Stafferton Way Link Road
Planning Application

DOC 002d Environmental Statement - Volume 4 - Non-Technical Summary

January 2014
Stafferton Way Link Road

Environmental Statement

Non-Technical Summary (NTS)

On behalf of Royal Borough of Windsor and Maidenhead
Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

© Peter Brett Associates LLP 2014
Contents

Introduction
   Context and Contact Details

The Proposed Scheme
   The Proposed Scheme
   The Application Sites
   Sensitive Receptors potentially affected by the Scheme

Alternatives

The Likely Significant Effects
   Air Quality
   Noise & Vibration
   Transport & Access
   Water Resources (Flood Risk, Surface Water and Groundwater)
   Ground Conditions & Contamination
   Ecology
   Landscape, Visual Impacts & Lighting
   Heritage Assets
   Socio-economic Impacts
   Cumulative Effects & Impact Interactions

Figures

Figure 1: Location of the proposed road works
Figure 2: The Proposed Scheme
Figure 3: Bridge Alignment Options
Figure 4: Noise Barrier Options
Figure 5: Archway Options
Figure 6: Chauntry Road/Oldfield Road Preferred Scheme (Part B)
Figure 7: Part C – Oldfield Road/Bridge Road Junction
Figure 8: Part A – Stafferton Way Link and Bray Road Roundabout

Tables

Table 1.1: Western Route
Table 1.2: Eastern Route (New Link)
Introduction

Context and Contact Details

The Royal Borough of Windsor and Maidenhead (RBWM) is applying for full planning permission for a road scheme (hereinafter "the Scheme") in the town centre of Maidenhead, Berkshire.

The scheme includes a 250m road extension of Stafferton Way to the east, including a bridge linking to Oldfield road. Further, a mini-roundabout at the A4/ Oldfield Road junction, a roundabout at the Oldfield Road/Chauntry Road junction and the opening up of the eastern arch of the railway bridge crossing Oldfield Road are proposed to improve the traffic flow in this area.

The extension of Stafferton Way will create a circular route to the south-east of Maidenhead town centre by linking the A308 and the A4. This new route will help to relief congestion in Maidenhead town centre and at the rail station.

This document provides a summary (in non-technical language) of the key impacts identified during the Environmental Impact Assessment (EIA) carried out to support the planning application for proposed scheme.

To obtain further electronic copies of this Non-Technical Summary free of charge, please contact:

Peter Brett Associates
Caversham Bridge House
Waterman Place

Reading RG 1 8DN

Phone: 0118 950 0761
E-mail: info@peterbrett.com

Figure 1: Location of the proposed road works
The Proposed Scheme

The proposed route of the Link Road comprises six sections – three of which require full planning permission. Accordingly, the planning application submission comprises three full planning applications for the following sections of the proposed Link Road:

A) Full planning application for proposed eastward extension of Stafferton Way (Part A of Link Road), including the erection of a new bridge over Moor Cut with associated works to the towpath and river, formation of new junction between Stafferton Way, Forlease Road and Green Lane, formation of a new roundabout junction between Stafferton Way, Oldfield Road (B3028) and Bray Road, and associated landscaping.

B) Full planning application for new three-arm roundabout at the junction of Oldfield Road (B3028) and Chauntry Road, and opening-up of eastern railway arch (Part B of Link Road).

C) Full planning application for new four-arm roundabout at the junction of Bridge Road (A4), Oldfield Road (B3028) and Lassell Gardens (Part C of Link Road).

The extension of Stafferton Way will be a single carriage, two-way road of approximately 250m length. The road includes a new bridge spanning over the Moor Cut at 2.1m above the level of the stream. The Stafferton Way extension will cross Green Lane and will link to Oldfield Road, Forlease Road and Bray Road by means of a roundabout. There will also be improvements to existing footpath/cycleway’s including ramp access between the level of the road and the Moor Cut towpath.

The bridge will be constructed of concrete with supporting steel beams and grey or black painted steel parapets. Acoustic fencing will be made of slatted timber panels. An area of land to the south of the new bridge will be landscaped post construction into a wetland area to provide additional marginal habitat adjacent to Moor Cut.

The Application Sites

Stafferton Way is an access road on an east – west axis and provides access to large commercial units on Maidenhead Retail Park. The road is accessible at the western end by a roundabout junction on the A308. At the eastern end the road terminates at a stub a few meters short of the Moor Cut flood relief channel. The stub is currently being used as a builder’s yard. The relief channel is surrounded by trees and an informal footpath runs along the northern side. To the northern side of the Moor Cut there is a corridor of open grass land surrounded by residential dwellings along Green Lane and Forlease Road. The grassland has been preserved by RBWM since the 1960s with the intention of eventually extending Stafferton Way. At the most narrow stretch, the application site is approximately 10m wide with the nearest residential dwelling at a distance of less than 8m.

Sensitive Receptors potentially affected by the Scheme

The residents of properties adjacent to Stafferton Way, Greenfields, Green Lane, Forlease Road, Bray Road, Oldfield Road, Chauntry Lane, Oldacres, The Fathingales, Kingsquarter and Bridge Road, are all potentially affected to some degree by the proposed scheme. Effects on commercial properties on Stafferton Way and Howarth Road as well users of public transport and roads including cyclists and pedestrians in and around the applications sites have also been considered. In addition, buried archaeological remains, protected species, notable trees and water resources could also potentially be affected.
Figure 2: The Proposed Scheme
Alternatives

The following outlines some alternative designs and locations that were considered during the planning of the scheme.

RBWM had first secured planning permission for a link road in 1996. The scheme has since been revised twice. No alternatives to the extension of Stafferton Way were identified to relief congestions in the town centre due to the constraints of staying within defined areas.

An alternative route to the eastern arm of the link road was proposed within the consented scheme in 1996. At that time traffic would of t travelled northwards from the junction with Bray Road along Forlease Road to the junction with Saint Cloud Way. The proposal utilises Oldfield Road as the preferred option to create a circulatory route to the east that does not draw traffic back into the town centre.

Design reviews took place throughout the process of the assessment to optimise the design of the scheme. Discussed design alternatives regarding the bridge concerned its height, the navigation on Moor Cut, access to the towpath as well as the bridge retention structures and the allocation of noise barriers.

The images to the right illustrate graphically some of the options and the options for the noise barriers.
Further design iterations include the consideration of the option for considering which archway to utilise at the junction of Chauntry Road and Oldfield Road as defined below, the preferred scheme is the retention of the central arch for northbound traffic and opening up the eastern arch for southbound traffic.

In addition the archway, the type of junction at this location has been assessed looking at “do minimum” schemes, roundabouts, traffic signals and tidal way operations. “A mini roundabout connecting to the central and eastern arch at this point is the Council’s preferred scheme with the western arch used for improved pedestrian access as defined below.
The Likely Significant Effects

Air Quality

The assessment of the effects on air quality concludes that the proposed link road will not exceed any of the relevant air quality standards along the proposed route. Due to the reduced number of vehicles using the route through the town centre, there will be a decrease in pollutant concentrations in these areas.

The assessment highlights a number of mitigation measures that can be used during construction to ensure that effects on air quality are minimised. These measures include the implementation of a Dust Management Plan, appropriate site management, and waste management. If the mitigation measures are put in place, the effects associated with the construction phase will not be significant.

Noise & Vibration

The noise and vibration assessment identifies the residential properties in the vicinity as the main sensitive receptors. Existing noise levels across the application sites are currently dominated by road traffic on the surrounding road network.

The construction of the new section of Stafferton Way between the existing Stafferton Way and Oldfield Road will introduce noise to the area during construction and operation. Any effects during construction will be of a temporary nature and the work would be undertaken using best practical means to minimise noise and vibration.

Properties in the immediate vicinity of the new section of road will be subject to increases in noise which are considered to be permanent adverse effects of moderate to major significance. The use of 3m tall acoustic fences on both sides of the new section of road will minimise the noise increases, but the need to provide access to properties means that some properties will be exposed to increases in noise and one property is expected to qualify for noise insulation.

The new road forms part of a circular route around Maidenhead and will increase traffic on Oldfield Road, which will give rise to adverse effects in the long term of minor significance at properties fronting onto Oldfield Road, or on side roads close to Oldfield Road.

Transport & Access

A range of transport modelling assessment tools have been used to assess the impacts of the proposed development.

At present there is significant traffic volumes in Maidenhead town centre during peak hours on certain roads (A308 and A4). This generates traffic queues and congestion which build up on the approaches to the town impacted partly by the existing restraints such as the bridge.

The assessment shows that if the proposed scheme does not go ahead, traffic volumes on roads within/around Maidenhead will remain high and journey times will also deteriorate.

It is predicted that the new scheme will result in traffic increases on some roads, coupled with traffic flow decreases on other roads. Journey times around Maidenhead on the A308/A4 will improve with the proposed scheme in place.

The anticipated journey times without and with the Stafferton Way as presented in the tables below.
Table 1.1: Western Route

<table>
<thead>
<tr>
<th></th>
<th>Journey Times</th>
<th>Journey Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Northbound</td>
<td>Southbound</td>
</tr>
<tr>
<td>AM</td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>PM</td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>2016 Without Stafferton Way Link</td>
<td>6m 42s</td>
<td>5m 7s</td>
</tr>
<tr>
<td>2016 With Stafferton Way Link</td>
<td>4m 47s</td>
<td>4m 48s</td>
</tr>
<tr>
<td>2031 Without Stafferton Way Link</td>
<td>7m 26s</td>
<td>7m 3s</td>
</tr>
<tr>
<td>2031 With Stafferton Way Link</td>
<td>5m 29s</td>
<td>6m 44s</td>
</tr>
</tbody>
</table>

Table 1.2: Eastern Route (New Link)

<table>
<thead>
<tr>
<th></th>
<th>Journey Times</th>
<th>Journey Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eastbound</td>
<td>Westbound</td>
</tr>
<tr>
<td>AM</td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>PM</td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>2016 With Stafferton Way Link</td>
<td>2m 30s</td>
<td>2m 5s</td>
</tr>
<tr>
<td>2031 With Stafferton Way Link</td>
<td>2m 37s</td>
<td>2m 9s</td>
</tr>
</tbody>
</table>
Environmental Statement – Non-Technical Summary
Stafferton Way Link Road

Water Resources (Flood Risk, Surface Water and Groundwater)

The scheme has been assessed considering its impact on flooding of the adjacent Moor Cut channel, surface water drainage & ground water. The assessment was based on information provided by the Environment Agency and the Royal Borough of Windsor and Maidenhead as well as Thames Water. Data of historical flooding, potential flood sources, climate change effects and proposed developments (in particular the proposed Maidenhead Waterway Restoration) in the town centre were also included in the assessment of potential effects.

Based on information supplied by the Environment Agency, the proposal is mainly located in an area with medium probability of flooding (between 1% and 0.1% per annum Flood Zone 2). However, the scheme spans over Moor Cut and is partly located in an area identified as being at higher risk of river flooding (Zone 3, probability of flooding higher than 1% per annum).

With no mitigation there are anticipated effects including a slightly increased risk of river flooding arising from the loss of floodplain storage and a potential increase in the peak surface water discharge into the watercourses due to an increase in the impermeable area. Flooding would mainly affect road users but also properties along the Moor Cut flood plain adjacent to the scheme.

The worst case flood modelling for the 1 in 100 year design event demonstrates that only the rear gardens of properties on Forlease Road could be affected. The worst case increase without mitigation is 145mm within the rear gardens. When considering the impact of climate change, there is no impact due to the development. This increase at the 100 year event occurs due to the disruption of an overland flow route by the bridge approach embankment. The loss of floodplain storage and changes to the overland flow route will be mitigated by the provision of compensatory storage below the embankments and ground lowering adjacent to the bridge.

The increase in highway run-off will be mitigated by the provision of below ground attenuation storage with controlled discharges to either watercourse or sewer. Contamination of ground water during construction will be avoided through the implementation of a Construction Environmental Management Plan (CEMP). The risk of groundwater contamination is therefore considered insignificant.

The risk of river and surface water flooding to road users will be mitigated through the elaboration of an Emergency Plan in case of extreme flooding, setting out strategies and actions such as advance warning measures, road closures and temporary relocation of people to land outside the flood plain. The impact on flood risk in the wider area will be mitigated through design measures such as providing compensation storage below the embankments, local changes to the river bank levels adjacent to the bridge and including attenuation storage within the surface water drainage system.

With the implementation of the described mitigation measures, the adverse effects are considered insignificant. The risk of flooding will further be mitigated once the Maidenhead Waterways project is completed.
Ground Conditions & Contamination

The baseline condition of the site has been drawn from available geological data of the site and historical land uses on the site.

The known geology on the site consists of River Terrace Deposits and the Seaford Chalk Formation, with alluvium expected to be encountered along the length of Oldfield Road to the north of the existing railway.

The only potential issue with regards to ground contamination is the likely presence of made ground across the site due to known current and historic Industrial and commercial land uses on and adjacent to the site.

Due to the low risk associated with the made ground the only two mitigation measures required for the site are: to spray stockpiles preventing air borne contamination and appropriate concrete design preventing deleterious effects on building materials.

Overall the only residual effect due to ground conditions is a minor adverse effect on site workers during construction, which can be managed using good construction practice.

Ecology

A range of ecological surveys have been undertaken to assess the value of the site. Overall, the site is deemed to be of low ecological value.

The assessment has identified the running water of the Moor Cut and York Stream and the trees and woodland along the railway line as the most valuable habitats within the site. Certain ecologically valuable receptors (including bats, birds and otters) have the potential to be present.

It was found that there were no protected or notable species of ecological value at the site. The assessment identified that certain fish and insect species may be present, but these were not considered to be of ecological importance.

The assessment shows that measures have been included in the scheme to mitigate against ecological effects and contribute to the ecological enhancement of the site. Taking these measures into account, it is concluded that no adverse ecological effects are expected during the construction or operation of the scheme.
Landscape, Visual Impacts & Lighting

A desktop study and field visit was carried out to identify the most sensitive landscape and visual receptors, and considered their ability to accommodate the change proposed.

The Site does not fall within any areas designated at a statutory or non-statutory level for landscape protection purposes, a conservation area or any other cultural heritage purposes. There are no Listed Buildings or Scheduled Monuments or Tree protection orders within the site. The only environmental designation associated with the site is a Wildlife Heritage Site that the bridge part of the proposed scheme crosses.

The visual impacts are restricted by the low laying nature of the site and the screening effect of adjacent trees and buildings. The visual impacts are due to the likely increased traffic, construction equipment during the period of construction, loss of mature vegetation and new lighting along connecting roads.

There is likely to be an impact on the landscape quality due to the increase in infrastructure, particularly in the Moor Cut / Bray Road area.

Two viewpoints during the study were considered to be likely to experience a significant visual effect; these were the Green Way and NCN 4 as the new replanted vegetation establishes itself and the residents with ground floor views of acoustic fencing at the back of their properties.

A possible solution to the visual impact of the acoustic fencing is to use pre-grown ivy fencing to shield it from view at low level.

Heritage Assets

The heritage assessment has identified four heritage assets within the site which have the potential to be affected by the proposed development. These assets are: prehistoric paleochannels, Mesolithic artefacts, the Cookham to Bray Canal and the Oldfield Road Railway Viaduct.

Any impact on these receptors will occur during the construction phase.

Mitigation measures to reduce the effect on heritage assets during the construction works include the requirement to monitor groundworks and record any archaeological features exposed.

With the implementation of mitigation measures, the long-lasting effects of the proposed development on the heritage assets will be negligible. All effects on heritage assets identified during construction will be indirect, temporary and reversible.
Socio-economic Impacts

The scheme has been assessed regarding its socio-economic impacts in terms of economic growth, safety, traffic relief, segregation etc.

The assessment was based on statistical data on employment and demographics obtained from the Official National Statistics (ONS) as well as data on retail capacity, employment space and the transport plan, traffic models and community facilities within the catchment area of Maidenhead town centre provided by RBWM.

In terms of socio-economic aspects, the scheme leads to several beneficial effects. RBWM has identified Stafferton Way and the surrounding employment space as an opportunity growth area as part of the wider Area Action Plan. As such, the scheme will contribute to the creation of 1,127 construction jobs. Stafferton Way will be a key linkage route and an area of major residential and office led development. The assessment also demonstrates that improved traffic can reduce travel times and hence lead to productivity gains for businesses and transport providers due to improved accessibility of shops, restaurants and offices located in the town centre.

Indirect, beneficial effects of the scheme include new, alternative routes for public transport and walking transport services to train station may encourage a shift in travel to work patterns. Eased congestion in the town centre further contributes to improved health and well-being of residents.

Cumulative Effects & Impact Interactions

The EIA Regulations require EIAs to consider the effects of the development in question alongside other major local developments to identify potential cumulative effects. As such, the scheme has been designed to account for the cumulative effects of the Maidenhead Waterways scheme.

The EIA has provided an assessment of impact interactions, i.e. the synergistic effect of environmental receptors being affected by more than one effect. This has considered impact interactions during the construction and operational phases of the project.

During the construction phase the combined effects of the proposed development will have a temporary minor adverse effect upon the local community. This can be managed through appropriate and sensitive management, including the use of phasing and the deployment of control measures that will be specified in the Code of Construction Practice.

Overall during the operation phase the combined effects of the Scheme will have a range of Minor to Major benefits for the town and local community as a result of an enhanced landscape and quality of the development, which will deliver an overall beneficial effect for transport, landscape and visual amenity and ecology.