

Reading Borough Council, Transportation and Streetcare

East Reading Mass Rapid Transit Scheme Design and Access Statement



October 2018



in association with



Doyle Design LLP

Project Ref: 132.1MRT

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Reading Borough Council, Transportation and Streetcare

East Reading Mass Rapid Transit

Design and Access Statement

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1 Executive Summary

Background		Proposal	Description of development	First Revised Scheme	Width and alignment
1.1	This Design & Access Statement (DAS) has been prepared by Doyle Town Planning and Urban Design (Doyle) on behalf of Reading Borough Council (RBC).	1.5 East Reading Mass Rapid Transit scheme is a segregated fast-track public transport, pedestrian and cycle route.	1.9 Permission is sought for:	1.11 The planning background for the proposed scheme is summarised below:	1.15 The width of the viaduct has been narrowed by 1m for a short section to the east of the River Kennet to position the structure further away from the towpath and river edge to the east of the River Kennet.
1.2	The DAS supports a full planning application for a new mass rapid transit (MRT) scheme to the east of Reading, Berkshire. The purpose of the East MRT scheme is to provide a fast track segregated public transport, cycle and pedestrian route into the town centre. It is designed to improve accessibility and support continued sustainable growth in Reading and Wokingham Boroughs and the wider area.	1.6 The route of the MRT scheme links the A3290 at Thames Valley Park, beside a proposed new Park & Ride facility, to Napier Road, Reading town centre and the railway station.	"Construction of a segregated fast-track public transport, pedestrian and cycle bridge and viaduct, comprising concrete bridge structure supported by concrete columns, steel beams and reinforced soil embankment, together with new footway links and existing footway alterations, junction improvements and landscaping."	2017 Planning Application (Refs:171108 and 172048): this was submitted in July 2017 to RBC and WBC; 2018 (June) Amended Application (Refs:171108 and 172048): this was submitted in June 2018 in response to comments received from consultees. The scheme design was amended to address these responses and additional information was submitted. The planning application was refused; and 2018 Planning Application: this planning application and ES has been prepared to assess the likely significant effects in relation to the amended scheme design.	1.16 The route alignment to the west of the River Kennet has been amended to take into account the proposed diversion of electricity lines. The alignment has been straightened and moved further away from The Coal Local Wildlife Site (LWS).
1.3	The application is submitted on behalf of Reading Borough Council, Transportation and Streetcare. Reading Borough Council (RBC), Wokingham Borough Council (WBC) and Thames Valley Berkshire Local Enterprise Partnership (TVB LEP) are promoting the scheme.	1.7 The route extends along the southern bank of the River Thames and north of the Great Western Railway Line. The route crosses the mouth of the River Kennet and then travels along Napier Road into Central Reading.			1.17 The replacement car parking spaces originally proposed to compensate for those lost spaces within the Tesco car park have been removed. Therefore, an additional 824 sqm of semi-natural habitat within the footprint of the on-site portion of The Coal, Kennet Mouth and Kings Meadow East LWS will be retained and protected when compared to the existing planning submission
1.4	The Statement has been produced in order that the local planning authorities and the wider community may understand the analysis that has led to the development of the proposed new route and bridge.	1.8 The scheme seeks to achieve the following key aims: - Provide a sustainable alternative solution to accommodate future travel demand on the London Road corridor; - Increase capacity for movement of people thereby reducing journey times and forecast congestion, as well as improving reliability of journeys along the corridor; - Support economic development in Reading Town Centre, east Reading, Wokingham and within the Thames Valley; - Develop a high quality, sustainable system which provides a sustainable alternative to the private car; - Facilitate a future MRT network for Reading and the Thames Valley; and - Allow access for mobility impaired and pushchairs	1.10 The proposed development comprises: - creation of a new route for public transport only, including cycle path and footway between Napier Road and the A3290 at Thames Valley Park proposed Thames Valley Park and Ride; - the erection of a new bridge over the River Kennet; - formation of a new T-junction with Napier Road; - connection to the proposed Thames Valley Park (TVP) Park & Ride; - development of new and improved footpath links to Tesco and the towpath; and - associated infrastructure and landscaping. - development of new and improved footpath links to Tesco store and the towpath; and - associated infrastructure and landscaping.	1.12 At the RBC Planning Committee held on 30th May 2018, RBC was minded to grant planning permission to the proposed development.	Columns
				1.13 WBC refused permission for the development at the Planning Committee on 25th June 2018 for the following reason: <i>‘The proposed MRT link, including bridge structure, due to its height and scale and its prominent and sensitive location, particularly its proximity to the River Thames and River Kennet, would be harmful to the landscape character of the area including its riparian appearance. This would be contrary to policies CP1, CP3 and CP11 of the Core Strategy’</i>	
				1.14 The June (2018) application included seven main scheme amendments along with a series of more minor adaptations, following consultation with planning officers, stakeholders and public feedback.	Mooring Platforms and Associated Riverside Planting
					1.18 The form of the columns supporting the viaduct has been changed. The previous proposals incorporated pairs of columns with flared capitals. These have now been substituted for single, flared columns. The single columns are considered to be more elegant reducing the overall footprint at ground level and creating a greater sense of openness along the riverside.
					1.19 The river edge incorporates three new mooring platforms and new marginal shelf for riverside native planting that provides landscape and visual amenity benefits. The improvements provide a greener outlook and better connectivity between the footpath and the waters edge.

	Trees		Lighting
1.20	The landscape strategy includes retention of the Willow tree east of the Kennet Mouth. Additional trees are retained north of the viaduct and within The Coal LWS.	1.26	Low level lighting has been incorporated within the proposed parapet rails across the structure and viaduct to provide adequate lighting levels to illuminate the proposed footway/cycleway and avoid light spill.
	Land beneath viaduct		
1.21	The design beneath the viaduct has been amended with areas of marshy wetland and grasses, providing an area for seasonal flooding, and a diverse marshy habitat. The area is proposed to remain open and unfenced to allow people to see beneath the viaduct, whilst discouraging public access due to the creation of areas of marshy wetland and grasses.	1.27	This has removed the requirement for lighting columns along the viaduct.
			Flood Compensation
		1.28	The scheme design incorporates amended flood compensation measures to mitigate the impact of the development on floodplain storage.
			Other scheme amendments
1.22	Provision is made within the application for fencing to be installed beneath the viaduct at a later date if proven to be desirable, rather than at the outset, as previously proposed.	1.29	There are further minor amendments described in chapter 3 of this report.
1.23	The existing mosaic will be carefully lifted, repaired and reinstalled into a new area, which is more visible to passers-by. New seating would be provided at the relocated mosaic and near to the location of timber mooring platforms, where enhanced views of the river may be enjoyed.		
1.24	Information, or storyboards are proposed at locations throughout the linear space, which could provide information on the habitat enhancements and the locally occurring Loddon Lily, and to celebrate the confluence of the Thames and Kennet.		
1.25	There is opportunity for the local community and schools to be involved in the design of the information / story boards, the reinstallation of the mosaic and the planting of Loddon Lily / marsh plant species beneath the viaduct.		

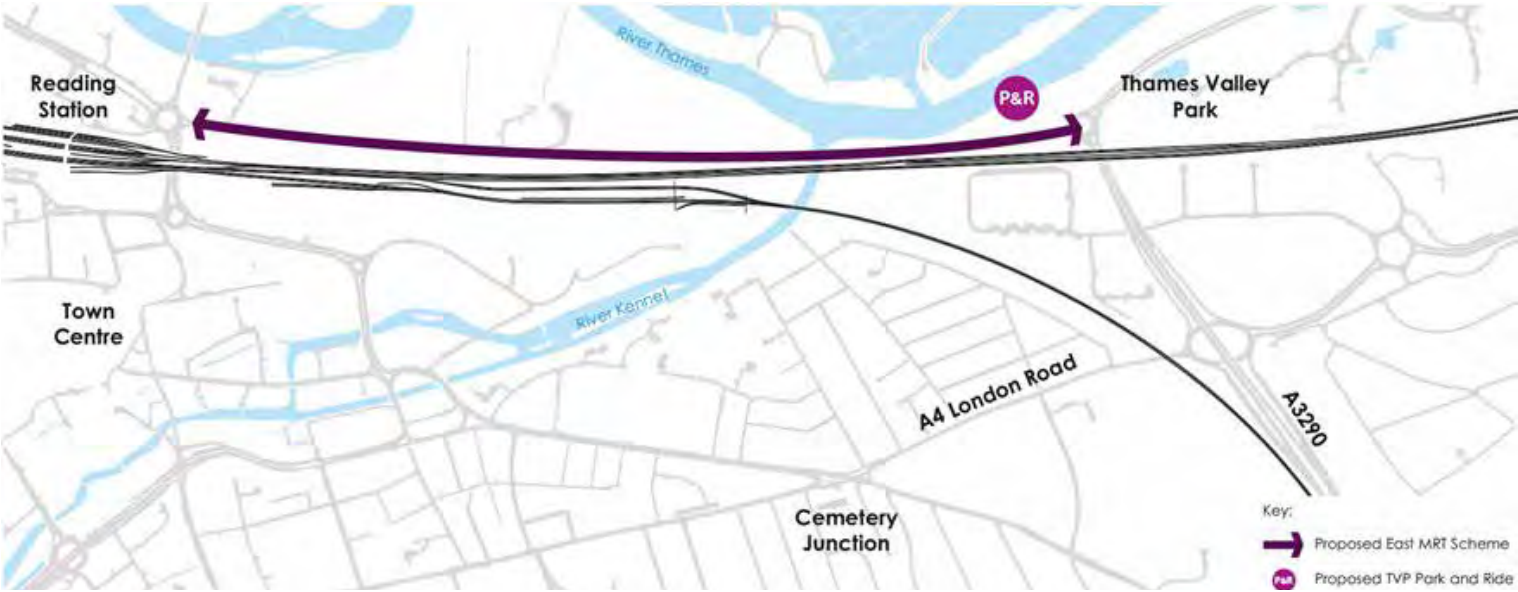


Figure 1. Transport context



Figure 2. Urban context

Further Design Development		Purpose	Business Survey	Policy					
1.30	The scheme requires planning permission from both RBC and WBC. RBC resolved to grant consent on 30th May 2018. WBC resolved to refuse planning permission on 25th June 2018 due to concern over harm to the character and appearance of the area and that the application would be contrary to Policies CP1,CP3 and CP11 of the Local Plan.	1.32	The design enhancements were the subject to a consultation exercise in September 2018 including a public exhibition and questionnaire.	1.35	The A4 corridor in east Reading linking the town centre and the A3290 is suffering from significant levels of congestion, particularly in the peak periods. This congestion is forecast to increase with the projected level of growth in Reading and Wokingham Boroughs.	1.42	A questionnaire survey was undertaken in May 2018 across 58 employers in Reading. The purpose of the survey was to understand employer’s views on traffic congestion and whether they believe it affects their businesses growth and productivity. The results of the survey showed that of these businesses:	1.49	This scheme is a long established element of RBC’s strategy to deliver sustainable economic growth and housing for Reading and Wokingham Boroughs. It is included in RBC’s Corporate Plan, Core Strategy and Local Transport Plan.
1.31	The project team has considered a number of alternative designs to respond to the comments from WBC at the Planning Committee for the 2017 Planning Application and to help blend the structure into the landscape/ backdrop of grass, shrubs, railway embankments, bridges, overhead electricity lines and electricity pylons, and riparian foreground. These alternatives are outlined below: - Planters at high level: Planters beside the parapets containing ivy to spill over the deck of the viaduct. This would provide ‘greening’ of the structure. - Gabion Cladding: Additional gabion cladding with ivy across the lower areas of the structure. The type, shape, size, roughness and tone of stone could be carefully selected to help blend the structure into the lower-level surroundings - Coloured pigment and/or textured concrete: Pigmented concrete would help to blend the structure with ground level colours. Texture on the surface of the concrete would potentially have a positive impact on very close views where this can be seen and/or surfaces in direct sunlight; and - Additional Landscaping: Further low-level planting and/or public art sculptures could be provided to enhance the landscape around the structure. There is limited opportunity for taller trees and substantial planting due to the easements required for the underground electricity cables.	1.33	Planters have been selected as the preferred option, as this would correspond with the proposed approach of a ‘living green wall’ at the TVP P&R development and would provide ‘greening’ of the upper level of the viaduct for local views from the Thames Path and river. Maintenance will be required, however automatic irrigation, a planting replacement programme and CCTV could keep this to a minimum. Provided the planting is successfully established and maintained, this option would have the greatest effect on softening and greening the appearance of the viaduct.	1.36	This scheme is a vital element of a wider strategy to develop and to encourage sustainable transport, active travel, in order to support planned growth.	1.43	93% believe their growth and productivity are affected by congestion and journey time unreliability;	1.50	The scheme is also identified in WBC’s Core Strategy, Managing Development Delivery, Local Plan, and Local Transport Plan; and TVB LEP’s Strategic Economic Plan.
		1.34	Full details may be secured by planning condition.	1.37	The new route will enhance accessibility and support the continued, sustainable growth of the boroughs of Reading and Wokingham and the wider area.	1.44	85% think better public transport provision and reliability would improve their businesses growth and productivity; and	1.51	The application site within WBC is safeguarded land for strategic transport networks including mass rapid transit.
				1.38	The new route will make it more attractive to travel by bus, cycle or to walk. Offering more sustainable travel choices will reduce reliance on the private car.	1.45	55% think enhanced walk and cycle links would their businesses growth and productivity.	1.52	The proposals have been informed by current and emerging national and local planning policy, and by discussions and negotiations with RBC, WBC, other key stakeholders including landowners, and the wider community.
				1.39	The new route will help to accommodate forecast travel demand, particularly on the A4 London Road corridor, which acts as a barrier to growth. The route will connect people to jobs in the area and in Reading town centre, and improve access to Reading railway station with its regional and national connections.	1.46	The majority of funding for the scheme has been allocated by central Government from the Local Growth Fund, with local contributions from the private sector funded through planning contributions and local investment.		
		Environment		1.47	Funding has been allocated for Phase 1 and Phase 2 East MRT by the Thames Valley Berkshire Local Enterprise Partnerships (TVBLEP) from the Local Growth Fund, for the period 2015/16-2020/21.	1.54	A range of landscaping measures form part of the scheme to complement the bridge and manage, enhance and protect environmental features affected by the scheme. This includes new riverside planting, marshy wetland areas and new tree planting.		
		1.40	The Planning Authority has confirmed that the proposed development falls within Schedules 1 or 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. An Environmental Statement (ED) is therefore required to accompany the planning application.	1.48	Funding from the Local Growth Fund is provided specifically for strategic transport projects and cannot be used for any other purpose.				
		1.41	The ES provides the assessment of the scheme and identified mitigation with regard to its environmental effects.						

Bus only right
turn filter lane

Proposed Mass Rapid
Transit Route

Realigned Tesco store
access road

Realigned Tesco store
parking spaces

Realigned footpaths

New bridge over the
River Kennet

Proposed viaduct

Timber short-stay
mooring platform

Marginal planting shelf

Thames Valley park
P&R (by others)

Proposed bus bays



Figure 3. Illustrative view of the revised proposed scheme in context - including sperate proposals for the Thames Valley Park Park and Ride car park (image approximately overlaid on GoogleEarth base)

2 Introduction and background

Introduction		Structure of this Statement			Guidance		Promoters		
2.1	This Statement has been prepared by Doyle Town Planning and Urban Design in conjunction with Peter Brett Associates (PBA) and Reading Borough Council (RBC). The Statement is in support of a full planning application for a segregated fast-track public transport, pedestrian and cycle route to the east of Reading linking the A3290 to Napier Road, Reading town centre and the railway station. The application is submitted on behalf of Reading Borough Council, Transportation and Streetcare.	2.5	The Design and Access Statement comprises the following sections.	2.16	Chapter 12 considers the history and current arrangement of bridges across the River Kennet in the vicinity of the proposed route and how this has influenced the development of the proposals.	2.25	This Statement addresses the requirements of Section 42 of the Planning and Compulsory Purchase Act 2004, which stipulates that a statement covering design concepts and principles, and access issues, should be submitted with an application for planning permission.	2.29	The project is being promoted by RBC, Transportation and Streetcare, working with WBC, Thames Valley Berkshire Local Enterprise Partnership (TVB LEP) and Peter Brett Associates LLP (PBA). The public-sector led project has been allocated funding by TVB LEP from the Local Growth Fund.
		2.6	Chapter 2 (this chapter) provides a general introduction and summarises the contents of the DAS.	2.17		Chapter 13 summarises the main components of the route from east to west.			
		2.7	Chapter 3 summarises scheme amendments.						
		2.8	Chapter 4 sets out the transport context.	2.18	Chapters 14 through to 20 describe the selected route and its key components including the bridge abutments and supporting columns.	2.26	Guidance regarding the preparation of the DAS is provided in the form of Department for Communities and Local Government document entitled ‘Guidance on Information Requirements and Validation’ and the CABE publication entitled ‘Design and Access Statements – How to write, read and use them’.		
		2.9	Chapter 5 summarises relevant planning policy on design.						
2.2	The Statement has been produced for the benefit of the local planning authority and the wider community, to better understand the analysis that has led to the development of the proposed new route and bridge.	2.10	Chapter 6 describes the process of design review undertaken as part of the project development.	2.19	Chapter 21 describes the proposed materials and detailing and the design process leading to their adoption.				Description of development is as follows.
		2.11	Chapter 7, ‘Site description’, describes the existing physical characteristics and environmental context for the proposed development	2.20		Chapters 22 look at movement, particularly pedestrian and cycle connections.			
2.3	The Statement illustrates the design process and then explains the underlying design principles, concepts and details of the proposal in a structured way.			2.21	Chapter 23 sets out the proposed approach to the design of the public realm.	2.27	The proposed bridge will be funded through allocated funding from the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP). Funding has been allocated for both Phase 1 and Phase 2 East MRT from the Thames Valley Berkshire Local Enterprise Partnership (TVBLEP) through the devolved Local Growth Fund, for the period 2015/15 to 2020/21.		“Construction of a segregated fast-track public transport, pedestrian and cycle bridge and viaduct, comprising concrete bridge structure supported by concrete columns, steel beams and reinforced soil embankment, together with new footway links and existing footway alterations, junction improvements and landscaping.”
		2.12	Chapter 8 summarises the project aims and objectives against which the proposals should be tested.	2.22		Chapter 24 summarises the approach to landscape design that is set out more fully in the separate Landscape Strategy documents and plans submitted with the planning application and the Environmental Statement.			
	Scope This Statement provides: - A summary of the application proposals; - A description of the site and the surrounding area; - A description of the proposals including details of use, layout/alignment, scale and appearance. - A description of the design process through the identification and appraisal of options through to the selection of final scheme.	2.13	Chapter 9 describes the initial ‘higher level’ appraisal of options that determined the general route alignment and the transport modes that it would accommodate.	2.23	Chapter 25 describes the approach to lighting in this sensitive setting.			2.31	The proposed development comprises: creation of a new route for public transport only, including cycle path and footway between Napier Road and the A3290 at Thames Valley Park proposed Thames Valley Park and Ride;
		2.14	Chapter 10 sets out the main constraints and potential impacts of the development and describes how the application scheme and the supporting information have sought to address these issues.			2.28	The majority of funding for the scheme has been allocated by central Government from the Local Growth Fund, with local contributions from the private sector funded through planning contributions and local investment. Funding from the Local Growth Fund is provided specifically for strategic transport projects and cannot be used for any other purpose. Private sector contributions will also be sought.		- the erection of a new bridge over the River Kennet; - formation of a new T-junction with Napier Road;
				2.24	Chapter 26 summarises some main points of the construction strategy that is described more fully in the Transport Statement submitted with the application.			connection to the proposed Thames Valley Park & Ride;	
		2.15	Chapter 11 sets out the design parameters that have guided design development including key dimensions such as the width of the deck, span, the height above the river level, and the dimensions and arrangement of approach ramps.					- development of new and improved footpath links to Tesco and the towpath; and - associated infrastructure and landscaping.	
									- development of new and improved footpath links to Tesco store and the towpath; and - associated infrastructure and landscaping.



Figure 4. Project sponsors

Application Documents:

Consultation Statement (prepared by Peter Brett Associates LLP);

Design and Access Statement (prepared by Doyle Town Planning and Urban Design);

Transport Statement and Transport Statement Addendum (prepared by Peter Brett Associates LLP);

Environmental Statement

- Environmental Statement: Volume 1 Main Report, comprising the following assessments: Socio-Economics; Transport & Access; Air Quality; Hydrology and the Water Environment; Ground Conditions; Landscape & Visual including Lighting; Ecology and Archaeology and Heritage.
- Environmental Statement: Volume 2 Appendices, including: Flood Risk Assessment and Drainage Strategy; Ground Conditions Assessments; Tree Survey; Arboricultural Impact Assessment; Lighting Assessment; Preliminary Ecological Appraisal and Heritage Desk-Based Assessment.
- Environmental Statement: Non-Technical Summary
- ES Addendum Main Report, including the following updated assessments: Hydrology and the Water Environment; Landscape & Visual including Lighting and Ecology
- ES Addendum Appendix, including: FRA Addendum, Water Framework Directive Addendum, Landscape and Ecology Strategy, Arboricultural Information and Lighting Assessment
- ES Addendum NTS
- Landscape and Ecology Strategy (prepared by Peter Brett Associates LLP);
- Planning Statement (prepared by Peter Brett Associates LLP);
- Sustainability Statement (prepared by Peter Brett Associates LLP);
- Topographical Survey (prepared by MK Surveys);
- Utilities Statement (prepared by Peter Brett Associates LLP);

Application drawings

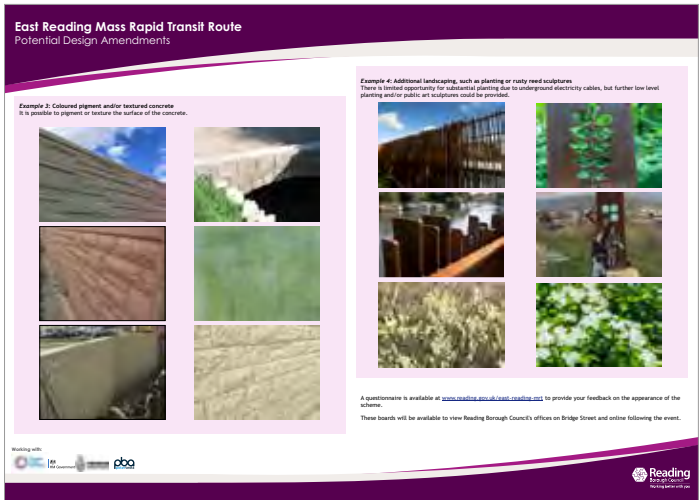
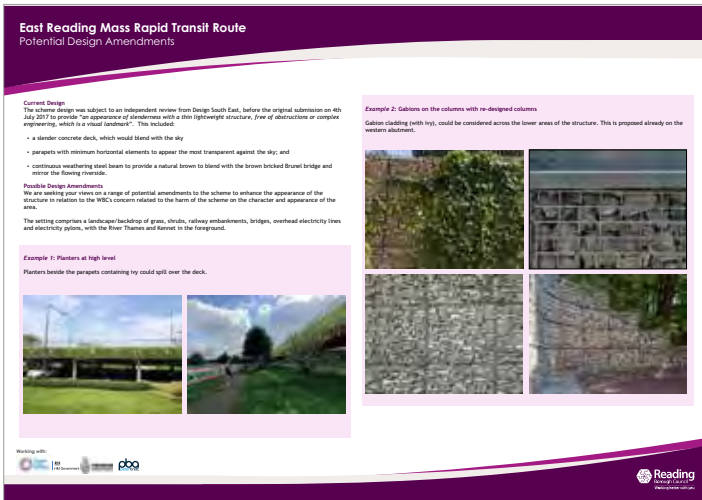
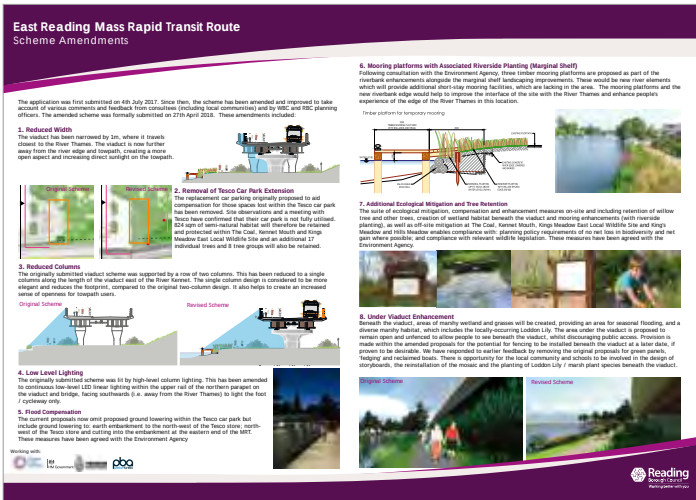
- 28791/2009/CIV/002 C – Site Location Plan
- 28791/2009/CIV/001 B – Existing Site Layout
- 28791/2009/CIV/003 D – Proposed Site Block Plan Phase 1A
- 28791/2009/CIV/005 C – General Arrangement Phase 1B
- 28791/2009/CIV/020 C – Proposed Site Context Including Proposed Park and Ride Development Phase 1B
- 28791/2009/CIV/006 B – Proposed Longitudinal Section and Typical Cross Section
- 28791/2009/CIV/017 C – Proposed Carriageway Contours
- 28791/2009/CIV/013 – Proposed Cross Sections
- 28791/2009/CIV/018 C – Proposed Surface Water Drainage Strategy
- 28791/2009/CIV/018 D – Proposed Utility Diversions
- 28791/2009/CIV/012 C – Proposed Street Lighting Layout P
- 28791/2003/SK310 P02 – Bridge and Viaduct Single Column Option General Arrangement
- 28791/2003/SK321 P03 – Bridge and Viaduct Single Column Option East Approach
- 28791/2003/SK322 P02 – Bridge and Viaduct Single Column Option East Approach
- 28791/2003/SK323 P02 – Bridge and Viaduct Single Column Option Main Span
- 28791/2003/SK324 P02 – Bridge and Viaduct Single Column Option: Cross Section Comparison at Pinchpoint
- 28791/4001/013 P01 – Marginal Planting/ Mooring Platforms

3 Design development



Figure 5. Exhibition Boards (12th September 2018)

Approach		Response to Design Review (Spring 2017).		Revised application scheme (Spring 2018).		Reduced Columns		Under Viaduct Enhancement	
3.1	The original baseline scheme has been the subject of four key design development stages. • Response to Design Review (Spring 2017) leading to the first planning submission (Summer 2017). • Revised application scheme (Spring 2018). • Enhancement option appraisal and public consultation (Autumn 2018). • Revised planning resubmission (Winter 2018)	3.2	Design South East independently reviewed the original scheme. This established a guiding design principle:	3.8	A planning application for the revised and refined scheme was first submitted on 4th July 2017.	3.13	The originally submitted viaduct scheme was supported by two rows of columns. This was reduced to a single central row of columns. This allowed the retention of a Willow tree at the Kennet Mouth and created sufficient space for overhead electricity cables and pylons to be placed underground.	3.16	Beneath the viaduct, areas of marshy wetland and grasses will be created, providing an area for seasonal flooding, and a diverse marshy habitat, which includes the locally-occurring Loddon Lily which grows in swampy or damp soil.
		3.3	“To create a lightweight structure with the appearance of slenderness, free of obstructions or complex engineering, which is a visual landmark”.	3.9	The submitted scheme was further refined following consultation with planning officers and in response to consultee comments.				Public art work relocated and restored
		3.4	The original scheme design was further developed in line with this principle with three key design changes: Deck	3.10	The width of the viaduct has been narrowed (by 1m) where it travels closest to the river and is thereby set further away from the river edge and the towpath.	3.14	The originally submitted scheme was lit by high-level column lighting. This has been amended to continuous low-level LED linear lighting within the upper rail of the northern parapet on the viaduct and bridge, facing southwards (i.e. away from the River Thames) to light the pedestrian / cycle way only.	3.17	The existing mosaic will be carefully lifted, repaired and reinstalled into a new area, which is more visible to passers-by. There is opportunity for the local community and schools to be involved in the design of storyboards, the reinstallation of the mosaic and the planting of Loddon Lily / marsh plant species beneath the viaduct.
		3.5	The deck of the bridge and viaduct was made more slender and the edge detail made more refined. Parapets	3.11	The scheme involved the relocation of surface car parking spaces. The spaces will not now be replaced.		Mooring platforms with Associated Riverside Planting (Marginal Shelf)		New seating
		3.6	The design of the parapet railing was refined and made more slender. Beams	3.12	The removal of replacement parking from the scheme allows a further 824 sq m of semi-natural habitat to be retained within The Coal, Kennetmouth and Kings Meadow East LWS. An additional 17 individual trees and 8 tree groups will be retained.	3.15	Three timber mooring platforms provide additional short-stay boat mooring facilities. These will be located within a newly created marginal shelf area running along a length of approximately 100m at the edge of the River Thames, east of the Kennet Mouth.	3.18	New seating would be provided at the relocated mosaic and near to the location of the timber mooring platforms, where enhanced views of the river may be enjoyed.
		3.7	A continuous weathering steel beam with a natural brown tone was introduced.						



Additional Ecological Mitigation

- 3.19 A suite of ecological mitigation, compensation and enhancement measures will be included on-site and within the wider Kings and Hills Meadows. These will include retention of retention of existing habitat, creation of new habitat and enhancement of off-site habitat within The Coal, Kennetmouth, Kings Meadow East Local Wildlife Site and wider King's Meadow and Hills Meadow.

Flood Compensation

- 3.20 The current proposals now omit proposed ground lowering within the Tesco car park but include ground lowering in the following areas in order to provide compensatory floodplain storage:
- a. lowering of an earth embankment to the immediate north east of the Tesco store;
 - b. lowering of an earth embankment to the north west of the Tesco store;
 - c. a cutting into the embankment at the eastern end of the MRT (where the land rises out of the floodplain near the P&R site).

Fewer Trees Removed and Increased Planting

- 3.21 The revised scheme results in:
- a. the removal of 36 individual trees (20B, 15C & 1U);
 - b. planting 81 individual trees;
 - c. 0.116 ha of tree groups removed and 0.17 ha of understorey and hedgerow planting and;
 - d. the enhancement of 3.65 ha of existing woodland and scrub habitat.

- 3.22 The amended scheme was formally submitted on 27th April 2018.
- 3.23 The scheme requires planning permission from both Reading and Wokingham Borough Councils. Reading resolved to grant consent on 30th May 2018. Wokingham resolved to refuse planning permission on 25th June 2018 due to concern over harm to the character and appearance of the area and that the application would be contrary to Policies CP1,CP3 and CP11 of the Local Plan.

Enhancement option appraisal and public consultation (Autumn 2018).

- 3.24 A series of scheme enhancements have been devised in order to address Wokingham Borough's outstanding concerns.
- Planters at high level.
 - Gabions on the columns with re-designed columns.
 - Coloured pigment and/or textured concrete finishes
 - Additional landscaping
- 3.25 The options are set out in more detail in the following sub chapters.

Revised planning resubmission (Winter 2018)

- 3.26 The design enhancements were the subject to a consultation exercise in September 2018 comprising:
- A Public exhibition on 12th September at the Waterside Centre, Thames Valley Drive.
 - The exhibition materials were also published also on at www.reading.gov.uk/east-reading-mrt.
 - A questionnaire (available on-line and at the exhibition).
- 3.27 Wokingham and Reading Planning Officers were consulted on the proposed changes.
- 3.28 The feedback received was used to inform amendments to the scheme to reduce the impact of the scheme on the riverside setting.
- 3.29 The selected improvement comprises planters at high level.
- 3.30 A new planning application is now submitted to both local planning authorities for approval.

Proposed Enhancement 1- Planters at Higher Level

Planters at high level.

- 3.31
- Planters beside the parapets containing ivy could spill over the deck. These will require regular maintenance, but integrated irrigation should keep this to a minimum. CCTV would deter vandalism to the planting.
- 3.32
- The hanging planting needs robust details and good aftercare including:
 - Appropriate plant choice.
 - Size of the trough and amount of lightweight growing medium.
 - Training wires/mesh.
 - Protection from road salt/salt tolerant plants.
 - Drought tolerance.
 - Maintenance cycles, plant replacement, trimming, fertilizer etc.



Figure 10. Example of ivy growing over and down a structure



Figure 6. Example of ivy growing up a structure



Figure 7. Example of ivy growing over and hanging down from a structure

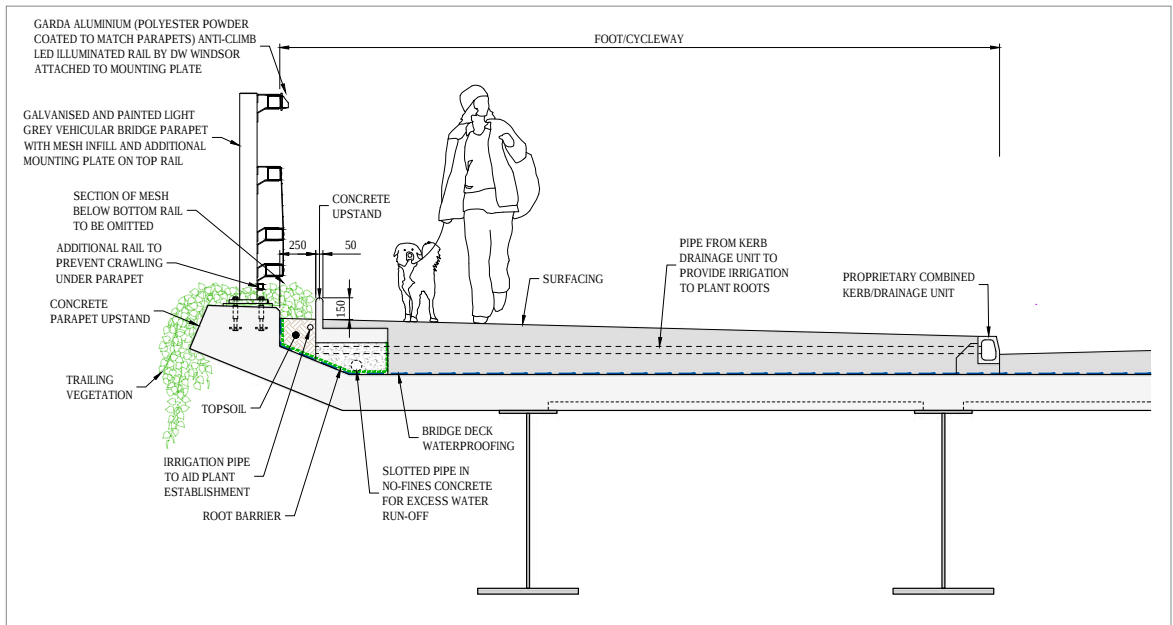


Figure 8. Illustrative cross-section of proposed planting



Figure 9. Example of high quality vinyl artificial ivy creeper



Figure 11. Photomontage of the proposed view from the towpath looking east



Figure 12. Artists impression of the proposed view from the towpath looking east with higher level planting

Proposed Enhancement 2 - Gabions on the columns with re-designed columns

Gabions on the columns with re-designed columns

- 3.33 Gabion cladding (with ivy), could be considered across the lower areas of the structure, (e.g. on redesigned columns). This is proposed already on the western abutment.



Figure 13. Close-up example of gabion-clad column



Figure 14. Artist's impression of gabion-clad columns.



Figure 15. Examples of gabion walls



Figure 16. Proposed view from the towpath looking east with the gabion walling to the bridge and viaduct abutments

Proposed Enhancement 3 - Coloured pigment and/or textured concrete

Coloured pigment and/or textured concrete

- 3.34

It is possible to texture the surface of the concrete or pigment the concrete. These treatments could be applied to the columns and/or the deck cantilever. This will add cost to the construction, but limited maintenance will be needed.
- 3.35

Any texture or colour to the deck should extend along the full length of the viaduct and the bridge, in order to give a consistent appearance.
- 3.36

Textured concrete is more distinctive where light falls across the faces and creates shadows - and thereby greater definition. The face of the columns and the deck above that will be nearest to the riverside will often be in shadow, so that the impact of any texture finish will be diminished.
- 3.37

The textured finish applied to the sculptural columns will need careful detailing. This may be a random or geometric pattern. It may also include figurative textures such as representations of local flora and fauna (birds, fish, insects, leaves etc.) There may need to be smooth-faced areas forming borders or frames at points of transition/ inflexion.
- 3.38

The textured or coloured concrete will have only a modest, subtle effect. It will help tone the structure back into the green background to some extent. The effect will be greater where more light falls on the structure, mainly on the southern side (and away from the riverside).



Figure 17. Examples of textured concrete



Figure 18. Proposals with non-coloured concrete



Figure 19. Examples of coloured concrete tones



Figure 20. Everglade (green)



Figure 21. Fernwood (brown)