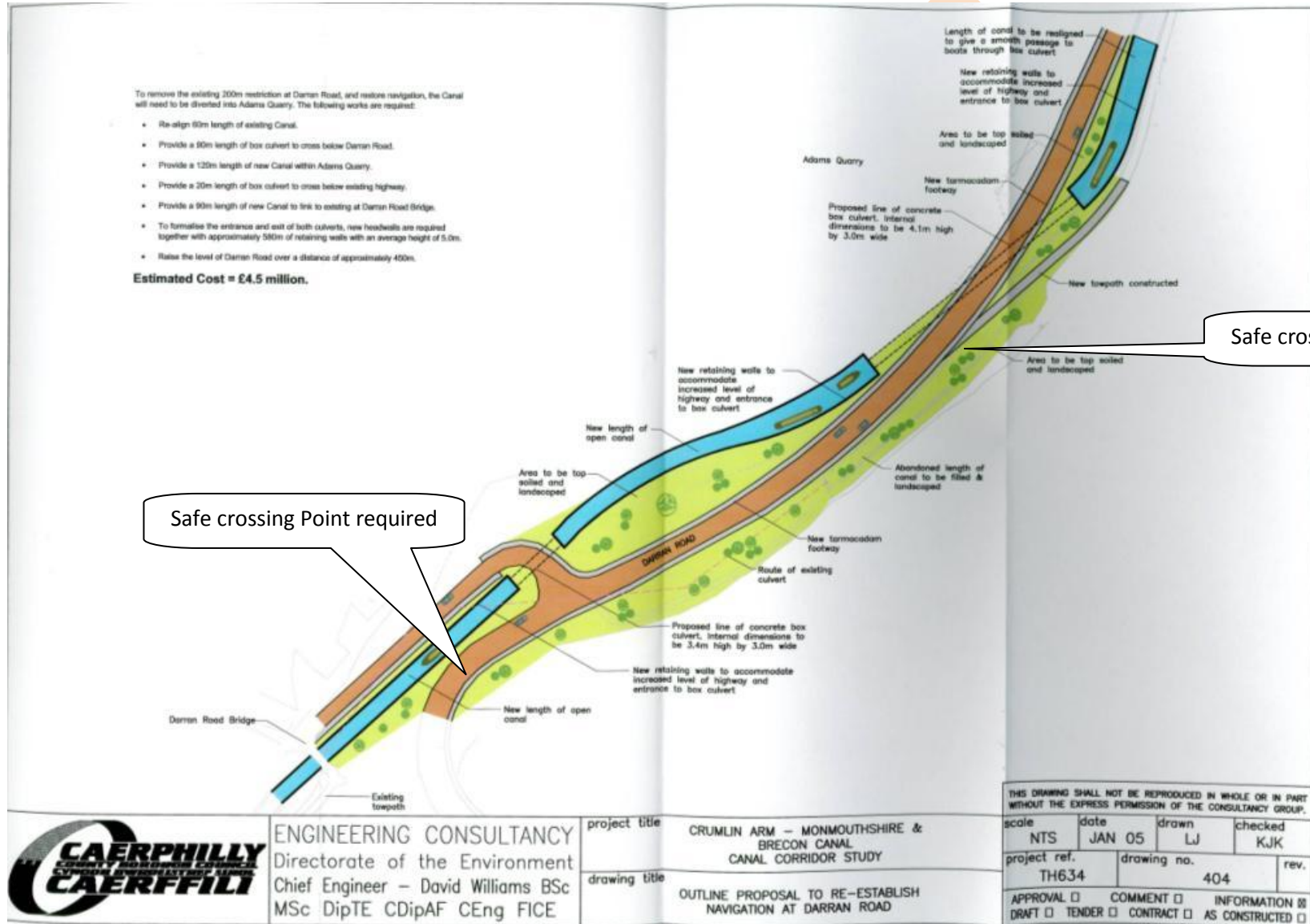




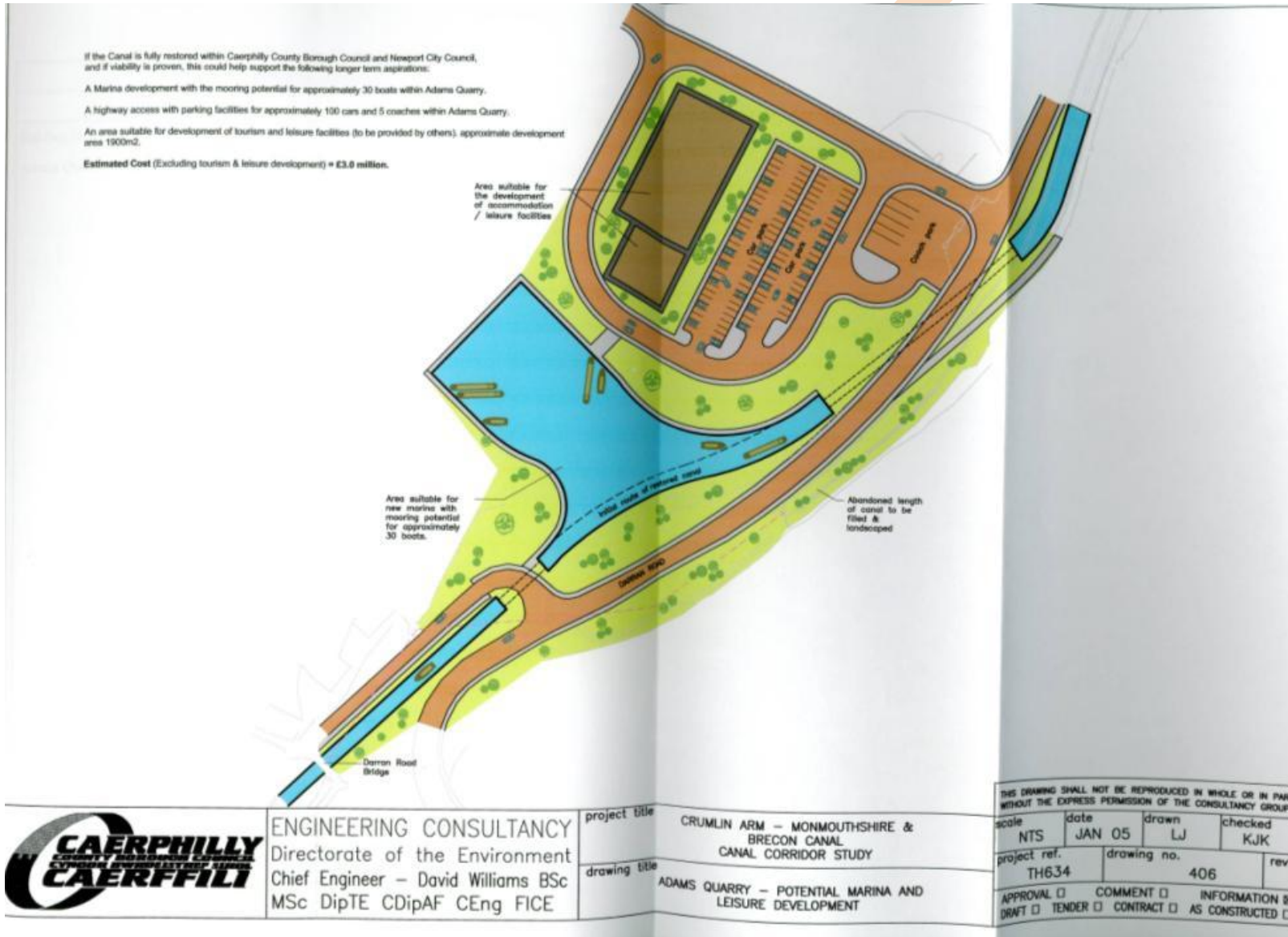
Appendix-Manor Road Obstruction-2005 estimate at £1.5M for a Tunnel consider an aqueduct



Appendix—Darren Road Obstruction 2005 estimate diverting canal into Adam’s Quarry £4.5M



Appendix- Adam's Quarry Marina 2005 estimate £3M





Canal Maintenance Pictures of relining work

