LOCAL AUTHORITY MAJOR SCHEMES BEST AND FINAL FUNDING BID SEPTEMBER 2011				
Scheme Name	Croxley Rail Link			
Local Authority Hertfordshire County Council				

SCHEME COST SUMMARY (£m)					
	Scheme As Previously Configured (from section 1.4)	Revised Scheme (from section 4.4)			
LA contribution	£32.1m	£33.7m			
Third Party Contribution	£2.2m	£6.86m			
DfT Funding Contribution	£136.5m	£76.24m			
Total	£170.8m	£116.8m			

CONTACT DETAILS FOR	FURTHER ENQUIRIES
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Alternative Contact: Position: Tel: E-mail:	Tom Duckmanton Project Manager 01707 356200 Tom.Duckmanton@mouchel.com

NOTE: Bids should be received by the Department by Noon on 9th September 2011.











As Senior Responsible Owner for Croxley Rail Link I hereby submit this Best and Final Funding Bid to DfT on behalf of Hertfordshire County Council and confirm that I have the necessary authority to do so. Name: Rob Smith Signed: Position: Assistant Director, Transport Management

SECTION 151 OFFICER DECLARATION

SENIOR RESPONSIBLE OWNER DECLARATION

As Section 151 Officer for Hertfordshire County Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Hertfordshire County Council and Transport for London have the intention and the means to deliver this scheme on the basis of their proposed funding contribution at section 4.3 (a) above, as well as meeting any ongoing revenue requirements on the understanding that no further increase in DfT funding will be considered beyond the maximum contribution requested at 4.3 (c) (including if third party contributions should no longer be available).

Name: Signed:

Claire Cook Claire

Please Note: The promoting authority should ensure that a copy of this BAFB form and all supporting information is available on its website by 5pm on12 September 2011.

Please detail the appropriate location where these documents can be located. The Department may provide a link to these pages from its own website.

www.croxleyraillink.com/about-the-scheme/benefits.aspx

SECTION 1: THE SCHEME AS PREVIOUSLY CONFIGURED i.e. BEFORE 10 JUNE 2010

This section should EITHER describe the scheme as approved at Programme Entry OR as submitted in a business case bid for Programme Entry OR on the latest design on which the last QMR submitted to the Department was based.

Note: this information should be consistent with what was included in previous Eol with any differences explained.

Date of Programme Entry or PE Bid or last QMR Submission (where applicable)	
Estimated total scheme cost (inclusive of eligible preparatory costs)	£170.8m
DfT contribution	£136.5m
Local Authority Contribution (excluding the costs of any Part 1 Claims that you may have included at this time)	£32.1m
Third party contribution	£2.2m

1.1 Brief description of the scheme as previously configured This should clearly state the scope of the scheme and describe all of its key components.

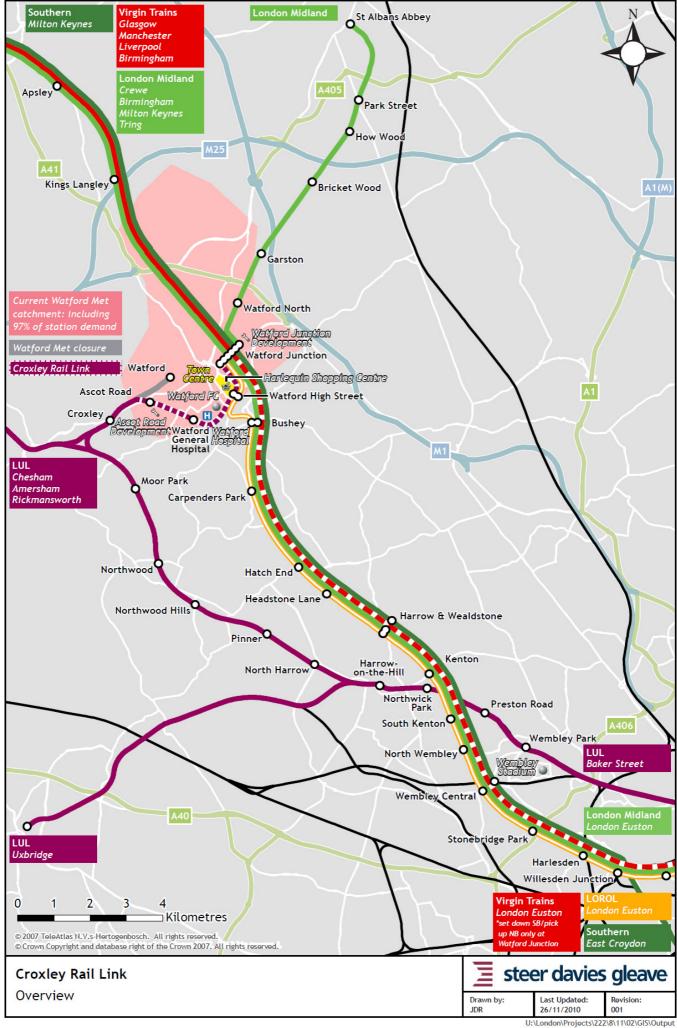
The Croxley Rail Link is a proposed diversion and extension of the Watford Branch of the Metropolitan line to Watford Junction via Watford High Street. New stations will be provided on the new rail link at Ascot Road, which forms a park and ride site for the area, and Watford General Hospital serving the proposed Watford Health Campus.

The key elements required to deliver the Croxley Rail Link are:

- A viaduct and embankment linking the current Metropolitan line 1.3km south of the existing Watford terminus to the disused rail alignment between Croxley and Watford High Street;
- Reinstatement of double track on the disused Croxley alignment, including a new junction with the Watford Junction to London Euston DC route at Watford High Street;
- Work to bring the bridges, cuttings and embankments on the disused Croxley alignment into operational use;
- New stations at Ascot Road and Watford General Hospital with ticket gates; and
- An additional rolling stock unit to deliver the extended services.

As part of the scheme, the existing Metropolitan line Watford (Met) terminus adjacent to Cassiobury Park will close to passenger traffic with services being diverted to serve the new terminus at Watford Junction.





1.2 What are/were the primary objectives of the scheme?

Please limit this to the primary objectives (ideally no more than 3) the problems to which this scheme is the solution. If the primary objectives have changed please explain why. Do not include secondary objectives i.e. things to which the scheme will contribute.

South West Hertfordshire has been underperforming economically – the local economy is still £210 million per annum lower than it was in 2001. It has experienced and continues to experience significant job losses. The Regional TEES (Transport Economic Evidence Study) showed Watford as having growth potential, but in an area where the cost of congestion and rail crowding is high.

South West Hertfordshire offers proximity to London, its airports and rail infrastructure, as well as the outer London balance of city-working, country-living making it ideally suited to support London's position as a major world city. London's emerging plans for a "star and clusters" approach to outer London development suggests that surrounding towns, such as Watford, need to better support the capital in terms of jobs and economic growth.

However, the close proximity to London has not been exploited due to lack of easy access within Watford. Moreover, the peripheral proximity of Watford to both London and the Eastern Region, and the fact it had been on the boundary of the two regions, meant that it did not achieve the focus that it may otherwise have done.

As indicated in the London Mayor's Policy:

'The Croxley Rail Link, providing a new connection between Croxley station on the Watford branch of the Metropolitan line and the now closed Croxley Green branch line is a long standing proposal championed by Hertfordshire County Council. Although outside the GLA boundary, the link is supported by the Mayor as it improves the regional connectivity of northwest London by linking the Tube network to the important National Rail interchange at Watford Junction and the employment, retail, leisure and healthcare opportunities in Watford town centre.

The Mayor, through TfL, and working with the DfT, Network Rail, train operating companies, London boroughs and other stakeholders, will seek longer-term enhancements and extensions to the Underground network, including:a link at Croxley to join the Watford branch of the Metropolitan line to Watford Junction (funding to be secured by Hertfordshire County Council in conjunction with the DfT)'

Accordingly the Croxley Rail Link scheme addresses a wide range of objectives, as detailed in the Major Scheme Business Case (MSBC) submission. The following bullet points summarise the three primary objectives of the scheme:

- To enhance sustainable links to, and between, residents and employment, business, education, health and leisure opportunities within Watford and across Hertfordshire, and to key external attractors, notably north west, central and the city of London and the national rail network, thus reinforcing Watford's role as a key transport hub north of London;
- To improve local connectivity within Watford between current/potential employees, the town centre and the key development areas of Watford Junction, Watford Business Park / Ascot Road and the Health Campus thus providing a catalyst for



both economic and housing development; and

 To provide a sustainable and value-for-money alternative to car travel, with inherently lower environmental impacts per trip including noise and greenhouse gas emissions

1.3 Please describe the process by which this scheme came to be the preferred option for meeting those objectives including reasons why alternatives were not progressed.

This may simply be an extract from what has already been described in previous Major Scheme Business Cases. However please take the opportunity to expand on that previous material as necessary.

The Croxley Rail Link scheme has been a practical aspiration since the early 1990s and has been developed over the years by a number of different promoters. During this period, various alternatives to the current proposal have been identified and assessed.

The alternative options can be split into three broad categories:

- Diversion of the Metropolitan line to Watford town centre using an alternative alignment;
- Options using the former rail link for a non rail solution; and
- Alternative service patterns making use of the Croxley Rail Link as proposed.

A strategic appraisal of 13 of these potential options has demonstrated that the Croxley Rail link offers the best value for money to achieving the key transport, economic, interchange and regeneration objectives for Watford and the wider area. This appraisal is provided in the Alternatives Review Report, which is submitted alongside this application.

1.4 What was the last total estimated cost of the scheme as previously configured including where changed since the award of Programme Entry?

Please provide the latest cost of the scheme with a summary and where, appropriate, an explanation of the key changes from the previous cost breakdown. Please use this section to identify any cost savings that you have already made since the award of Programme Entry. Figures should be outturn costs. Please adjust to exclude the costs of any Part 1 Claims that you may have included at this time.

£m	Pre 2011/ 12	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16	2016/ 17	2017/ 18	2018/ 19	Total	%
LA contribution		1.0	1.0	1.2	0.7	2.4	0.0	24.7	1.1	32.1	18.8
Third Party contribution							2.2			2.2	1.3
DfT funding requested			2.3	2.4	1.4	0.1	79.2	50.5	0.6	136.5	79.9
TOTAL		1.0	3.3	3.6	2.1	2.5	81.4	75.2	1.7	170.8	



1.5 Please describe any developments (such as housing) linked with the scheme as described above and explain any changes impacting on these developments (eg policy changes such as housing allocations, changes to redevelopment plans)?

This should explain any links that the planned scheme had to major developments and provide details of changes to these plans such as through changes in policy relating to housing, changes to developer plans etc

As strategic transport authority, Hertfordshire County Council's role is to facilitate improved access. The County Council's leadership of the Croxley Rail Link project reflects the importance placed on the scheme's ability to enhance economic growth in South West Hertfordshire, and to provide a real improvement in travel choice for journeys to and through the area. Watford Borough Council is making provision within its Local Development Framework for, and is already committed to, a number of key development sites aimed at both housing and economic development, which will be directly connected and optimised by the Croxley Rail Link:

- Watford Health Campus
- Watford Junction Interchange
- Watford Business Park
- Ascot Road

Whilst the Croxley Rail Link scheme has no ultimate dependency on these developments, and no developments are specifically reliant on the Croxley Rail Link scheme, they are highly symbiotic.

Watford Health Campus

The Health Campus is a mixed use regeneration project that has been developed by a group of organisations all with a key interest in the regeneration of the land around the current Watford General Hospital. These include the Strategic Health Authority, the West Hertfordshire Hospitals NHS Trust, the East of England Development Agency, the Hertfordshire Partnership NHS Foundation Trust, Watford Football Club, Watford Borough Council and Hertfordshire County Council.

The recently formed Local Economic Partnership for Hertfordshire will be driving the economic development input, which was previously provided by the East of England Development Agency and Hertfordshire Prosperity.

The Health Campus site of some 26 hectares will comprise the following: a reprovided district general hospital; 25,000 sq.m of commercial floor space; 500 new homes; 15,000 sq.m of hotel, leisure and hospitality facilities. The new hospital will become a centre for specialist treatment, drawing patients from a regional catchment area.

Outline planning permission, with signed Section 106 agreement, was granted on 15th July 2010 with the principles of a Masterplan for the area.

At present, the site is occupied by the existing Watford General Hospital, Watford Football Club and the Cardiff Road Industrial Estate. The key landowners of the site are West Hertfordshire Hospitals NHS Trust and Watford Borough Council, with



the majority of land being in the ownership of the local Council. The Council is currently in the process of procuring an experienced and committed private sector Partner to help deliver the scheme.

An OEJU notice was published on 5th July 2011 to commence the selection of a private sector Partner. It is anticipated that a joint venture company could be established by July 2012, with the initial phases of development commencing on the site in Autumn 2012.

The Croxley Rail Link passes through the southern part of the Health Campus site and the intermediate station proposed between the new Ascot Road station and the existing Watford High Street station will be located as close as possible to the main western pedestrian access to the Health Campus site, off Vicarage Lane. Given the site's location, the Rail Link project provides a highly accessible route directly to the campus for both local people and those travelling from outside the Borough, be that via interchange at Watford Junction, or travelling north from outer London (Harrow, Brent etc). As part of the work undertaken with local businesses to establish the real economic benefits flowing from this scheme, the Health Campus promoters were interviewed and specifically flagged the local time saving benefits that the scheme will bring:

"The time it currently takes to go from Watford to the Health Campus and the hospital is too long. It's not far in distance but it can take half an hour by car or bus, or walking (but many may not be able to walk). It's 20 minutes walk to the Metropolitan station at present but even that is too far and many choose to drive, which adds congestion to the roads. The new CRL station will be 5 minutes walk which means everyone will use that." - Watford Health Campus

Watford Junction Interchange

Hertfordshire County Council has been developing an improvement scheme over a number of years, devised to improve the station operation and utilise the existing station layout, including vehicular access to the east of the site, opening this area for increased station parking and development. As the current scheme opens up the area to the east of the station for potential development, the project has now evolved into a mixed-use regeneration project with a high housing content.

Hertfordshire County Council is working in alliance with Watford Borough Council, Network Rail and the public sector development partners to achieve a truly integrated transport and development 'vision' for the overall site. While this project was the subject of a separate major project EOI, it did not get accepted into the Department for Transport's 'Development Pool' of major projects in February 2011. Scheme promoters are currently investigating the potential around other emerging funding mechanisms, such as Tax Increment Financing, to plug the initial infrastructure gap for this high value brown field development.

The implementation of the Rail Link will significantly improve regional connectivity within NW London and SW Hertfordshire and enhance Watford Junction as a key regional transport node. The new link provides direct interchange at Watford Junction between the London Underground services



into South West Hertfordshire and London, the national rail network, the Abbey Line service to St Albans as well as local public transport services that serve the Junction station. The delivery of Croxley Rail Link naturally supports the overall viability and deliverability of a private sector redevelopment of this subregional and nationally significant transport node.

Watford Business Park

The Watford Business Park is located immediately south of the Croxley Rail Link alignment as it passes Ascot Road. Whilst the highway access is of a high standard, it is congested particularly at peak hours, and for employees, bus-based access is constrained.

The Local Development Framework's employment topic has concluded that Watford Business Park offers the best opportunity to improve the Borough's employment offer depending on the quality of access to the site. The increased access to wider labour markets that Croxley Rail Link will bring was confirmed during the interviews with businesses in the area:

"Currently it's hard to recruit for Croxley Business Park and Watford Business Park as they are quite remote, with poor transport links. CRL will attract more businesses into the area, if they see it has better transport connections. It will make Watford more 'recognised' as a place, as this tends to happen when stations are built. It gives the area more 'oomph'" - Hays Recruitment

Implementation of the Rail Link, with a new station proposed at Ascot Road, will provide a reliable and regular new mode of access to the area both from central Watford and from outside of Watford (via both Watford Junction and the modal connections there and the London Boroughs south of Watford served by the Metropolitan line).

Watford Borough Council, as owner of the business park, has confirmed that the Rail Link, through enabling better access, will significantly increase the value of the economic assets in this area and enable further development of currently underutilised or vacant sites to be bought forward. On that basis the Borough Council has agreed to contribute to the project.

It has been possible to quantify some of the likely economic benefits to the local businesses and developers. For example, discussion with the owners of Croxley Green Business Park (as reported in the Economic Impacts study) indicated that potentially up to 1,000 jobs depended on the new link, and that approximately £150,000 could be saved per year both by themselves in providing shuttle buses to the town centre, and also by one of their tenants, GE Money.

Ascot Road

Sites along Ascot Road under private ownership, primarily the soon to be vacated 25 acre Royal Mail sorting depot, are also expected to be redeveloped within a similar time frame to that of the Rail Link. This site directly abuts the proposed new Ascot Road Station and private sector developers are currently at a pre-application stage, eagerly awaiting a funding decision on the link which will determine the level



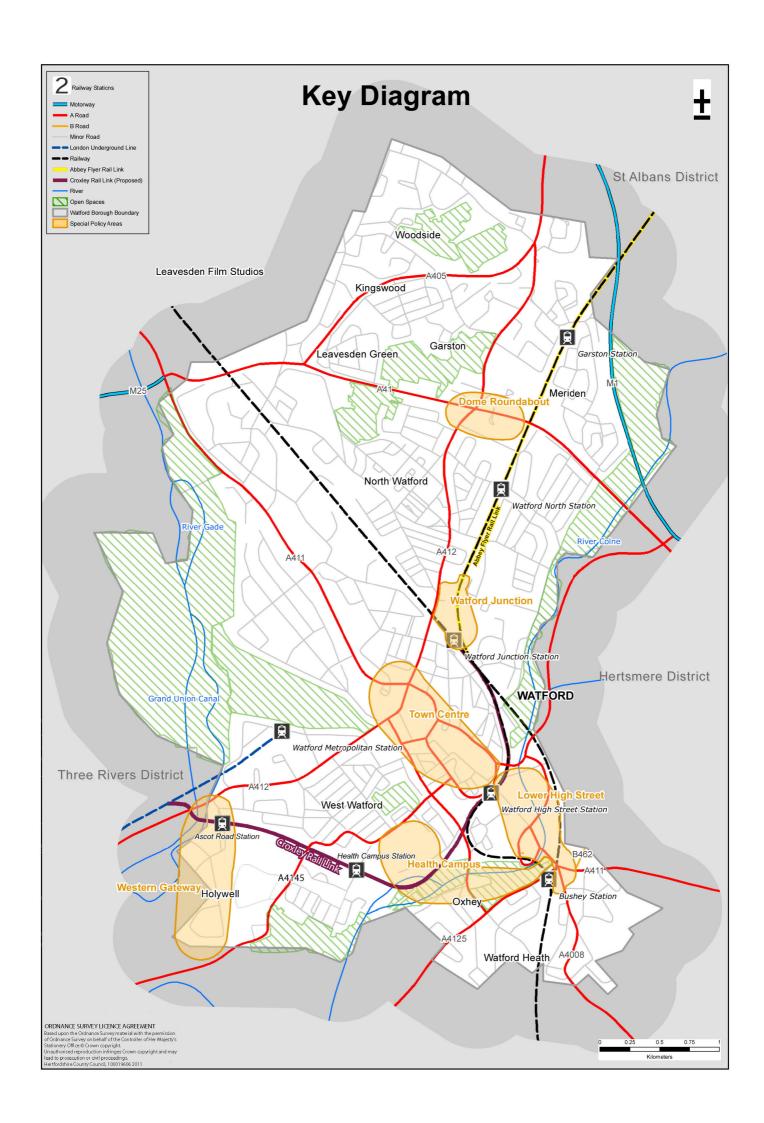
of development activity the site can sustainably deliver.

Development of theses sites will provide local authorities additional opportunity to seek third party funding for investment into the project, through established Section106 processes or through emerging contribution mechanisms such as Community Infrastructure Levy.

More details about the area are given in the Economic Impacts report which is submitted as part of the bid application.

The following schematic plan shows how the Croxley Rail Link, running from Watford Junction, neatly connects the proposed development sites at Watford Junction, Watford Health Campus and Watford Business Park & Ascot Road and then onto all stations to Baker Street.





SECTION 2: REVISED SCHEME PROPOSAL

This section should describe the changes you are proposing to make for the purposes of your Best and Final Funding Bid.

2.1 Are you proposing any changes of scope from the scheme as described in Section 1? If yes, please describe in detail the changes you are proposing. Please also attach explanatory maps, diagrams etc. as appropriate.

The scope has been regularly reviewed to ensure the proposals best meet the objectives while optimising value for money and affordability of the scheme (see section 1.3). The nature of the scheme means that it is not possible to substantially reduce the scope of the scheme whilst still delivering the scheme's benefits. On that basis, the MSBC 2009 scheme remains the core proposal.

A number of changes in scope have been considered, but have been ruled out as indicated in section 2.2.

However, substantial initiatives to reduce costs through value engineering have been undertaken and are set out in sections 2.3 and 2.4.

2.2 What, if any, additional changes of scope have you ruled out for the purposes of your Best and Final Funding Bid? Please give reasons.

As part of the scheme development process we have considered making significant changes to the scope of the project in order to optimise value for money. This includes examining the viaduct, stations, and level of service provision provided on the link. These considerations are explained below.

Viaduct

One of the largest single cost items in delivering the scheme is the viaduct linking the disused Croxley alignment to the Metropolitan line. Consideration has been given to the provision of a single track viaduct instead of the proposed double track structure.

The introduction of such a long section of single line working would significantly affect capacity and service flexibility including the ability for service recovery after perturbations such as breakdowns etc. This constraint could lead to unreliable services and reduced benefits and revenue. This would put the net revenue surplus required to fund the capital borrowing at risk.

Analysis concluded that the cost saving of a single track viaduct compared to the proposed double track viaduct would be minimal given the proportion of the cost necessary for ground work and supporting structure. It is estimated that any overall savings in construction of a single track viaduct will be counter balanced by the increased costs of signalling.

The dual viaduct provides the opportunity for service enhancement and additional services in the future.

On these bases, scope reduction to a single track viaduct has not been pursued.

Shortening the length of Viaduct



Providing an embankment in place of sections of the viaduct was considered.

Whilst this would provide a modest saving in the design & engineering costs of the project it would have significant detrimental impacts on the objectives of the scheme, including creating a major visual and physical severance impact on the local area. In particular, it would increase the risk and severity of flooding on the River Gade to unacceptable levels. The option has not been pursued.

Stations

A possible scope change that could secure a material cost reduction would be to reduce the number of stations constructed. However, doing so would reduce accessibility to the new link and would result in a significant reduction in the benefits of the scheme. The two stations proposed specifically serve separate catchment areas with Ascot Road serving the Watford and Croxley Business Parks and being a park and ride site for the scheme whilst Watford General Hospital serves the hospital and the proposed development area. Ascot Road station is within the catchment area for the current Watford (Met) station, which closes to passenger services as part of this scheme.

Both stations support development schemes in their local area. These sites include the western end of Whippendell Road, and significant residential developments.

In addition, there are several large development projects within Watford progressing through the planning process and located near to the proposed stations including:

- The Watford Health Campus;
- The Charter Place Redevelopment Scheme, and
- The Civic Centre Education / leisure campus.

The removal of either station from the scope of the project would therefore have a significant negative impact on the strategic, economic and financial case for the scheme. Both stations have been retained as part of project scope.

A reduction in the level of facilities provided at Ascot Road and Watford Hospital stations was also considered. This included reviewing staff levels and ticket gates, and developing facilities similar to those found at DLR stations. Whilst this process has enabled the scope of the stations to be reduced, it was not feasible to totally eliminate these elements without compromising operational and revenue protection arrangements.

Service Provision

The frequency of services provided has a direct impact on the infrastructure requirement, the number of additional rolling stock sets required to deliver the service and the associated benefits realised. Service options have been reviewed to identify feasible changes in service frequency that could optimise rolling stock and infrastructure requirements. This work confirms that the service level proposed in the 2009 MSBC submission (diverting all current services at Watford (Met) to Watford Junction) remains the optimum option.

The analysis confirmed that if no additional unit was procured, then a reduced peak



service to Watford Junction from 6 trains per hour to 4 trains per hour would result. This would not only reduce the benefits of the Rail Link but also the frequency of service for existing users at Croxley and Watford (Met) (some of which are already disadvantaged by travelling to Ascot Road). In addition, two extra trains per hour would need to reverse short of the Watford branch, which would require additional infrastructure. Importantly, this would impact on the quality and nature of the service by changing it from a 'turn up and go' underground type service to a more typical over-ground type time-tabled service.

A reduced service could reduce revenue and benefits whilst not reducing fixed infrastructure costs meaning the option is less attractive than the proposed scheme.

Joint Running Section (commonly known as the DC Line)

Consideration has been given to separating the services on the DC Line between the disused branch line and Watford Junction, by dedicating one track for Metropolitan line services and the other for London Overground services. This proposal removes the need to integrate the different methods of signal control, but introduces an unacceptable level of performance risk. Accommodating the proposed peak Metropolitan line frequency of 6 trains per hour would result in the single line section operating at capacity, severely limiting the ability of London Underground and London Overground to quickly recover their services during periods of disruption. Further, this option limits any potential to enhance the service frequency on the Metropolitan or Overground routes in the future.

2.3 Whether or not you are proposing a change of scope, please identify any savings that have been made to the total cost of the scheme, for example through value engineering.

Please provide details with a summary and explanation of the further savings beyond those already identified at 2.1 above or, if no scope changes are proposed, with reference to the cost breakdown provided in the latest cost estimate at 1.4 above.

Robust Cost Estimate Through Design Development

The ongoing development of the scheme has provided a more detailed understanding of the design, advancing the project from:

- RIBA stage B to RIBA stage C for the design of the London Underground stations at Ascot Road & Watford Hospital, the upgrading of the existing alignment and the new Viaduct.
- GRIP stage 2 to GRIP stage 3 for the design of the stations at Watford High Street & Watford Junction.

As a result of the scheme development, the level of design detail has improved significantly, increasing confidence in the scheme costs and reducing the level of design risk. This has resulted in some elements of the scheme increasing in value, but at the same time reducing the level of risk allowance. Other elements of the scheme have reduced in value.

Value Engineering

At key milestones, value engineering workshops have been, and will continue to be, held with the scheme partners to ensure that value for money and challenges to the design have been optimised wherever possible.



The following cost saving measures have been identified:

Ascot Road Station

- Recycling the station ticket gates from Watford (Met) station;
- · Reducing the quality of station finishes; and
- Reducing the length of platform canopies.

Watford Hospital Station

- A reduction in the size of the buildings;
- Reducing the quality station finishes;
- Reducing CCTV provision; and
- Increasing the use of pre-fabricated materials in station construction.

Watford High Street

- Omitting the platform extensions;
- · Omitting concrete paviours; and
- Omitting services to platform extensions.

Watford Junction

- Omitting extensions to platforms 1& 2;
- Omitting the provision of new staff accommodation;
- Omitting additional platform benches;
- Omitting additional platform totems; and
- Reduction in the level of signage
- Utilise existing stabling.

In response to DfT's question regarding the possibility of not extending the platforms at Watford High Street and Watford Junction Stations, our initial response was to confirm that it would be contrary to Network Rail's standards to have trains overhanging the platforms and, that for operational reasons the platforms would need to be extended at Watford Junction station.

The standards have been challenged and Network Rail have agreed to take a risk based approach. A key change to the stabling proposals at Watford Junction removes an operational constraint previously identified which enables us to adopt the working assumption on platform extensions set out above.

Providing a single island platform instead of two separate directional platforms at each station has been considered. This would reduce the design and construction costs of the stations. However the option would require altering the alignment of the Rail Link at Ascot Road and Watford Hospital. This would increase land take requirements and significantly increase overall costs due to consequential bridge works required. This option has not been pursued.

Operational Savings

Opportunities have been identified to further reduce the operating costs. Specifically revised staffing levels have resulted in significant operating cost



savings, although these have been partially offset by increased energy and maintenance costs, which represent a more robust estimate of the likely cost impact. These changes result in the overall incremental operating costs of the project reducing from £2.1m to £1.6m per year. The table below provides a breakdown of the 2009 MSBC and 2011 BAFB cost estimates showing the changes in each cost item.

MSBC & BAFB ANNUAL OPERATING COST ESTIMATES (£)

	2009 MSBC	2011 BAFB	Change since MSBC Submission
Station Staffing	535,620	173,269	-362,351
Station Maintenance	51,685	51,685	0
Energy	16,800	16,800	0
Station Communications	0	0	0
Gateline	43,990	39,628	-4,362
Power/maintenance	460,187	898,576	438,388
Train Operators (drivers)	439,256	109,814	-329,442
Access charges for track	91,670	64,181	-27,488
Access charges for station	459,882	325,621	-134,260
Uniforms	3,325	1,400	-1,925
Total	2,102,415	1,680,975	-421,441



2.4 Please provide separate details of any further changes you are proposing to the scheme from that submitted in January 2011.

Capital Costs

The value engineering exercise held in June 2011, identified a number of opportunities to further reduce the scheme costs. Some of these measures have been incorporated into the scheme and others are subject to further design development and will be explored during the next design stage. These proposals include:

Recycling existing materials

- The condition and suitability of the existing track on the DC section has been reviewed and the scheme maximises the reuse of the track (where feasible). This has been included in the current design.
- Gate lines and other valuable infrastructure at Watford (Met) station will be set aside for re-use at one of the proposed new stations, significantly reducing the overall costs of the new stations. This has been included in the current design.
- Developing the track alignment to minimise the level of imported materials and reusing any excess materials for constructing the new embankments.
 Ballast will be cleaned and recycled, for example. This has been included in the current design.

Bridge Designs

Reducing the scope of the bridge modifications by omitting one of the
maintenance walkways. In most instances this proposal offers little or no
cost savings due to the scope of works required. However, it may be feasible
to remove one of the walkways (subject to risk assessments) at some bridge
locations. This has been identified as an opportunity to explore further.

Prefabricated Solutions

 Further cost savings may be realised by constructing the stations and substation with prefabricated or modular type buildings. Such solutions would need to be compatible with existing maintenance regimes and have been identified as an opportunity to explore further.

Trackside Drainage

 A positive drainage solution has been developed to comply with the Environment Agency requirements. However, given the type of rolling stock, there is the potential to allow any surface water to naturally drain into the subsoil, reducing both the build and maintenance costs. This proposal has been presented to the Environment Agency, who are receptive to the proposal, subject to specific conditions being adhered too. This option has



been identified as an opportunity to explore further.

2.5 What is your latest assessment of the cost, feasibility and value for money of any alternatives to the proposed scheme?

This should include any previous options subsequently discarded and / or those proposed by third parties. Please explain why this / these options have not been progressed. Please detail any elements that have been included in your proposed scheme. Please make reference to any material differences with the preferred scheme in costs or benefits such as carbon impacts

During the development of the Croxley Rail Link scheme a wide variety of alternative options for improving transport opportunities in Watford, and the Rail Link corridor specifically, have been considered. These have been reviewed and assessed in the Alternatives Review report that accompanies this BAFB submission. The alternative options can be split into three broad categories:

- Diversion of the Metropolitan line to Watford town centre using and alternative alignment;
- Options using the former rail link for a non rail solution; and
- Alternative service patterns making use of the Croxley Rail Link as proposed.

A qualitative assessment of options for alternative alignments has concluded that no other options offer a viable business case for investment. This is because alternative options:

- Are more costly as they do not optimise the existing redundant and operational railway infrastructure.
- Do not serve the development areas in South West Watford.
- Are more costly to operate alternative modes than extending an existing railway operation i.e. marginal additional rolling stock requirement, existing signal control.
- Need to interchange to connect to NW London and the Tube network.

The Low Cost Alternative considered in the 2009 MSBC submission involved converting the former rail link into a segregated busway. The capital cost of this option is cheaper than the proposed Rail Link. However the service offered is less attractive with slower journey times and no direct connectivity to and from London and the Metropolitan line corridor. As a result the economic case for this option is weaker than the proposed Rail Link. Further analysis as part of the 2009 MSBC submission suggests that the revenue generated by the segregated bus services would not cover the additional operating costs. Given there are already competing bus services operating on a commercial basis it would prove challenging to procure services to use the busway. Nothing has changed since 2009 that would change this assessment and so the Low Cost Alternative has not been pursued further.

Alternative uses for the rail link, including as a cycleway or highway, have also been considered in the Alternatives Review report and ruled out. This is because they do not fulfil the transport and wider regeneration objectives of the promoting authorities.

An option for splitting the Metropolitan line service between the existing Watford (Met) station and the Croxley Rail Link has also been considered and a full economic appraisal has been presented as part of this BAFB submission. The



analysis concludes that splitting the service results is a weaker economic case compared to the central case proposal to divert all services to Watford Junction. The key reasons for this are:

- The new Rail Link serves a significantly more densely populated area plus around half of the existing Watford (Met) users having shorter access times to the new Ascot Road station.
- The new Rail Link improves access to the town centre generating more demand.
- A split service reduces both the service frequency on the new Rail Link and to the existing Watford (Met) station providing a poorer service to all customers.
- · Operating cost are higher.

Options to operate further services on the Croxley Rail Link, including direct services between Aylesbury, Rickmansworth and Watford Junction have been proposed in the past. While these services may be economically viable, delivery of such services is more technically and commercially challenging at this stage. The present configuration of the scheme would not prevent these services being promoted at a future date.



SECTION 3: IMPACT OF CHANGES PROPOSED AND DELIVERY OF THE SCHEME

This section should describe the impact of the changes you are proposing in Section 2 above compared to the previously configured scheme as described in Section 1

3.1 What impact, if any, would the proposed changes have upon achievement of your primary objectives? This should refer to the scheme as identified in section 2.1

Whilst the review of the project has delivered substantial savings it has not substantially changed the scope of the scheme as indicated in Section 2.1. By retaining that scope, the scheme continues to deliver the maximum possible benefits and makes the same contribution to meeting the identified scheme objectives.

3.2 Please provide a short description of your assessment of the value for money of the revised scheme including your estimate of the Benefit Cost

Ratio. This should cover both monetised and non-monetised costs and benefits and should briefly explain the reasons for significant changes since your most recent Business Case submitted to the Department. The full assessment, as set out in the Value For Money guidance should be provided as an Appendix. Valuation of any dependent development should be reported here, separately from the central value for money evidence and supporting evidence, and a full description of the approach taken should be included in the Appendix.

The Analysis of Monetised Costs and Benefits (AMCB) table for the Croxley Rail Link scheme is shown below. This provides a breakdown of the economic benefits and costs generated by the scheme. The present value of benefits at £169m exceeds the present value of costs of £65m resulting in net present value of £105m and a **benefit to cost ratio of 2.6:1** representing high value for money against the DfT's value for money criteria.

ANALYSIS OF MONETISED COSTS & BENEFITS

2002 prices and values £000's	MSBC Value	BAFB Value	Change	
Non-User Benefits				
Noise	0	18	18	
Local Air Quality	0	73	73	
Greenhouse Gases	0	55	55	
Journey Ambience	0	0	0	
Accidents	0	275	275	
Infrastructure	0	18	18	
Congestion	0	2,405	2,405	
Economic Efficiency				
Consumer Users (Commuting)	260,653	41,212	175.070	
Consumer Users (Other)	200,033	43,463	-175,978	
Business Users and Providers	39,615	67,908	28,293	
Wider Public Finances (Indirect Taxation Revenues)		-4,863	-4,863	
Option & Non Use Values	18,300	18,686	386	
Present Value of Benefits (PVB)	318,568	169,252	-149,316	



Wider Public Finances (Indirect Taxation Revenues)	-3,621		3,621
Present Value of Costs (PVC)	124,962	64,737	-60,225
Net Present Value (NPV)	193,606	104,515	-89,091
Benefit to Cost Ratio (BCR)	2.55	2.61	0.06

The table identifies where the key changes have occurred since the MSBC submission. Non user benefits were not valued for the MSBC submission but are included as part of the BAFB bid. The consumer and business user benefits have changed as a result of changes in the journeys and journey purposes in the input data to the updated model. This updated data provides a more recent and robust model of the likely benefits of the scheme. The reduction in scheme benefits has been offset by a reduction in the scheme capital and operating costs. The scheme has been designed to a greater level of detail and value engineering undertaken to ensure a robust cost estimate. Operating costs have also been reviewed and where possible reduced, notably through revision to staffing provision at the proposed new stations.

In addition to these core benefits it is estimated that the project will generate wider economic impacts in terms of agglomeration, labour supply and imperfect completion. These benefits are summarised as follows and add a further £45.4m to the scheme benefits, which if included in the AMCB table would lift the benefit to cost ratio to 3.3:1.

- Agglomeration impacts £37.8;
- Labour supply benefits £0.7m; and
- Imperfect competition impacts £6.8m.

The scheme also scores strongly against the government's wider transport objectives as recorded in the full appraisal summary table included in the appraisal report. In particular the scheme makes a strong contribution towards:

- Regeneration Through improved access to and from Watford Town Centre and Watford Business Parks (adjacent to the proposed Ascot Road station) the Rail Link will support on-going and new business in Watford. The proposed station at Watford Hospital will provide access to the proposed Watford Health Campus:
- Reliability as a segregated transport corridor the Rail Link can provide congestion free journeys between Watford Town Centre and the Metropolitan line corridor offering improved journey reliability compared to bus and car journeys in peak times.
- Accessibility Although the closure of Watford (Met) station will result in some having poorer access to the Metropolitan line on balance the Croxley Rail Link will improve accessibility to London and the Metropolitan line corridor, Central Watford, Watford Hospital and the business parks adjacent to Ascot Road station.

Further information regarding abstraction of demand from existing rail services was provided in a response to the DfT query (e) following the inception meeting for Croxley Rail Link.

3.3 What impact, if any, would the proposed changes have on the statutory orders or permissions required or the timetable for obtaining these?



For example would fresh planning consent need to be sought?

None of the changes proposed, through the value engineering exercises will affect the statutory processes and hence the timescales for delivering the project remain unchanged. However, it is recognised that some of the design changes will require design concessions. These concessions will be progressed in line with the Project Assurance regime, currently in place for the project.

3.4 What are the procurement arrangements for the revised scheme and what, if any, changes have been made from the arrangements or timetable proposed for the original scheme? For example would any retendering be required? Have you supplied details of your procurement strategy and arrangements to the Department?-

A Procurement Strategy Summary Note has been forwarded to the Department for Transport, in July 2011, in advance of the Procurement Strategy itself, which accompanies the BAFB application. The Procurement Strategy Summary Note summarised the various work elements and the proposed strategy for each element. The Strategy itself considers the Infrastructure Procurement Options by discipline, and includes details on the pre-contract works. It summarises the proposed procurement strategies according to the sections of the works, which are: Section 1 – Metropolitan line; Section 2 – Viaduct; Section 3 – Disused Line; Section 4 – DC Line.

In the MSBC, the previous arrangements envisaged that the civil engineering elements of the scheme would be procured by Hertfordshire County Council through an Early Contractor Involvement Design and Build contract. The specialist railway related elements of the scheme were to be largely procured by London Underground Limited using their existing contractors.

The Procurement Strategy has been reviewed with the scheme partners to establish the most cost effective solution for procuring the works. This includes a review of the Assurance regime and setting up an Assurance team to reduce the number of industry interfaces. The arrangements now will be that a single contract will be procured through Hertfordshire County Council, apart from signalling, communications, rolling stock and ticketing equipment, which would use existing London Underground Limited frameworks.

No firm decision has yet been made on the standard form of contract that will be used, but it will be set on a contractor 'design and build' basis with a pain-gain target cost feature.

3.5 Please describe the internal / external expertise & skills that will be assigned to the project to allow for its effective delivery. This should detail who / what roles will have overall responsibility for the project and what other skills will be available.

The Project Governance structure in question 3.6 sets out the hierarchy for delivering the project from the level of Project Manager to the various work streams.

The County Council, as lead promoter, has an established track record as a successful client organisation for the development, procurement and delivery of major infrastructure projects. The Senior Responsible Owner and the Project Sponsor for the Croxley Rail Link, with support from Consultant Mouchel, led the



successful delivery of the Baldock Bypass project within programme and within the capped grant allowance. They also have very current experience in working closely with the rail industry through delivering the Royston Rail subway crossing (due for opening in spring 2012) and with the St Albans Abbey Line pilot.

Hertfordshire County Council is working in partnership with London Underground and Network Rail and a collaborative team approach, driven by the project governance structure set out below, ensures that the overall objectives of the scheme are achieved matched to the aspirations of each of these three key stakeholders.

Hertfordshire County Council has in place a series of technical and professional support contracts to ensure that the best and most appropriate expertise is focussed on each key area.

Mouchel Consulting are providing design expertise across rail, structures, highways and urban realm areas, as well as technical expertise in the environmental assessment land referencing and public consultation and stakeholder management areas.

Architectural input is being supplied by **Acanthus LW**, who have extensive experience in station design for London Underground.

Hertfordshire County Council has engaged **Winckworth Sherwood** as parliamentary agents to support and advise upon the TWA order application process and associated legal matters. Hertfordshire County Council also has its own in-house legal services department for more general matters.

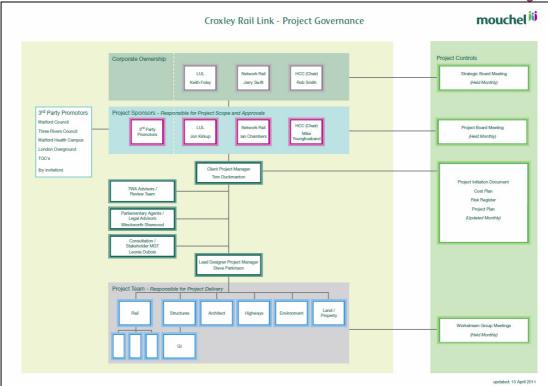
Steer Davies Gleave has a longstanding relationship with Hertfordshire County Council and the project, and continue to supply economic and business case support as well as Transport Planning expertise.

As the project progresses through the stages as set out in section 3.7 below, Hertfordshire County Council will use its well established client expertise to procure additional specialist input as required and to undertake an effective procurement process for contractor engagement.

3.6 Please supply a note setting out the governance arrangements for the scheme. This should also link roles and responsibilities with accountability and arrangements for Reviews as appropriate.

The governance arrangements have been set out in the Governance Strategy, which was forwarded to the Department in July 2011. A summary is provided below, including the Project Governance diagram showing the governance levels and key team members.





The three parties having corporate ownership are:

- Hertfordshire County Council Rob Smith
- London Underground Limited Keith Foley
- Network Rail Jerry Swift

Their key responsibility is to oversee the delivery of the project and to make strategic decisions and they form the Strategic Board, the chair being Rob Smith. The Project Sponsors look after the day-to-day progress of the project, and they comprise Hertfordshire County Council, London Underground Limited and Network Rail, as well as Watford Borough Council and Three Rivers District Council.

They meet monthly at Project Board meetings which are chaired by Mike Younghusband of Hertfordshire County Council. The Project Manager, Tom Duckmanton, reports to these meetings, and he manages the Project Team, which comprises work streams which provide the expertise and skills required for the project.

The project governance arrangements are reinforced by a suite of agreements between the scheme partners (refer to the Powers & Consents Note and the Heads of Terms that accompany this application). These formal agreements set out how the parties will work together and define their obligations in order to secure the promotion of the Transport & Works Act Order. In addition they identify any further agreements required to regulate the design, procurement, construction and delivery of the works. To date the following agreements have been agreed with the partners:

- London Underground Framework Heads of Terms including the Financial Arrangements.
- London Underground Draft Promotion Agreement (approved by the Rail & Underground Board)
- Network Rail Framework Heads of Terms



CROXLEY RAIL LINK: Best and Final Funding Bid Network Rail Property Heads of Terms



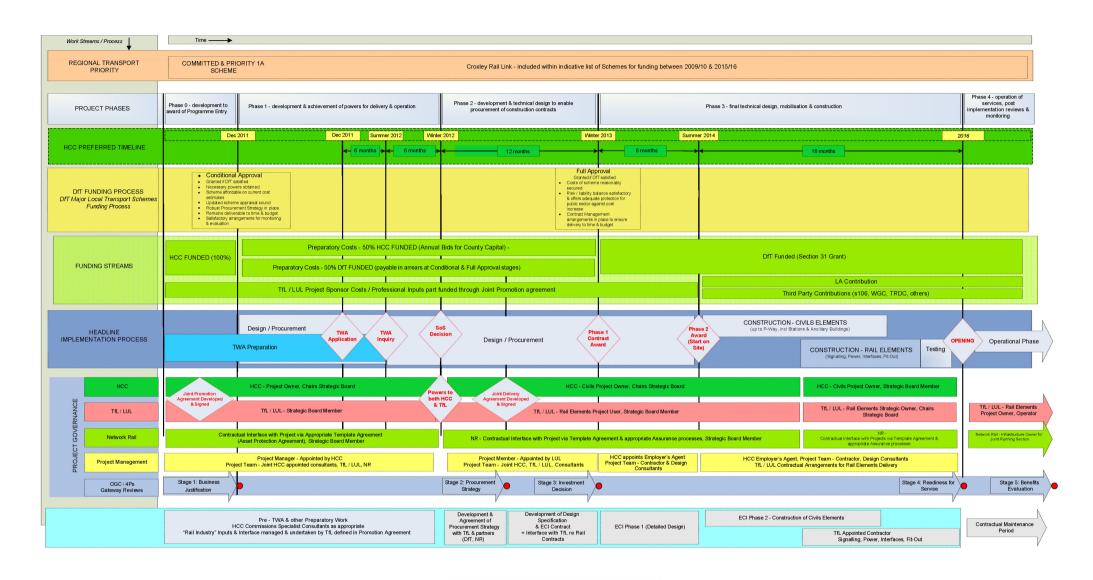
3.7 What is the estimated start and completion date of the scheme as now proposed, taking into account any of the impacts described above? For the purposes of this question assume that decisions on BAFB will be made in December 2011

For the purposes of this question assume that decisions on BAFB will be made in December 2011 and that no DfT funding will be available before 2012/13. Please complete the list of milestones below adding any additional ones where appropriate and setting out separate start and completion dates where there are separate elements in the schemes. Please enter "n/a" if not applicable rather than deleting lines.

The Process Map following the table below sets out the proposed process in detail.

Milestone	Expected Completion Date
Approval of BAFB from DfT	Dec 2011
Statutory Orders published	Dec 2011
Public Inquiry Starts	Summer 2012
Confirmation of Orders	Winter 2012
Complete Procurement	Winter 2013
(include separate elements if appropriate)	
Submit Full Approval application to DfT	Winter 2013
Work Starts on Site	Summer 2014
Any significant intermediate milestones	
(please specify)	
Work Completed	Autumn 2015
Opening / commencement of operations	2016
(including phases of opening as appropriate)	





CROXLEY RAIL LINK -IMPLEMENTATION WORK STREAMS & PROCESS MAP

3.8 What are the key risks to the delivery to this timetable, aside from the availability or otherwise of DfT funding?

Please list the biggest risks (ideally no more than three) that have a potentially significant impact on the timing of the scheme. For each risk please describe its likelihood, quantify the potential time delay, and explain how you are mitigating the risk including how risks are transferred as part of your procurement strategy?

The principal risk to the overall programme delivery is obtaining the Transport and Works Act Order (TWAO) powers within the timeframes outlined in the project plan (ref to section 3.7). A number of events could lead to a delay in the TWAO process and these have been recognised in the project risk register. The two biggest risks are:

1) Formal public objections to the scheme

The above risk had a likelihood classification of 'possible' and an impact classification of 'high', giving an overall risk rating of 'severe'. The potential time delay could be significant with programme delays of up to six months. A number of controls have been implemented by the scheme promoters to mitigate this risk including:

- A review of all the alternative options (refer to Alternative Review Report submitted as part of this application) to ensure the planning case supporting the preferred scheme in fully developed. In addition to the above a detailed assessment of the proposed closure has been conducted to provide key evidence to support the decision to close Watford (Met). The assessment included a survey of the existing users, an impact assessment on the local users and option appraisal to explore the feasibility of splitting the service.
- Significant pre-TWAO application consultation has been undertaken including public exhibitions which have recently been held (refer to section 5.0) to provide the opportunity for stakeholders and the public to discuss issues with the project team, fully understand the proposals and provide feedback. The feedback from these sessions is currently being collated and will be considered as part of the ongoing scheme development. Further stakeholder and public information sessions are planned prior to the TWAO application. These sessions will enable the promoter to provide further information regarding the scheme, including feedback to the consultation exercise.
- As part of the consultation process the project team will be actively
 managing potential objections from residents, business and other groups.
 The objective of this work is to engage with potential objectors to seek to
 allay their concerns or reach suitable agreements thus reducing the
 number of any objections at any future Public Inquiry. The removal of
 potential objections reduces enquiry time, saves money and removes
 potential obstacles to the project. Pre-application negotiations also allow
 the project to understand and prepare in advance to rebut any objections
 that could not be removed at Inquiry.



- Agreements have been developed with London Underground & Network Rail, setting out the working relationship between the scheme promoters. The agreements include arrangements for dealing with potential objections to ensure resolutions (where feasible) can be reached in an agreed timeframe.
- 2) Protracted timescales setting the Public Inquiry or achieving Secretary of State Decision (Risk Reference: PJT0005)

The above risk has a likelihood classification of 'possible' and an impact classification of 'high', giving an overall risk rating of severe. The potential time delay could be significant with programme delays of up to six months. A number of controls have been identified including:

- Timely appointment of Parliamentary Agents, who are an integral part
 of the project team and attend monthly working group meetings,
 providing advice and direction as required and thus ensuring that the
 application is robust.
- Early engagement with the TWA Unit to discuss the scheme proposals. This will be followed by a draft submission of the Order to the TWA Unit prior to the application.
- 3.9 Please indicate the level of allowance you have made within your own budgets to cover the cost of scheme evaluation including your initial estimates of the costs of:
 - a) full scheme impact evaluation
 - b) pre and post scheme opening monitoring reports

Please note that funding for scheme evaluation and monitoring will <u>not</u> be available from DfT.

Hertfordshire County Council's strategy will be to make best use of established monitoring regimes and tools rather than to create costly duplication.

Hertfordshire County Council and London Underground Limited will be undertaking substantial monitoring of journeys and patronage in order to identify the net revenue surplus that will pass to Hertfordshire County Council. This monitoring, which will be funded out of the revenue itself will also provide the necessary data for scheme evaluation. In addition to this, as part of its' Local Transport Plan monitoring, Hertfordshire County Council maintains a series of transport cordons in South West Hertfordshire. These are monitored for volume and modal split and are supplemented by a countywide travel survey undertaken on a three yearly basis. This established regime will provide the transport context to the monitoring and evaluation.

The Monitoring and Evaluation Strategy proposed for the scheme is set out in a note forming part of this submission. The note states that, in line with the guidelines issued by the DfT in August 2011, a detailed evaluation plan for the scheme will be submitted with the application for full approval, following on from a successful application for funding. The budget for undertaking monitoring and evaluation is allowed within the scheme cost estimate at £145,000. Hertfordshire County



Council can confirm that this budget will be locally funded and is not being sought from DfT through the BAFB process.

Watford Borough Council monitors the economic health of its area on a regular basis and it will contribute to assessing the economic contribution of the Croxley Rail Link.



SECTION 4: FUNDING FOR REVISED SCHEME PROPOSAL

This section is to detail the cost, revenues and funding requirements for your revised proposal as described in Section 2 above. Please quote all amounts in $\mathfrak{L}m$ to three decimal points (i.e. to the nearest $\mathfrak{L}1000$)

4.1 What is your estimate of the total outturn cost of the revised scheme? After taking into account all the proposed changes described in Section 2 above. Do not include any pre-Programme Entry costs. Please provide a breakdown of the total cost, split between different elements of the scheme and separately identify preliminaries, project management, risk and inflation. Please also provide your full cost breakdown as an annex

The estimated costs of the project at current, 2011 prices are shown in the table below.

The current costs for the project are:

- A spot cost of £99.27m at 2011 prices
- Quantified risk of £5.1m at 2011 prices

This gives a cost of £104.37m at today's prices as shown in the Table below.

Cost Item	Outturn Cost (£)
Construction	65,895,000
Preliminaries	10,320,000
Profit & Overheads	2,964,750
Design	3,300,000
Project Management inc. legal costs	2,150,000
Assurance & Third Party Fees	660,000
Possessions	550,000
Rolling Stock	9,000,000
Risk	5,100,000
Land & Geotechnical Monitoring	4,440,000
Total at 2011 Prices	104,379,750

Given the proposed construction period is **2014 – 2016** an allowance for inflation has to be made.

Whilst a general rate of 2.5% inflation rate per annum has been mooted by DfT, local authorities will be taking the risk on inflation and must make their own projections.

The industry predictions for rail based schemes, as outlined in Section 4.2 below are in excess of 2.5%.

- At 2.5% inflation p.a. the inflation costs are calculated at £7.240m giving a projected out turn of £111.35m
- Based on industry predictions of inflation relevant for the various different types of works the calculated inflation is £12.960m giving a projected outturn of £116.8m

Hertfordshire County Council is assuming the industry inflation predictions and



adopting the £116.8m out turn cost.

4.2 Please state what inflation assumptions you are using.

Inflation rates for different categories (e.g. general inflation, construction cost, operating cost) should be separately identified.

We have used the latest treasury forecasts to estimate the medium term RPI rate until 2016, after which we have assumed general inflation will be 2.5% per year. We have also used F&A Rail tender indices to estimate the medium term inflation figures for different elements of project construction. The table shows that, in 2012, capital costs inflation is less than the anticipated rate of general inflation (RPI) suggesting a real cost deflation in capital costs. All capital prices are assumed to converge back to RPI in 2017 and onwards.

For fares growth we have assumed RPI +3% for the first three years and RPI+1% thereafter. Operating costs including wages and other items are assumed to grow at RPI. Our inflation assumptions are shown in the table below.

TABLE 1 INFLATION ASSUMPTIONS

	2011	2012	2013	2014	2015	2016	2017 - Onwards
RPI Index ^{1&2}		243	251	259	267	274	-
RPI % Change ^{1&2}		3.4%	3.1%	3.3%	3.2%	2.5%	2.5%
Station & Civils ³		2.0%	4.3%	4.9%	5.0%	4.9%	2.5%
Permanent Way ³		1.9%	4.5%	5.5%	5.6%	5.7%	2.5%
Electrification ₃		2.2%	4.4%	5.5%	5.6%	5.6%	2.5%
Signalling ³		2.5%	4.5%	5.5%	5.5%	5.5%	2.5%
Telecomms ³		2.6%	4.6%	5.5%	5.5%	5.5%	2.5%
Rail Tender Index ³		2.4%	4.3%	5.2%	5.2%	5.0%	2.5%
Fares⁴		6.4%	6.1%	4.3%	4.2%	3.5%	3.5%

^{1.} ONS RP02 Table

July 2011

2011



². HM Treasury Forecasts for the UK economy: a comparison of independent forecasts

³ F&A Rail tender indices July

^{4.} Assumption

4.3 Please provide a breakdown of the proposed funding sources for the scheme

(a) Local Authority contribution

£33.700m

This needs to cover the difference between the total cost of the scheme as stated above and the total of the requested DfT and agreed third party contributions. It should include the LA costs incurred or expected to be incurred after Programme Entry excluding ineligible preparatory costs as defined by previous guidance. Where a local authority is promoting more that one scheme, please detail the level of contribution required if **all** schemes are successful as part of this funding process. Please do not include the cost of any Part 1 Claims.

The following Table sets out the three sources of capital funding totalling £33.7m, which is £28.9% of the total out turn costs

Funding Source	Funding (£m Outturn)
General Capital Programme	£6.770
Hertfordshire County Council Capital	
Raised Through Net Surplus	
Revenue	£26.000
Ascot Road Land	£0.930
Total Third Party Funding	£33.700

(b) Agreed third party contributions

£6.864m

Please name each contributor on a separate line and provide evidence of agreement (e.g. a letter from the funder outlining the degree of commitment, timing for release of funds and any other conditions etc). Note: you will be required to underwrite all third party contributions should these not materialise.

The following table sets out the third party funding currently available. This shows that a total of £6.864 million of third party funding is being secured, representing 5.9% of total out turn costs.

	Funding Available (£m
Funding Source	Outturn)
Watford Section 106 Funding	£1.159
Three Rivers Section 106 Funding	£0.165
Hertsmere Section 106 Funding	£0.060
Watford Borough Council	
Contribution	£2.000
Watford Borough Council held S106	£0.580
Watford Health Campus	£0.450
Section 106 Funding to be Collected	£0.300
Local Enterprise Partnership	£0.350
Network Rail Land Contribution	£1.800
Total Third Party Funding	£6.864

There is a portfolio of Section 106 agreements either in place, or in the



pipeline, but for which the development has yet to take place (including Watford Health Campus). A view has been taken on the proportion that will be in place by the time of the construction of the project. There is a risk that not all developments will progress, which is why only a proportion has been assumed. The risk is likely to reduce with the positive news of the Croxley Rail Link progressing.

Watford Borough Council have committed a capital contribution of £2 million towards scheme based on wider assessment of uplifted value to council owned assets and sites along the length of the proposed route.

The Network Rail Land transfer will be covered by a signed property agreement.

(c) DfT funding requested

You are reminded that, as set out In the document "Investment in Local Major Transport Schemes" the risk layer cost sharing mechanism is being discontinued and the figure you enter here will, if accepted, be the maximum funding that DfT will provide for the scheme. If you wish eligible preparatory costs (as defined by previous guidance) to be paid these will need to be consolidated within this funding request.

£76.236m



4.4 What is the estimated funding profile.

Assume that no DfT funding will be available before 2012/13. Please specify the third party contributor(s) and list each one (if more than one) on a separate line. Please assume that the DfT and LA contributions will be in the same proportion in each year from 2012/13 and provide an explanation if this is not the case. Although the total level of DfT funding will be fixed, profiles across years may be subject to further discussion and agreement. Please do not include the cost of any Part 1 Claims.

£m	2012/13	2013/14	2014/15	2015/16	2016/17	Total	%
LA contribution	0.650	2.230	1.300	29.52	0	33.700	28.9
Third Party contribution		4.727	1.383	0.554	0.200	6.864	5.9
DfT funding requested	0.650	14.00	36.99	24.596	0	76.236	65.2
TOTAL	1.300	20.957	39.673	54.67	0.200	116.800	



4.5 If any DfT funding were available in 2011/12 would you be in a position to reach Full Approval and begin claiming such funding and if so how would your funding profile change?

(If appropriate please set out a funding profile similar to that in section 4.4)

The scheme promoters have continued to invest in the ongoing development of the project, to ensure that the key milestones identified in section 3.7 can realistically be achieved. This ongoing commitment to the project has strengthened stakeholder support for the project and enabled the promoters to deliver the scheme to a faster and more efficient programme.

A number of significant milestones have been achieved during this period, including developing heads of terms, stakeholder engagement, consultation events, land referencing activities and ongoing preparation of the environmental assessment. The next and most significant milestone is the submission of the Transport and Works Act Order (TWAO) application (planned late November 2011). Preparation for the submission is well underway and there is high likelihood this date will be achieved.

The promoters will continue to progress the project inline with the key milestones described in section 3.7, however, the statutory processes described above limits any opportunity to fast track the project further. In addition, the promoters are focused on marrying the delivery of the above scheme with the planned upgrade of the Metropolitan line to avoid any abortive costs.

4.6 Please indicate the level of flexibility with regard to the phasing of the local contribution of the bid (including the third party contribution), should the DfT have a need to vary the phasing of its own contribution for budgetary reasons.

Please detail the level of change in DfT support per funding year you could accommodate within the project and from which sources any change would be made up.

The promoters are adopting an initiative funding package, which includes borrowing secured against the revenue surplus generated by the scheme. This initiative approach has enabled the promoters to maximise the local contribution and in the long term may create opportunities to fund other enhancement schemes.

The promoters would welcome the opportunity to discuss varying the phasing of the local contribution, but given the initiative approach, opportunities to re-profile the local contribution will be limited by the availability funds which are reliant on revenues generated by the scheme.

The promoters would also be prepared to accommodate a minor delay, of say, six months, to the overall programme to enable the DfT to draw down on funds after 2014/15 (when there is an expectation of a major dip nationally in schemes ready for funding) although an allowance would need to be made for inflation.

4.7 Please set out the efforts you have undertaken to obtain (additional) third party funding and, where appropriate, why it is not available.

A number of development sites have been identified along the route of the Croxley Rail Link. As these come forward, the uplift in the value of these sites will mean that the Council will be able to secure additional third party funding either by developer



contributions secured under s.106 of the Town and Country Planning Act, the emerging Community Infrastructure Levy or other related charging regimes. However, it is impossible to quantify the level of these contributions at this time. Nevertheless, Watford Borough Council are confident that policies in the County's Local Transport Plan 3, South West Herts Transport Plan and its own Core Strategy will provide a solid basis for requiring such payments to be made. The Croxley Rail Link is firmly part of the future vision for Watford.

4.8 Please supply details of likely revenue generated, any ongoing revenue liability associated with the operation of the scheme (other than routine maintenance) and how you intend to fund it. If revenues fall short of those forecast (especially in the early years after implementation) how will these be funded? (This is of particular relevance to public transport schemes but could apply to package schemes.)

Analysis has concluded that the additional London Underground revenue generated by the Croxley Rail Link will exceed the incremental operating cost of diverting services to Watford Junction. Details of the revenue generation and operating costs can be found in the Economic Appraisal report. The table below provides a summary of the net operating cost impact, revenue generation and net financial position over the first 10 years of operation.

000's	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27
Costs Reven	£2,369	£2,433	£2,499	£2,566	£2,635	£2,706	£2,779	£2,854	£2,931	£3,011	£3,092
ue Net	£2,592	£3,059	£3,561	£4,099	£4,271	£4,450	£4,637	£4,831	£5,033	£5,244	£5,464
Incom e	£223	£626	£1,062	£1,533	£1,636	£1,744	£1,857	£1,977	£2,102	£2,234	£2,372

Hertfordshire County Council will raise the local contribution by prudential borrowing secured against council tax receipts and repaid over a 25 or 30 year period, to be confirmed following decision on DfT scheme funding. London Underground has agreed to transfer the operating surplus to Hertfordshire County Council to cover repayments for the borrowing. Indicative calculation of the cost of borrowing amounts to a £26m local contribution over a 25 year period at and interest rate of 3% resulting is an annual repayment of £1.4m per year. The revenue surplus will not cover the repayment of the loan in the initial three years of the scheme. However beyond this initial period the revenue surplus would exceed the repayments. Hertfordshire County Council would fund the repayments in the first three years, recovering this from the surplus revenue in later years.

Further information regarding fare levels and fare setting, service frequencies and operating cost/revenue shortfall was supplied in response to the DfT queries (a), (b) and (f), following the inception meeting.

4.9 Please detail any other funding information you think to be of relevance to the bid

(For example other costs or revenue risks etc being taken by the local authority or other parties but not included within the funding table above.)

The County Council has, and is also, funding the costs outside of the scheme business case, viz.



- Scheme development costs to date
- Transport & Works Act Order costs estimated @ £700k
- Part 1 compensation costs estimated @£600k
- Monitoring costs as described in Section 3.9 above

Further information regarding the Croxley to Watford link was supplied in response to the DfT query (d) following the inception meeting.



4.10 Please explain how the Local Authority contribution will be funded.

Explain where local contributions are dependent on a particular source of income and contingency plans if that income is not forthcoming. Please also include any contingency plans for meeting third party costs that fail to materialise.

Section 4.3 (a) above sets out the three sources of Local Authority capital funding totalling £33.7m.

The Ascot Land has been purchased at £0.93m and the £6.77m capital funding is within the County Council's approved, medium term capital programme.

The £26m capital to be raised on the strength of the net surplus revenue has been based on a conservative set of revenue assumptions. However the risk will be on those subsequent revenue receipts rather than the raising of the capital to construct the scheme in the first place.



SECTION 5: STAKEHOLDER MANAGEMENT

5.1 Consultation

Please provide a brief overview of the consultation you have undertaken to date with

- (a) the public,
- (b) statutory environmental bodies and
- (c) other stakeholders;

This should include dates detailing when consultation was carried out Please also summarise any further consultation you plan to undertake.

A project website was launched on 12th July 2010 which provides regular updates and an opportunity for interested parties to contact the project team. The Consultation period commenced on 16th May and ended on 18th August. The analysis to date is based on responses received up to this point. The Consultation undertaken to date comprises:

a)

- 53,000 leaflets were distributed to all households in Watford and Croxley Green between 13th – 20th May 2011 promoting the Croxley Rail Link public consultation and public exhibitions.
- Four public exhibitions were held between 26th May and 1st June 2011 in Watford and Croxley. In total 767 people attended these events.
- An online feedback form was launched on 16th May 2011 and ran until the end of the consultation period on 18th August 2011; hard copies were also available at the exhibitions and on request. In total 743 people responded to the consultation by filling out a feedback form.
- 78% of respondents said that there is a need to improve transport connections to and within Watford. 84% said that the Croxley Rail Link would result in improvements to travel connections, 73% said that the scheme would result in improvements to economic growth.
- Comments received by email, telephone and letter are still being analysed

b)

- A formal screening decision and scoping request was prepared and submitted to the Secretary of State for Transport in May 2011. A formal scoping opinion on 29th June 2011. The organisations consulted during this process were: the Department for Transport (DfT) Hertfordshire County Council; Watford Borough Council; Three Rivers District Council; Natural England; Environment Agency; and British Waterways.
- In addition to this, consultation with statutory and non-statutory bodies and local interest groups was undertaken as part of the environmental assessment in order to gain additional information on the existing environment and baseline conditions surrounding the scheme.

c)

- 156 local stakeholders and other interest groups were identified and invited to take part in the consultation.
- Initial key stakeholder meetings took place November December 2010, communications ongoing.
- 1:2:1 meetings with affected landowners and interested parties have taken



place and will continue until the submission of the TWA.

- Communications strategy developed and recent series of public consultations, including: Member briefings; key stakeholder meetings; 1:2:1 meetings with affected land owners and interested parties; public exhibitions; consultations with statutory consultees
- Project website provides regular updates and opportunity for interested parties to contact the project team
- Initial analysis of feedback forms indicates large majority supportive of scheme
- A further information release is planned prior to the submission of the TWA to provide details of any proposed mitigation

5.2 Letters of support

Please append any letters of support explaining strategic importance of scheme especially from the Local Enterprise Partnership and business groups.

These should detail, where possible, the particular outcomes they believe the scheme will deliver. Where a LEP includes more than one scheme it will be important that they differentiate between schemes, and prioritise if possible.

The Local Enterprise Partnership (LEP) outlined its support for Croxley Rail Link at its meeting on 8th July 2011. The LEP agreed to give its support to Hertfordshire County Council in its bid for Department of Transport funding and support the scheme in the identification of potential funding contributors from the business community. The LEP chair subsequently outlined an offer of £350,000 from its available cash resources towards the direct delivery of the project. The contribution represents a significant commitment from the LEP, accounting for the majority of their uncommitted resources.

The LEP chair expressed the view that Croxley Rail Link will do much to boost Hertfordshire's economic growth by;

- Improving the attractiveness of Hertfordshire to mobile foreign investment by improving connectivity to the city of London
- Mitigating the loss of private sector employment in the county since 2003 by enabling private sector development, reducing vacancy rates in commercial premises in Watford and attracting new employment opportunities for people in Hertfordshire and London
- Unlocking the potential of the £1bn Watford Health Campus development to regenerate the local economy
- Strengthening transport infrastructure in South Hertfordshire, making the area more resilient to disruption on an already congested road and rail network
- Minimising the economic impact on businesses and improving the efficiency of the labour market by improving access to public transport and providing a cost effective and viable alternative to commuting by car

The Greater London Authority, Mayor's office, was delighted to reaffirm its full support for the scheme, emphasising the need to strengthen the role of Outer London town centres in London's economy. The Mayor of London, Boris Johnson, went on to add;



'Improving public transport access for current and potential employees to Watford town centre (and also key development areas of Watford Junction, Watford Business Park and the Watford Health Campus) will clearly help promote local economic and housing development. This project will also provide enhanced links with both North West and Central London, as well as with the National Rail network, thus reinforcing Watford's role as one of the key transport hubs north of London.'

'In short, I believe the Croxley Rail Link scheme will have a tremendously positive impact on Watford, Hertfordshire and London as a whole and I hope it is granted the necessary funding from the Department for Transport.'

Richard Harrington, MP for Watford, wrote in support of the Croxley Rail Link in his letter to Norman Baker MP. In his letter MP Harrington outlined;

'I believe that the project has very strong merit as an infrastructure project alone; the wider benefits in terms of supporting and enhancing other strategic developments and businesses in the area, cement my belief that this would be a sustainable and positive investment for the DfT and for the future of Watford.'

Network Rail, outlined its support in principle to the submission of both the Best and Final Funding Bid for the Croxley Link and outlined that;

'The Croxley Rail Link project provides valuable additional capacity at Watford Junction as well as providing new journey opportunities. It is an important sustainable transport solution for onward journeys from Watford Junction'.

The Watford & West Herts Chamber of Commerce Board and its members see the Croxley Rail Link as vital to the continued prosperity of Watford. One of the reasons for the support of the Chamber of Commerce is outlined as;

'Watford is expected to create 6,500 new homes and 7,000 new jobs by 2031. Housing will relay on good public transport accessibility while employment growth will be supported by the development of strategic employment sites. The Croxley Rail Link will serve five of the six strategic development sites in Watford.'

The Chamber of Commerce Investment Manger outlined that;

'Watford's track record in attracting business.....will be further enhanced with the Rail Link investment and we will have genuine strength in attracting skilled labour.....'

Local authorities have outlined the key benefits they anticipate from the proposals and have illustrated their support for the proposals as follows.

Three Rivers District Council outlined:



'The Council supports the principle of improved and integrated public transport services which provide an alternative to car travel and reduce the carbon footprint of the District. The Croxley Rail Link will provide significantly improved transport choices for people wishing to travel to/from Croxley and Watford Business Parks, West Watford, Watford General Hospital and the proposed Health Campus, Watford Football Ground, Watford High Street and town centre facilities, and Watford Junction station which is served by the West Coast Main Line, London Overground and the Abbey branch line to St Albans.'

St Albans City & District Council outlined;

'Thank you for the opportunity to comment on this consultation. St Albans City & District Council welcomes the Croxley Rail Link scheme because it could potentially provide a number of social, economic and environmental benefits to St Albans City & District and is supported by us as a planning authority. I believe the proposal presents an exciting opportunity to improve connectivity both to and from St Albans, due to the improved connectivity from Watford Junction station, which links to St Albans via the Abbey Line.

Further opportunities include better access from St Albans to Watford General Hospital with residents able to change onto the Metropolitan Line at Watford Junction and onto the proposed new station. The improved connections should also potentially make Watford and St Albans more attractive places to do business. We also think that the project has the potential to slightly reduce road traffic across the sub-region, including into this district (e.g. from the M25 and M1) which will be very welcome if this proves to be the case.'

Watford Health Campus outlined in its letter of support that the Croxley Rail Link was vital to supporting the aims and delivery of the Campus. The Health Campus added;

'As well as a key underpinning to the commercial and residential viability of the Campus site, the new Croxley Rail Link will make a significant difference to the ability to attract and retain staff at Watford General Hospital and hopefully a marked improvement in the quality of life of the resident of west Watford'.

Existing business groups in the Watford and Croxley area have been engaged in the consultation process and have expressed support of the project. As part of the Croxley Rail Link development, a number of interviews were carried out with local businesses and a selection of the feedback is outlined as follows.

Croxley Business Park mentioned the importance of sustainable choices, stating that:

"Croxley Green Business Park has a green theme, with its car sharing scheme, bike scheme (100 free hire bikes) and bus service. It is trying to minimise car use where possible but public transport is so poor. CRL will help achieve this."



Sigma Pharmaceuticals were also among those who talked about congestion as a major concern, along with parking. They stated that:

"a better LUL connection would mean fewer people driving to the industrial estate and therefore parking and road capacity would be available for purposes such as loading and distribution."

Developers Centros, who have land near the proposed Ascot Road station along the route, when discussing the benefits of Croxley Rail Link, said "its impact on this site would be nothing but positive". "If it does go ahead, the northern part of the site will be more attractive, particularly to office (B1) uses, as well as other uses."

A number of user groups have outlined their support for the proposals during the consultation process.

Sustrans, the sustainable transport charity, expressed its support for the project and continues to be engaged as the design develops.

The chair of the Federation of Met Line User expressed support and outlined that their committees have been campaigning for Croxley Rail Link for over 25 years.

5.3 Opposition

Please describe any significant opposition to the proposed scheme, the reasons for this opposition and how you are dealing with their concerns?

Please describe any mitigation measures you have included in your plans in response to these concerns.

Opposition

The main opposition to the scheme is due to concerns regarding the closure of Watford (Met) station to passenger services. In total 135 respondents at the public consultations expressed concerns about this (many of whom do not oppose the scheme). 82 people still thought Croxley Rail Link would improve travel connections

In particular people are concerned about reduced access to Cassiobury Park, as an important local amenity and the impact that the closure will have on property prices and inconvenience in and around the Cassiobridge Metro estate (citing Watford (Met) as a major factor in resident's decisions to buy property on the estate). People are also concerned about the impact on Watford Grammar School for Boys, in particular, that Ascot Road is too far and that the closure will result in increased traffic around the school.

Other concerns include the visual impact of the viaduct (32 respondents) and the impact that the scheme will have on the volume of traffic in and around Watford (32).

Mitigation

London Underground Limited are involved in design development meetings with the objective of mitigating the impacts of the scheme. A safe walking route is being established from Ascot Road and traffic assessments will be undertaken. A full appraisal has been undertaken which concluded that to maintain a service to



Watford (Met) as well as the link would provide a poorer service to all. In addition around half of the existing Watford (Met) users will be able to access service in a shorter time than currently.

The viaduct has been designed to reduce the visual impact as far as possible.

London Underground Limited are involved in design development meetings with the objective of mitigating the impacts of the scheme. A safe walking route is being established from Ascot Road and traffic assessments will be undertaken. The viaduct has been designed to reduce the visual impact as far as possible.

Further information regarding the closure of Watford Met station was given in the response to DfT query (k) following the inception meeting.



SECTION 6: ADDITIONAL INFORMATION

6.1 Please add any additional information that is relevant to your Best and Final Funding Bid that is not covered elsewhere in the form.

Further details relating to the wider economic benefits of the scheme are discussed in detail in the Economic Impacts report, which forms part of this submission.

Some extracts from the report are given in sections 1.2 and 1.5 of this BAFB form. The following is an extract from the Executive Summary of the report.

The continued economic success of Hertfordshire and Watford, and by extension the UK as a whole, will depend on a number of key challenges being addressed. The economic costs imposed by transport constraints, in particular lack of access and congestion, has a significant impact on business growth and productivity within Hertfordshire through lost productive time and reducing effective labour market catchments.

Evidence shows that the scale of these economic 'costs' of transport constraints are greater in Hertfordshire that any other part of the region, with congestion costs to businesses and residents around the urban areas of Watford, St Albans and Hemel Hempstead amounting to over £80m per year, which will more than double to £170m by 2021. An ICM survey of Hertfordshire Businesses published this year found that traffic congestion on the county's roads had the most significant negative impact on business efficiency with seven in ten (72%) convinced that it has a detrimental impact. There is an urgent economic need to invest in solutions which mitigate the social and economic impacts of congestion.

The economic profile of businesses make addressing these challenges vital to maintaining the international competitiveness of indigenous high value businesses in pharmaceuticals, business and financial services. The role of strategic linkages to London, the ability to access a large labour market and need to support agglomeration all affect the overall economic competitiveness of the county.

6.2 Please provide details of any other information that has been submitted to the Department since January 2011 that forms part of your submission (This should include name of the document and date of submission.)

Document Title	Date Submitted	Location on Promoter Website
DfT Inception Meeting: Modelling	31 st March 2011	www.croxleyraillink.com/abo
Update Overview		ut-the-scheme/benefits.aspx
DfT Inception Meeting: Supporting	31 st March 2011	www.croxleyraillink.com/abo
Evidence Overview		ut-the-scheme/benefits.aspx
DfT Modelling Issues and	12 th May 2011	www.croxleyraillink.com/abo
Engagement Plan		<u>ut-the-scheme/benefits.aspx</u>
DfT Modelling Issues and	15 th June 2011	www.croxleyraillink.com/abo
Engagement Plan (revised)		ut-the-scheme/benefits.aspx
Croxley Rail Link Public Transport	7 th July 2011	www.croxleyraillink.com/abo
Local Model Validation Report		ut-the-scheme/benefits.aspx



CROXL		and Final Funding Bid
Watford SATURN Model – Croxley	7 th July 2011	www.croxleyraillink.com/abo
Cordon Local Model Validation		ut-the-scheme/benefits.aspx
Report		
Croxley Rail Link Consultation	22 nd July 2011	www.croxleyraillink.com/abo
Progress to Date Note		ut-the-scheme/benefits.aspx
Croxley Rail Link Consultation	22 nd July 2011	www.croxleyraillink.com/abo
Strategy		ut-the-scheme/benefits.aspx
Croxley Stakeholder Management	22 nd July 2011	www.croxleyraillink.com/abo
Plan	LL	ut-the-scheme/benefits.aspx
Governance Strategy	22 nd July 2011	www.croxleyraillink.com/abo
Governance chategy	22 July 2011	ut-the-scheme/benefits.aspx
Objective Derivation Note	22 nd July 2011	www.croxleyraillink.com/abo
		ut-the-scheme/benefits.aspx
Procurement Strategy Summary Note	22 nd July 2011	www.croxleyraillink.com/abo
		ut-the-scheme/benefits.aspx
Croxley Rail Link Demand Model	22 nd August 2011	www.croxleyraillink.com/abo
Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Alternatives Review	9 th September 2011	www.croxleyraillink.com/abo
Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Cost Report	9 th September 2011	www.croxleyraillink.com/abo
	•	ut-the-scheme/benefits.aspx
Croxley Rail Link Economical	9 th September 2011	www.croxleyraillink.com/abo
Appraisal Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Economic Impacts	9 th September 2011	www.croxleyraillink.com/abo
Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Heads of Terms	9 th September 2011	www.croxleyraillink.com/abo
		ut-the-scheme/benefits.aspx
Croxley Rail Link Highways Local	9 th September 2011	www.croxleyraillink.com/abo
Model Validation Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Letters of Support	9 th September 2011	www.croxleyraillink.com/abo
	the -	ut-the-scheme/benefits.aspx
Croxley Rail Link Monitoring and	9 th September 2011	www.croxleyraillink.com/abo
Evaluation Strategy Note		ut-the-scheme/benefits.aspx
Croxley Rail Link Powers and	9 th September 2011	www.croxleyraillink.com/abo
Consents Note		ut-the-scheme/benefits.aspx
Croxley Rail Link Procurement	9 th September 2011	www.croxleyraillink.com/abo
Strategy Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Public Transport	9 th September 2011	www.croxleyraillink.com/abo
Local Model Validation Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Risk Register	9 th September 2011	www.croxleyraillink.com/abo
Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Scheme	9 th September 2011	www.croxleyraillink.com/abo
Development Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Social and	9 th September 2011	www.croxleyraillink.com/abo
Distributional Impacts Report		ut-the-scheme/benefits.aspx
Croxley Rail Link Value for Money	9 th September 2011	www.croxleyraillink.com/abo
Annex		ut-the-scheme/benefits.aspx



Notes:

BAFB Form and Link to the 5 Case Model

The following section provided to bidders to detail which elements of the form relate to the 5 cases used in decision making.

Case	Elements of the BAFB Form
Strategic Case	1.1, 1.2, 1.3, 1.5, 2.1,2.2, 2.4, 2.5, 3.1, 3.2, 5.1, 5.2, 5.3
Financial Case	1.4, 2.2, 2.3, 2.4, Section 4
Economic Case	3.2 (and Appendices)
Management Case	3.3, 3.5, 3.6, 3.7, 3.8, 5.1, 5.3
Commercial Case	3.4, 3.5,3.7,3.8

