UPDATE REPORT:

BY THE DIRECTOR OF ENVIRONMENT & NEIGHBOURHOOD SERVICES
READING BOROUGH COUNCIL **ITEM NO. 9**
PLANNING APPLICATIONS COMMITTEE: 30 May 2018

Ward: Abbey/Out of Borough
App No.: 171108/REG3
Address: Land between Thames Valley Business Park and Napier Road, Reading
Proposal: Construction of a segregated fast-track public transport, pedestrian and cycle bridge and viaduct, comprising concrete bridge structure with a river span of 59.5m and a land span of 316m, supported by concrete columns, steel beams and reinforced soil embankment, together with new footpath links and existing footpath alterations, replacement supermarket car parking provision, junction improvements and landscaping.
Applicant: Reading Borough Council Highways and Transport

RECOMMENDATION AMENDED TO:

In considering the EIA Regulations (as per main report);
Delegate to the HPDRS to GRANT Regulation 3 planning permission, subject to the satisfactory completion of a s106 legal agreement by 27/7/2018 (or to refuse by this date unless an extension of time agreed)

S.106 obligations: as set out in main Agenda report, but with confirmation that all s106 management controls (landscaping, ecology, etc.) to be carried out for a minimum of ten years.

Construction method statement to be via s106, not condition (currently #15).

Alterations to conditions required:

Landscaping conditions required:
L2a, L2b (which allows phasing to be accommodated), L3, L5 (covering a min 10 years), L6a (AMS), L10 (boundary treatment)

Flooding conditions/controls, see discussion below.

Long elevation plans: to be supplied.

1. AIR QUALITY UPDATE

1.1 Various objectors consider that the application demonstrates little improvement to congestion and therefore air quality and the report describes that the proposal will generally improve air quality within the area in part of the Borough which experiences poor air quality and assist traffic flows on the local road network.

1.2 The applicant has clarified the approach taken in respect of air quality.

1.3 There were three scenarios tested:

- Scenario 1 – Effects of the MRT Route Only
- Scenario 2 – Effects of the MRT Route and Thames Valley Park (TVP) P&R Combined
- Scenario 3 – Effects of the MRT Route with TVP P&R in the Baseline

1.4 For each scenario, the applicant predicted concentrations at 12 specific receptor locations.

- In Scenario 1, 9 of the 12 locations had improvements, with 3 worsening.
- In Scenario 2, 7 of the 12 locations had improvements, 3 worsening and 2 no change
- In Scenario 3, 6 had improvements and 6 worsening

1.5 The predicted improvements generally occurred where the pollutant concentrations were highest. However, in accordance with the assessment criteria use, all of the predicted impacts were deemed to be negligible when the size of the change in concentrations and existing pollutant levels was taken into account. Overall therefore, the effects were judged to be not significant.

1.6 Officers therefore concur with the overall sentiment that the scheme will improve air quality, especially as it will also arise from things that cannot be easily modelled with any degree of certainty; i.e. reduction in congestion, smoothing out traffic flows etc, which would by the provision and use of more public transport.

2. UPDATE ON ALTERNATIVES CONSIDERED

2.1 The main report discusses alternatives to the chosen scheme and your officers have sought reassurance from the applicant's EIA consultants that this task has been carried out robustly, in terms of the Regulations.

2.2 The applicant confirms that EIA for MRT East is submitted under the Town and Country Planning EIA Regulations 2011 (as amended). The EIA Regulations require an Environmental Statement (ES) to include an outline of the main alternatives considered by the applicant, indicating the main reasons for the choice made, taking into account the environmental effects. This legal requirement is expressed in very general and high-level terms, requiring only the inclusion of an "outline" of "main" alternatives and an "indication" of "main" reasons. However, sufficient detail should be provided to allow for a meaningful comparison between the alternatives and the proposed development.

2.3 The consideration of alternatives is set-out in Section 3.4 and Appendix 3-2 of the 2017 East Reading MRT ES and it is confirmed that this fulfils the requirements of the EIA Regulations.

2.4 Specifically, the consequences of the 'Do Nothing' Option were identified in the Phase 1 and 2 Option Appraisal Report (PBA, 2016) and is summarised in Section 3.4.6 (of the main Report) and Section 8.3 (of Appendix 3-2) of the 2017 ES. Under the 'Do Nothing' Option that assumes no mitigation (e.g. physical alternatives) is provided, there would be ever increasing congestion and worsening transport conditions; existing poor air quality issues would be exacerbated; and there would be restricted access to jobs and services. Appendix 3-2 of the 2017 ES sets out the assessment of ten further 'Do Something' Options (or alternatives) that comprise both wider transport options within Reading and Thames Valley as well as looking at the eastern route in Reading town centre from the A4 and A329 Thames Valley Park. A two-stage assessment process was undertaken whereby the ten options were assessed (the assessment criteria included socio, environmental and well-being impacts) and reduced to four options for more detailed appraisal. This led to the identification of a Preferred Hybrid Option. Further detailed options appraisal work of the Preferred Hybrid Option (e.g. of the route alignment) has since been undertaken during determination to inform the revised scheme and environmental assessment in the 2018 ES Addendum."

3. FURTHER EFFECTS ON TREES

3.1 Various objectors have raised the issues of air quality degredation and flooding implications associated with proposed tree loss and the applicant has provided responses to these issues.

Air quality

3.2 In terms of the impact of trees, this is not specifically assessed in terms of pollutant concentrations. The effects are complex and depend on the positioning of the trees in relation to buildings and the pollution source. In general terms, one should not enclose pollution by the planting of trees either side of heavily trafficked roads, but they can in other circumstances be used to separate people from pollution or prevent pollution from elsewhere impacting on a particular street. If there is a net gain in trees, then presumably the overall benefit in terms of CO2 reduction can be calculated, but as CO2 is a global problem, the benefits would be insignificant.

3.3 Officers therefore offer that given the mitigating tree planting, it is not clear that there is harm as suggested.

Flood Risk

3.4 The applicant's flood risk team has examined the issue of trees and flood prevention and provided a detailed response.

3.5 Studies have shown that natural flood management techniques, such as the provision of trees in the floodplain *can* be beneficial in terms of reducing flood risk to the downstream receptors, this is particularly applicable when located in rural upland catchments. However, it is not relevant to correlate such studies with the impacts of localised tree removal at the MRT site. The removal of the limited number of trees in this localised stretch of the lowland River Thames would not have a measurable impact on water levels. In addition, it is also noted that the majority of the individual trees to be felled in this stretch of the river (which are to be replaced as set out in the planting plan included in the Landscape and Ecology Strategy submitted with the application) are located on land west of Kennetmouth and as such are mainly outside of or in higher level floodplain.

3.6 The trees located in the lower level floodplain (where there is more risk of flooding) are generally single trees rather than woodland areas. As the mechanism to impact water levels relies on tree density and obstructions imposed, the removal of these low numbers of trees in this location will not have a measurably impact on overall flood flow.

3.7 Officers therefore understand from the above that trees within the floodplain can make a positive contribution to flood risk, however in the low numbers to be removed, size and density the impact is negligible within this part of the Thames catchment and is not able to be measured. The project will only remove the necessary trees and will be accompanied by focused ecological mitigation. Surface water in this location will also be positively controlled at greenfield runoff rate to demonstrate no increase in runoff despite an increased impermeable area (in accordance with the presented SUDS report).

4. FLOOD RISK UPDATE

4.1 The main agenda report discusses flooding briefly in terms of technical aspects only and a fuller discussion of flood aspects is required here.

Flooding policy

4.2 The application has been assessed in terms of the National NPPG Guidance on flooding (Flood Risk and Coastal Change) in terms of its acceptability in terms of the Sequential Test. The application site is within flood zones 2 and 3. The proposal is considered to comply with the definition of Essential Infrastructure in Table 2 of the above guidance, in that it is 'essential transport infrastructure…. Which has to cross the area at risk' and these

reports have identified why the route has been chosen. It also includes elements of 'water compatible development' (repairs to banks, mooring facilities). Officers therefore advise that there are clearly no other sequentially preferable sites that could be chosen and the proposal complies with the NPPF, the guidance and Policy CS35 (Flooding).

Environment Agency response

4.3 The **Environment Agency** has advised by email received on 29 May that they are able to remove their objections on flood risk, biodiversity and navigation grounds subject to the following conditions being imposed on any planning permission granted (discussion by officers on each in italics):

1. The moorings are managed as short stay visitor moorings *(s106 proposed)*
2. The failing wall at the existing mooring area at Kennet Mouth is repaired *(s106 proposed)*
3. The detailed finalised design for the marginal shelf and mooring platforms is agreed ahead of construction *(details provided in application, final detailed design in s106)*
4. Prior to commencement of development, details of the final alignment of the road and ground level changes shall be submitted in order for compensatory storage mitigation to be provided in line with the principles demonstrated in the flood risk assessment and addendum reports and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details. *(s106)*
5. No development shall take place until a method statement/construction environmental management plan that is in accordance with the approach outlined in the Planning/Environmental Statement, has been submitted to and approved in writing by the local planning authority. *(currently in main report as a condition, on reflection, given cross-boundary issues, suggest s106).*
6. No development shall take place until a landscape and ecological management plan, including long- term design objectives, management responsibilities and maintenance schedules for all landscaped areas (except privately owned domestic gardens), shall be submitted to and approved in writing by the local planning authority. *(s106).*

4.4 On the basis of the above, officers consider that all of the EA's requirements can/have been accommodated and officers advise that on this basis there is no longer an EA objection to the application. A formal letter is not expected until 4 June.

5. TREES AND LANDSCAPING UPDATE

5.1 The applicant has produced various information in response to requests from officers and others in respect of landscaping impacts of the development and the most recent document has been received today and unfortunately too late for the Council's Natural Environment team to comment on. The issue of numbers of trees affected is complex and in order to try and simplify/quantify the impact, the applicant's 8 page Technical Note is appended to this update report.

5.2 In summary:

1. **Overall landscape and ecological mitigation**: this has involved minimising impacts on landscaping and ecology as far as possible/practicable; creation of a range of new features, both on-site (including works to the LWS) and off-site (in Hill's Meadow and King's Meadow). This is considered to be a comprehensive suite of ecological mitigation, compensation and enhancement. There are discussions above about the overall mitigation calculations which can be afforded and officers advise that there will be immediate losses. However, it should be noted that habitats associated with the mitigation/management proposed will mature into biodiverse habitat of value to protected and notable species, as well as being of intrinsic value.
2. A **Summary of total tree features, removal and planting and comparison of original and amended application** has been produced**:** these are supplied in a detailed format. Officers advise that this has not been verified by the Natural Environment Team, but this is merely alternative presentation of the same works.
3. An **Explanation on tree feature removal** is supplied and provides an explanation of tree groups, etc.

5.3 Officers will also provide a guide to the environmental management proposal at your meeting. Overall, officers accept that the impacts on existing wildlife and landscaping will be significant and adverse, but that this is considered to be necessary for the scheme to be progressed and the proposed mitigation package is considered to be comprehensive.

6. ADDITIONAL CONSULTATIONS RECEIVED

6.1 The **RBC Consultant Ecologist's** advice is that he notes the amendments, in particular the removal of the replacement car parking spaces that were to be located with The Coal Local Wildlife Site. Despite this he considers that the proposed scheme will have a significant and irreversible adverse effect on the Kennetmouth, the River Thames and The River Kennet, their wildlife and their environs. The planning authority will therefore need to decide whether the benefits of the scheme outweigh the significant adverse impact of the scheme.

6.2 Remains concerned that environmental impact has been underestimated and does not agree with the ecological calculation matrix conclusions. Cannot agree with the applicant's sentiment that there will be no net loss in biodiversity as a result of the scheme.

6.3 **Reading Friends of the Earth** have expanded their objections. Those points not covered in other areas of the reports are as follows:

6.4 Planned new development in East Reading (e.g. Forbury Industrial Park and redevelopment of Alpha House site) and identified future new development (prison site) all add to pressures on existing green spaces without offering new provision for informal open areas.

☐ It will present a less attractive impression to visitors to Reading arriving by boat up the Thames.

The applicant's Landscape Assessment – assessment against policies to protect designated landscape features - rates the effect of the scheme as Adverse and Permanent, but of only Moderate or Minor significance because in each case the affected area is only a small part of the wider protected area. The local impact on landscape at Kennet Mouth will be high.

☐ Because the affected area is at Kennet Mouth- an access point to the wider protected landscapes from the urban area – it will have a disproportionate effect on public enjoyment and use of the open space which is not acknowledged.

There is a fast-increasing body of scientific evidence noting the benefits of green space and the negative mental health effects of built up areas.

Noted, but sustainable travel also assists public health.

New developments and proposals for further developments in the area East of Reading mean further pressure on the existing green spaces (Kings Meadow, The Coal woodland and Broken Brow area). Theses existing spaces will have a higher relevance in the future. *Wider strategic benefits considered to outweigh this.*

6.5 An objector (using the title of **'Climate Change Centre Reading'**) advises that the Council must consider our fast-changing climate in every action/decision and such decisions need to be fully evaluated in resilience terms for the life of the development. In order to successfully adapt to these challenges, the Council needs to build on the strengths of the planning tradition and to adapt to the complexity of accelerating global change by delivering at scale at a more rapid pace. Concerned that this planning application is not part of a holistic solution. *The MRT scheme is a bold infrastructure project designed to deliver these types of environmental gains in accordance with adopted Corporate, planning and transport policies at national, regional and local levels and no further research is required.*

6.6 **Thames Valley Police, Crime Prevention Design Advisor (CPDA)** advises that the marsh/wetland under the viaduct is an innovative solution and could deter antisocial behaviour, providing it remains a wetland through the year. Points of concern:

- The lower areas and whether the area will dry out and encourage rough-sleeping, particularly the eastern end. Perhaps these lower areas need fencing.
- The Kennetmouth is an area known for fly-tipping, fires and other antisocial behaviour, including drug-dealing/using. If the wetland fails, graffiti will occur on the viaduct pillars. Believe a combination of appropriate 'target hardening' options could be incorporated.
- Generally supportive of the detailed landscaping amendments, including the location of benches, and seating areas at the Kennet mouth (adjacent to the moored boats) could be used to prevent gathering, and fires, as this maximises surveillance.

6.7 Overall, the CPDA cautiously welcomes the proposals. The main issue should be designing out these ASB issues. Agrees that the fall-back solution of fencing may be required, although there is the obvious litter-trap issue and seclusion which that may bring.

6.8 **Tesco Stores Ltd.** has written to express their disappointment with the amended plans and advises that none of their concerns have been fully resolved. These are listed as:

- Safety: MRT vehicles at the junction crossing over the path of vehicles egressing the store *this is a T-junction with a central right-turn filter and god visibility. The Highway Authority has no concerns*
- Operational impact of loss of parking *covered in main report*
- Details of construction impacts *to be covered in CMS/CEMP or otherwise directly as landowners*
- Detailed design issues, e.g. establishment of landscaping areas *see landscaping proposals and conditions to be attached, see elsewhere in this report.*
- Loss of land would restrict future development potential *not a planning concern, particularly given planning support in policies is for the proposal, not for development on the superstore site*
- Concern for consultation process *Tesco clearly aware of this process and has made their points clearly.*

6.9 **BBOWT** continues to object as it is considered that the ecological impacts have been understated in the application, it is not possible to fully mitigate for the ecological impacts, and the scheme will result in a clear net loss in biodiversity. Put simply, the scheme as currently proposed will be highly

damaging to Reading's local natural environment. The amended scheme will result in the permanent loss of part of the LWS and without any additional area of habitat buffer between the proposed bus lane and the remaining LWS, will result in disturbance and other degrading impacts to the habitat remaining within this part of the LWS. This is contrary to the reasons for designation of the LWS and other environmental protections for conserving this area. The amended scheme will continue to result in the permanent loss and degradation of priority habitats. Whilst we welcome the amended plans, which indicate that priority habitat loss will be reduced, the loss has still not been avoided. A substantial area of protected habitat will be lost.

6.10 The additional submitted documentation includes a biodiversity impact assessment which has been mis-applied as it downgrades the impacts and is overly-optimistic in the habitat mitigation which will be delivered. The NPPF requires new developments to achieve a net gain in biodiversity wherever possible. The proposed development does not show that a clear net gain in biodiversity has been demonstrated.

6.11 **Network Rail** has supplied a late objection in respect of a sliver of land near the Kennetmouth under their ownership. An update on this this objection is expected for your meeting.

6.12 **Caversham GLOBE** continues to object on the grounds of:

- Insufficient number of replacement trees, its effect on air quality and conflict with the Tree Strategy
- Wishes the three Horse Chestnut trees along the Thames Path by the western bank of the Kennetmouth to be retained in the proposals. *The Tree Officer has assessed the Horse Chestnut trees and concludes that one is dead and the other two would not be able to be retained due to location of the bridge.*
- The LWS should be protected from development
- Also objects to the loss of a very large and prominent hedge in Tesco Car park which consists of hundreds of mature hedging plants. This hedge has high public amenity and wildlife value, it provides screening of the railway and the hedge is used by numerous nesting birds.

7. ADDITIONAL OBJECTIONS RECEIVED

7.1 The following table sets out responses to objections which were either not covered in the main Agenda report, or have otherwise been received since the publication of that report. The further objections are discussed under the same groups as in the main Agenda report. At the time of writing, a total of 184 objections have been received to the application.

Environment

Loss of trees will adversely affect flooding. Trees reduce the risk of flooding, while the imposition of more built road structure in the area will increase it. No assessment of increased flood risk has been carried out.	*It is accepted that trees have a limited effect on flooding, but the flooding compensation more than mitigates for this. See above also.*
The revised planning application indicates that, if approved, it will result in the felling of at least 766 trees and only 77, or 10%, of the trees lost will be replaced. The trees which are identified represent 18 species of tree, although 200 trees to be felled are of an unstated species.	*See above.*
The Tree Schedule in the Arboricultural Impact Statement includes the estimated remaining life of each tree surveyed, and the trees to be felled include many healthy mature trees and many younger trees with 40+ years of remaining life, consequently the Arboricultural Impact Statement shows that the ERMRT will result in the loss of 23,565 years of tree life.	*New trees will provide longer lifetimes and in particular where otherwise unmanaged woodland may restrict the ability of trees to achieve maturity.*
The area is dangerous when the land floods. River moves at speed and trees collapse, this indicates that the bridge would be unstable.	*The bridge has been designed by the applicant in conjunction with a Civil Engineering company in relation to the flooding characteristics of the area.*
Reading Buses has now advised that the buses will burn a range of fuels, not just 'clean' fuels, which will exacerbate air quality.	*Bus operators, including Reading Buses, are moving towards less polluting fuels, such as compressed natural gas (CNG) as they update their fleets. Overall, the reduction in car journeys of the scheme will improve local air quality.*

Traffic and transport

Issue	***Officer response***
Suggested alternative: lobby hard for a stop for the Elizabeth Line at the park & ride facility at Thames Valley Park. This would have the added benefit of allowing commuters and others to travel east as well as west to Reading.	*Proposal to be considered on its merits*

The last data analysing traffic flow on London Road was in 2015 and showed falling numbers of traffic due to changing work and shopping trends. Therefore, not accepted that congestion is affecting economic prosperity in the area.	*Longer-term trend is increasing congestion, especially given future development eastwards*
Digital signalling on the railways line means that the council's assertion that the corridor is at capacity is untrue.	*Noted, but this will not materially affect the need for this scheme.*
No assessment is provided on the physical and mental health of local people. Some will stop using the affected area, some will make less use of it, and those who continue to use it will enjoy less benefit.	*The loss of usable open space will be minimal as a result of the proposal.*
Build a railway station for light rail at TVP instead	*Proposal to be considered on its merits*
Build a multistorey car park at TVP	*Proposal to be considered on its merits*
The proposal will encourage commuting	*Commuting levels and congestion will increase with or without the development. The MRT is a tool to encourage the sustainable growth of commuting.*
Harm to Grade II Listed Building is not justified	*This is explained in the main report. No physical harm would occur to the character or fabric of the structure and impact on its setting is considered to be minor.*
More services/traffic means a third Thames crossing is needed	*Not necessary and not the purpose of this application.*
Spend the funds on road maintenance instead	*This is not a planning matter, but these works come from separate funding sources.*
Concerns for wheel chair users	*Covered in main report. No diminution of use of the Thames Path and the MRT itself offers further opportunities for wheelchair users.*
Whilst the Thames Path is very successful in attracting commuters due to its beautiful, green, open space by the river as well as route, it certainly hasn't reached anywhere near its full capacity.	*The capacity of the Thames Path is not the key driver of this scheme.*
The lack of clarity in the planning applications and/or inaccurate reporting	*See discussion above.*

by the councils regarding the number of trees that will be felled for the ERMRT appears to have created confusion in the minds of Councillors when discussing the schemes, and therefore amongst the public who are invited to comment on the consultation.	
Concern for impact on navigation and height of bridge over the river. The EA requires 4.77m minimum	*8 metres is provided. EA's previous concern on navigation policy was on the Thames, not the height of the bride at the Kennetmouth.*

Procedural

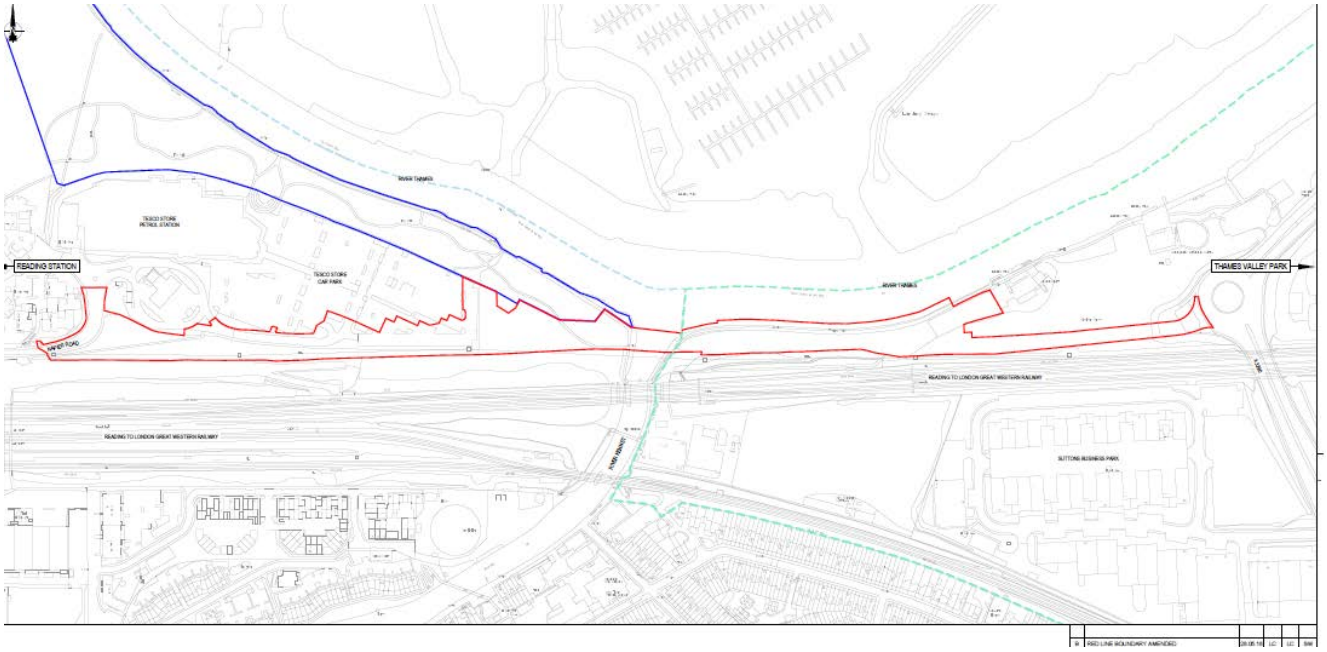
Disparity and lack of consistency in information from different sources represent misinformation to the public, local residents and consultees about the scheme's impact on traffic in east Reading and along the London Road.	*Complicated proposal. The applicant and officers have tried to present the scheme as clearly as possible.*
The Council has been secretive about this proposal and in particular the late amendments which have been made	*The main report explains the publicity undertaken on this planning application. The application was able to be reported to the Committee only once all the proposed changes were finalised to an acceptable level.*
The scheme is only for financial profit	*Unclear what the objection relates to so cannot respond*
The scheme is poor value for money	*Not a planning matter*

8. CORRECTIONS, CLARIFICATIONS AND AMENDMENTS

8.1 The very slightly adjusted (reduced) red line site boundary plan, as amended to address the current Network Rail objection is reproduced below. Further issues will be updated verbally at your meeting.

9. CONCLUSIONS

9.1 The officer recommendation is essentially the same as presented in the main Agenda report, with only very slight variations as set out in the Recommendation above.



28791/2009/CIV/002 B Site Location Plan

Plans:

Application Drawing	Issue Date
28791/2009/CIV/002 B – Site Location Plan	May 2018
28791/2009/CIV/001 – Existing Site Layout	June 2017
28791/2009/CIV/003 B – Proposed Site Block Plan Phase 1A	April 2018
28791/2009/CIV/016 A – Proposed Site Block Plan Phase 1B	April 2018
28791/2009/CIV/004 B – General Arrangement Phase 1A	April 2018
28791/2009/CIV/005 B – General Arrangement Phase 1B	April 2018
28791/2009/CIV/015 B – Proposed Site Context Including Proposed Park and Ride Development Phase 1A	April 2018
28791/2009/CIV/020 A – Proposed Site Context Including Proposed Park and Ride Development Phase 1B	April 2018
28791/2009/CIV/006 A – Proposed Longitudinal Section and Typical Cross Section	April 2018
28791/2009/CIV/007 B – Proposed Carriageway Contours Phase 1A	April 2018
28791/2009/CIV/017 A – Proposed Carriageway Contours Phase 1B	April 2018
28791/2009/CIV/013 A – Proposed Cross Sections	April 2018
28791/2009/CIV/008 B – Proposed Surface Water Drainage Strategy Phase 1A	April 2018

28791/2009/CIV/018 A – Proposed Surface Water Drainage Strategy Phase 1B	April 2018
28791/2009/CIV/009 B – Proposed Utility Diversions Phase 1A	April 2018
28791/2009/CIV/019 A – Proposed Utility Diversions Phase 1B	April 2018
28791/2009/CIV/011 A – Proposed Street Lighting Layout Phase 1A	April 2018
28791/2009/CIV/012 A – Proposed Street Lighting Layout Phase 1B	April 2018
28791/2009/CIV/021 – Proposed Site: Context Comparison Between Original Scheme and Revised Scheme	April 2018
28791/2009/CIV/022 – General Arrangement Phase 1B with originally submitted scheme overlaid	April 2018
28791/2003/SK310 P01 – Bridge and Viaduct Single Column Option General Arrangement	April 2018
28791/2003/SK321 P02 – Bridge and Viaduct Single Column Option East Approach	April 2018
28791/2003/SK322 P01 – Bridge and Viaduct Single Column Option East Approach	April 2018
28791/2003/SK323 P01 – Bridge and Viaduct Single Column Option Main Span	April 2018
28791/2003/SK324 P01 – Bridge and Viaduct Single Column Option: Cross Section Comparison	April 2018
28791/4001/013 P01 – Marginal Planting / Mooring Platforms	April 2018

Case Officer: Richard Eatough

TECHNICAL NOTE

Job Name: East Reading Mass Rapid Transit

Job No: 28791

Note No: Landscape/Trees 001

Date: 30/05/18

Prepared By: Natasha Jones (PBA), Mike Wood (Treework), Johanna Stewart (PBA) and Sarah Matthews (PBA)

Subject: **Response and Information on Tree Retention, Loss and Planting**

In response to concerns raised regarding tree loss and planting, this note sets provides:

1. a summary of overall landscape and ecological mitigation
2. a summary of total tree features, removal and planting and comparison of original and amended application
3. an explanation on tree feature removal and planting
4. a selection of photographs

1. Overall Landscape and Ecological Mitigation:

Overall landscape and ecological mitigation is set out in the Landscape and Ecological Strategy and ES Addendum.

In summary the primary mitigation measures and enhancement proposals, in relation to landscape aspects are:

- Retention of existing trees and vegetation where practicable (a greater number of trees have been identified for retention due to the removal of replacement car parking at Tesco's);
- Re-routing of services and utilities to the south of the proposed MRT, to enable replacement tree planting to take place to the north of the MRT;
- Height of the proposed bridge element to correspond to that of the Listed railway and accommodation bridge;
- Low-level parapet lighting which removes the need for lighting columns;
- Planting of new native trees and shrubs;
- Selective management and re-planting of the Coal Woodland, this includes new individual trees and also the new woodland shrub and understorey planting;
- Retention and enhancement / extension of the existing area of Acid Grassland at the western end of the MRT East route, with scattered new tree planting to create a glade with dappled shade;

DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
Job No/Brief/TN001	-	30.05.18	As above	Treeworks	Treeworks	SM

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- Mooring enhancement with associated new marginal shelf and riverside planting in front of the existing concrete retaining wall at the edge of the River Thames (east of Kennet Mouth);
- Creation of tussocky grassland between the River Thames and the MRT, and wildflower hydro-seeded grassland on the MRT embankment, marshy areas created beneath the viaduct and new marshy planting including Loddon Lily;
- One-column viaduct design and viaduct narrowed by 1m to the east of the River Kennet, with narrowed foundations;
- Relocation and repair of the existing mosaic, provision of new seating and storyboards in public realm area (public information);
- Willow tree T88 east of the Kennet Mouth retained and additional 3 trees retained to the east of the River Kennet.
- High-quality biodiverse habitat will be installed within the application site, to include:

  On-site

  - Habitats on-site to be retained and / or enhanced though inclusion of native and species rich planting, to be managed for biodiversity. Habitat types to include: acid grassland, woodland, including native understorey planting, tussocky grassland and trees.
  - Installation of a marginal shelf to provide a naturalised river edge of value to biodiversity.

  The Coal, Kennet Mouth and Kings Meadow East LWS:

  - Removal of invasive, non-native plant species (e.g. Himalayan balsam Impatiens glandulifera and butterfly bush):
  - Selective tree management; and
  - Native understorey planting, this includes new individual trees and also the new woodland shrub and understorey planting.

  King's Meadow and Hills Meadow:

  - Planting of four black poplar Populus nigra within King's Meadow;
  - Rotational management to reduce invasive species within the belt of vegetation at the north of King's Meadow;
  - A one-off project to resolve tree and undergrowth management, followed by rotational annual maintenance of the belt of vegetation at the south of Hills Meadow; and
  - Installation of bird and bat boxes within Hills Meadow and / or the off-site portion of The Coal, Kennet Mouth and Kings Meadow East LWS (6 x bird boxes, 6 x bat boxes (general) and 1 x bat box (hibernation)).

This a suite of ecological mitigation, compensation and enhancement measures will enable:

- compliance with planning policy requirements of no net loss in biodiversity and net gain where possible; and
- compliance with relevant wildlife legislation.

A detailed Ecology Mitigation Strategy will be secured by planning condition. This will include appropriate working methods and timings, as well as detailed mitigation strategies for reptiles and bats.

Ecology Comment: Once operational, habitat associated with the proposed development will mature into biodiverse habitat of value to protected and notable species, as well as being of intrinsic

ecological value in its own right. **The proposed development presents the opportunity to deliver a net gain in biodiversity, as demonstrated in the Biodiversity Matrix Calculation.**

2. Summary of Total Tree Features, Removal and Planting and Comparison of Original and Amended Application

The revised scheme results in the removal of 36 individual trees (20B, 15C & 1U) and planting 81 individual trees. The removal of 22 tree groups (calculated as 0.34ha of tree groups) and planting of 0.17 ha of understorey and hedgerow, plus the enhancement of existing woodland and scrub habitat (totalling 3.65 ha) through improved management as part of the ecological mitigation and enhancement.

Table 1 – Summary of Tree Feature Removal and Planting for the Revised Scheme

Tree Features	Removal	Planting
Individual Trees	36 individual trees (20B, 15C & 1U)	81 individual trees
Tree Groups	22 tree groups (0.34ha)	0.17 ha of understorey and hedgerow planting, plus the enhancement of 3.65 ha of existing woodland and scrub habitat

The detailed numbers of tree features are summarised below for the baseline, original submission scheme and revised scheme and Additional Tree Features Retained and Comparison with Original Scheme is summarised in Table 5.

Surveyed (baseline):

128 individual trees and 65 tree groups (4 are category A, 88 are category B, 98 are category C, and 3 are category U).

Following the original submission and prior to the current submission 4 trees and 1 tree group were removed by neighbouring land managers (e.g. Network Rail)

This resulted in a total of 124 trees and 64 tree groups (4 are category A, 86 are category B, 95 are category C, and 3 are category U).

Original Submission Removal:

83 (53 individual trees/30 tree groups) - see categories in Table 2.

Table 2 – BS Category of Tree Features to be Removed in Original Scheme (extracted from Original Arboricultural Impact Assessment, AIA)

Category A Trees/Groups	Category B Trees/Groups	Category C Trees/Groups	Category U Trees/Groups
T86	T37, T63, T74, T76, T77, T78, T81, T82, T83, T84, T85, T88, T91, T101, T114, T117, T122, T127, T128, T129, T164, T165, T166, T172, T178, T185, T186, G42, G47, G58, G62, *G97, *G105, *G107, G115, *G168, *G187 Note: G2 and G4 are outside of the MRT site boundary and will be lost due to the P&R site only	T10, T46, T56, T59, T60, T61, T67, T79, T80, T89, T90, T93, T102, T121, T167, T171, T175, T183, T184, T191, *G11, G12, G45, G48, G49, G50, G68, G75, G92, G103, *G106, G119, G116, *G174, G176, G177, G190 Note: T63, T64, T65 and G66 are at the boundary / partially within the MRT East site boundary, however are also being lost due to the P&R proposals.	T136, T162
1	34 + 5 part removal of groups. * indicates part removal	38 + 3 part removal of groups * indicates part removal	2

Original Submission Planting:

75 new trees to be planted within Redline, and additional 12 new trees to be planted in The Coal woodland.
Total of 87 total proposed individual trees

Amended Submission Removal:

58 tree features to be removed (see **Appendix A**):

- 36 individual trees (see categories in Table 3 below)
- 22 tree groups (calculated as 0.34ha of tree groups (as defined above), as set out Table 4:

Table 3 – BS Category of Tree Features to be Removed (extracted from Revised Arboricultural Impact Assessment, AIA)

Category A Trees/Groups	Category B Trees/Groups	Category C Trees/Groups	Category U Trees/Groups
None	G42, G47, T63, T78, T81 T82, T83, T84, T85, T91, T114, G115, T117, T122, T127, T128, T129, T164, T165, G168, T172, T178, T185, T186, G187	G9, T10, G11, G12, G14, G15 G45, T46, H48, H49, G50, T59, T60, T61, S64, T89, T90, G103, G106, G116, G119, T121, T167 T171, G174, T175, G176, G177 S183, T184, G190, T191	T163
0	**25**	**32**	**1**

Table 4 – Proportion and Area of Tree Groups to be Removed

Group (G) / Hedge(H) Number	Percentage of group to be removed	Area (ha) to be removed
G9	16%	0.018
G11	70%	0.001
G12	55%	0.011
G14	7.70%	0.056
G15	1.50%	0.031
G42	46%	0.039
G45	23%	0.018
G47	100%	0.001
H48	100%	0.002
H49	100%	0.014
G50	100%	0.012
G103	100%	0.029
G106	13%	0.025
G115	47%	0.026
G116	100%	0.025
G119	60%	0.009
G168	100%	0.005
G174	61%	0.003
G176	100%	0.004
G177	100%	0.012
G187	100%	0.003
G190	100%	0.001
Total Area (ha) to be removed		0.345

Amended Submission Planting and Tree Feature Retention

The proposals include the planting of 81 new individual trees (69 new trees within redline, additional 8 new trees in The Coal woodland, plus 4 Black Poplars offsite). The Landscape and Ecology Strategy provides details on Planting.

We propose 0.16 ha of new understorey planting and 0.01 ha of new hedgerow planting. This totals 0.17 ha of understorey and hedgerow planting, plus as part of the ecological mitigation and enhancement, woodland and scrub habitat both on and off-site (totalling 3.65 ha) will be enhanced through improved management.

Table 5 – Categories of Additional Tree Features Retained and Comparison with Original Scheme

	Original Scheme No. Tree Features to be Removed		Revised Scheme No. Tree Features to be Removed		Total Additional Tree Features Retained			
BS5837:2012 Retention Category	Trees	Groups	Trees	Groups	Trees	Groups	Total Features	Notes
A	1	0	0	0	1	0	1	
B	28	12	20	5	8	7	15	OS included 1 Tree & 2 Groups in P&R CS includes 1 tree in P&R
C	22	18	15	17	7	1	8	OS included 1 Tree & 1 Groups in P&R CS includes 1 tree in P&R
U	2	0	1	0	1	0	1	
Total	53	30	36	22	17	8	25	
	83		58		25			

3. Explanation on Tree Feature Removal

A group of trees can be described as a cohesive arboricultural or landscape feature, comprising the same or mixed species and age ranges e.g. a hedge, woodland or screen. Tree groups may be made up of the same or mixed species and age ranges.

A tree in a group that is notably different, such as an old Oak in a young woodland for example, would be recorded as an individual tree and not part of the group.

Individual trees within tree groups are less valuable, as they do not provide significant individual value or amenity (landscape, arboricultural or ecological) as a single entity.

Arboricultural Comment:

Many of the trees in tree groups that are proposed for removal to facilitate the project are clearly in need of management, such as thinning or selective removal, due to neglect.

In most cases, the project proposals provide an excellent opportunity to replace, manage and mitigate the low-quality tree groups which are proposed for removal.

New tree planting will provide future amenity, landscape and ecological value over and above the current setting, through a range of suitably selected species, appropriate for the space and riverside setting.

Landscape Comment:

Replacement individual trees, of a suitable species for the riverside location, are proposed to mitigate the loss of individual trees.

Replacement is made through the proposed 'hedgerow planting', and the proposed 'woodland shrub and understorey planting' to mitigate loss of 'tree groups' or parts of tree groups.