

Cross Valley Link Road

Environmental Statement

Non-Technical Summary

June 2006



Summary

The proposal to construct the CVLR has been the subject of an Environmental Assessment in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and Volume 11 of the Highways Agency's Design Manual for Roads and Bridges.

A specialist assessment has been undertaken for each of the key environmental topic areas and, for any identified significant negative impacts, mitigation measures have been provided (or recommended) either to reduce or to remove adverse impacts, where possible. In addition, the preparation of the Environmental Statement has led to the identification of opportunities to improve the design and construction methods of the Proposed Scheme.

Further details of all issues assessed are provided in the main CVLR Environmental Statement.

movements, the length of the construction programme, and the site working hours. The preparation of a Contractor's Environmental Management Plan will ensure that construction works do not adversely affect the environment.

Cumulative effects

Cumulative effects assessment is the examination of the proposed development together with potential impacts from other adjacent proposals. The cumulative effects of the proposed development were considered throughout the EIA process and, as such, many of the impacts highlighted have already been incorporated in the mitigation measures proposed.

A further assessment was made of the impacts from other proposed developments likely to occur within 2 kilometres of the application site. These impacts were considered in a strategic context, allowing the identification of direct, cumulative, indirect and secondary effects on the sensitive receptors previously identified in the CVLR Environmental Impact Assessment.

As these effects are not within the control of the Applicant, it will not be possible for the Applicant to provide mitigation measures against them. Instead, recommendations have been provided to help the West Northamptonshire Development Corporation ensure that these strategic effects are resolved.

Environmental impact tables

The DMRB assessment guidelines stipulate that Environmental Impact Tables must be prepared to summarise the main likely and indirect impacts of a road scheme, taking into account any proposed mitigation measures.

These Environmental Impact Tables are split into the following appraisal groups: Local people and their Communities; Travellers; The Cultural and Natural Environment; and Policies and Plans.

Carbon dioxide emissions (a key greenhouse gas) within the application area are forecast to increase by 11% by 2023 due to the CVLR. Mitigating against the impact of traffic emissions on regional air quality and climate change is a national problem that requires a combined effort at local, regional and national level.

Public access and movement

An assessment was undertaken of potential impacts on the community use and enjoyment of Public Right of Ways. The application site severs three Public Right of Ways, including Camp Lane and the Nene Way.

For public safety reasons, the three Public Rights of Way severed by the CVLR will be temporarily closed during the construction works. All three paths will be realigned to provide safe road crossing points suitable for walkers, cyclists and horse-riders. Realigned sections will also be landscaped to minimise visual impacts of the new road.

Vehicle travellers

The vehicle traveller assessment considers the effects of the proposed development on driver stress through the comparison of selected indicators, including Driver Frustration, Fear of Accidents, Driver Uncertainty, and Views from the Road. The assessment revealed the proposed development to have a beneficial effect on driver stress levels, by providing a quicker, safer, more direct and aesthetically pleasing route between the residential and employment areas proposed on either side of the River Nene floodplain.

Disruption due to construction

The effects of construction operations have been assessed with regard to their impacts on the local community and ecological environment. These include the source and type of construction materials, the number and duration of heavy goods vehicle

The surface level soils along the road corridor do not pose a risk to human health or the environment. No remedial works are required in respect of contaminants within the surface level soils. However, the soils and geology below the Proposed Scheme have been found to contain elevated concentrations of naturally occurring arsenic, chromium and nickel. Any soils excavated from the site should not be reused in areas which are currently, or likely, to be developed for housing, rural allotments or schools, without further testing.

Noise and vibration

The proposed development has been assessed with regard to construction noise, road traffic noise and operational noise from within the site affecting existing and proposed sensitive receptors. Noise levels were measured using standard methods at identified sensitive receptors.

Due to the minimum 300 metre separation between the site application boundary and the nearest sensitive receptor, construction noise and vibration emissions are considered unlikely to be significant. Although no existing receptors were identified within 300 metres of the Proposed Scheme, slight to moderate increases in traffic noise were identified at residential properties adjacent to the "CVLR Southern Section" road scheme. These increases did not exceed 5dB(A) and were not considered to be significant.

Air quality

The air quality assessment has looked at the potential for impacts to occur during the construction and operational phases of the Proposed Scheme. During construction, temporary impacts could occur due to emission of air pollutants and dust. During operation, air quality and regional pollution impacts, including contribution to climate change, could occur due to traffic emissions. Existing air quality in the vicinity of the Proposed Scheme has been determined through a review of available air quality data and is currently considered to be good, with concentrations below national air quality objectives.

The dominant source of dust during the construction period is likely to be the haul roads and earthworks. With the application of good contract management measures, the risk of construction activities giving rise to dust levels that would result in a nuisance is low. Adverse impacts will be confined to the construction period, and are unlikely to occur more than a few dozen metres from the construction activity. Once the construction has been completed, it is not anticipated that there will be any significant releases of dust or residual effects.

Concentrations of key traffic-related pollutants have been estimated at sensitive locations across the area, as has the net change in public exposure to these pollutants. The results show that national air quality objectives for the protection of human health will not be exceeded in the vicinity of the Proposed Scheme. Overall, there will be a reduced exposure and, therefore, a general improvement in air quality due to the CVLR.

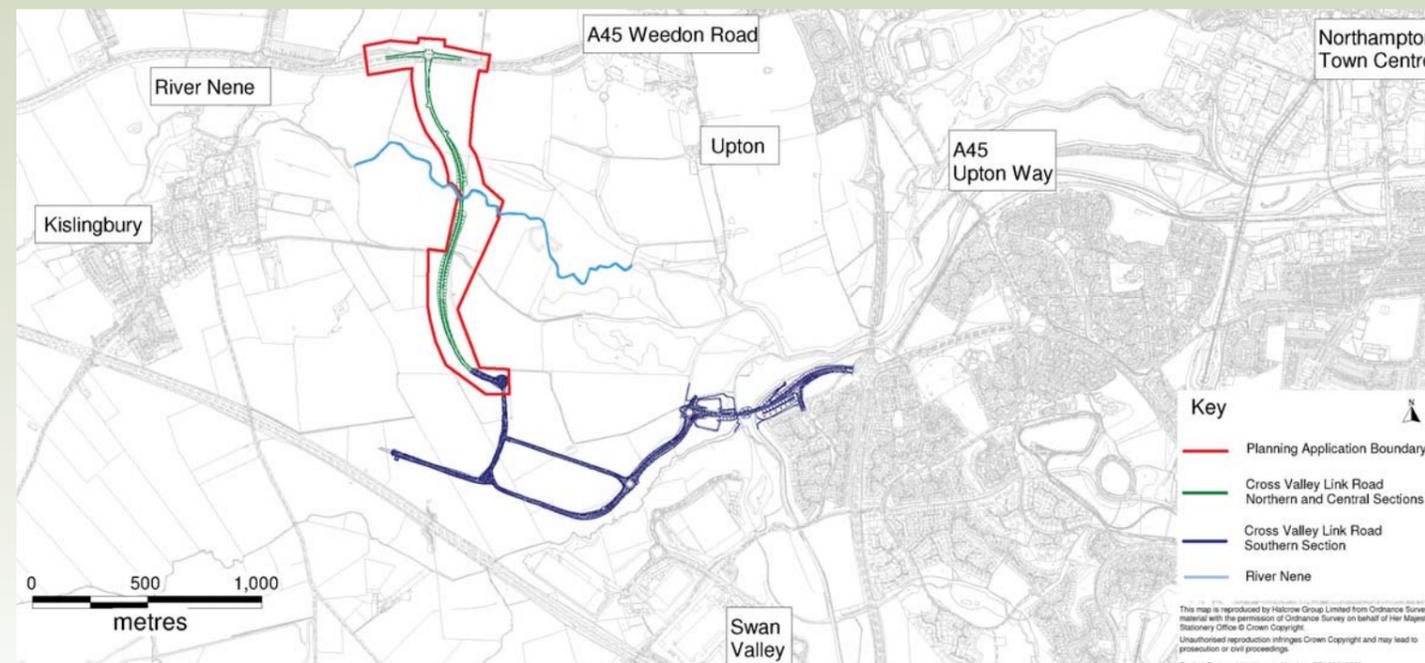


Figure 1 - Site Location

Introduction

An application for detailed planning permission has been submitted to Northampton Borough Council by English Partnerships and Northamptonshire County Council for a proposed Cross Valley Link Road (CVLR) to be constructed on the western outskirts of Northampton, across the River Nene floodplain.

If approved, it will connect with the previously approved but, as yet, unbuilt "CVLR Southern Section" road scheme, to provide a complete road link between the A45 Weedon Road and A45 Upton Way/ Danes Camp Way roundabout.

Halcrow Group Ltd has undertaken an Environmental Assessment of the scheme in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and the Design Manual for Roads and Bridges (DMRB). This non-technical summary briefly describes the proposal and summarises the Environmental Statement.

The site and surrounding area

The application site is approximately 7.8 hectares in area and is located on the western edge of Northampton. The proposed road corridor is approximately 1.45 kilometres in length and traverses the River Nene floodplain. The application site, and its surroundings, are currently managed as farmland, although there are separate proposals for new residential, commercial and industrial land to be developed at the northern and southern extremities of the proposed road.

The proposed scheme

The proposed CVLR is key infrastructure for the Northampton South West District and is identified in both the Northampton Borough Local Plan and the Milton Keynes South Midlands Sub-Regional Strategy (2005). The CVLR will provide a direct link between the residential and employment land being developed on either side of the River Nene floodplain.

The CVLR links Upton Park / Upton Lodge and the Pineham Employment Area, and will relieve congestion on the A45. It provides an additional link across the River Nene floodplain and incorporates footpaths and cycleways to ensure safe crossings for all travellers.

The carriageway will be 7.3m in width and has been designed to a 40mph speed limit. It will incorporate a three-span bridge across the River Nene (which requires the minor realignment of a 150 metre length of the River Nene), high quality directional lighting to respect the wildlife of the site and surroundings, a sustainable drainage system to prevent flooding and minimise pollution, and extensive landscaping to minimise the visual impact of the road embankments.

Alternatives to development

A number of alternatives were considered, both in terms of alignment and engineering design. Based upon extensive stakeholder workshops, statutory agency consultation and public consultation in 2006, the design for the CVLR was agreed between English Partnerships and Northamptonshire County Council.

Cultural heritage

An assessment was made of the potential effects on archaeological and cultural heritage features. There are no Listed Buildings or Scheduled Ancient Monuments within the proposed route of the CVLR, although twelve archaeological sites of minor significance will be directly affected by the road.

There is also the potential for further unknown sites to exist along the proposed route, indicated by a variety of previously detected sites in the vicinity of the application area. A programme of geophysical survey and archaeological trial trenching will determine the extent and nature of the archaeological resource and inform an appropriate level of mitigation.

Landscape and visual effects

A Landscape and Visual Impact Assessment considered the potential effects of the proposed development on the character of the surrounding area, and on local views. The existing character of the study area is generally that of a rural river valley, although urban development is encroaching on the landscape from the east.

The proposed scheme is considered to have a moderate adverse impact on completion, reducing to a neutral impact in the long term as new planting becomes established and the urban development of Northampton surrounds the northern part of the route.

In addition, a number of visual receptors will be affected by the proposals, including the public rights of way that are severed by the road.

Biodiversity

An ecological assessment has been undertaken through a desk study, stakeholder consultation, and a range of habitat and species surveys.

The most prominent ecological resources likely to be affected by the CVLR are the River Nene, part of Upton Pasture County Wildlife Site (CWS) and Camp Lane and Drain CWS. In addition to these resources, species rich hedgerows, including two which are considered as 'important' under the Hedgerow Regulations 1997, and several significant trees, provide further features of ecological interest which would be affected. However, much of the site comprises arable fields and improved pasture which are of negligible value.

Mitigation measures will minimise impacts on ecological receptors but the effect of habitat loss and the fragmentation of Camp Lane and Drain will be Slight adverse, with the interruption to the 'important' hedgerow running along its northern edge assessed as Moderate adverse.

Short term losses of habitat in Upton Pasture will occur during the construction phase. However, sympathetic habitat reinstatement and improvements in the hydrological regime of the site will result in a slight to moderate beneficial effect.

The permanent effects on badger populations to the south of the River Nene, and on fish and reptiles, will be Neutral, whilst bats, otters and birds (including barn owls) will incur a Slight adverse effect. Badger populations to the north of the river may be subject to an estimated Moderate adverse effect, although a comprehensive mitigation strategy is being



Figure 3 - Aerial photo of application site

designed, in consultation with English Nature, to minimise this as far as possible. This mitigation strategy will be designed to mitigate not only for the impact of the CVLR but also for the future impact of development in the South West District.

The effect on the river corridor habitat of the Nene is also considered to be Moderate adverse, although measures to encourage water vole to recolonise the area are considered as Moderate beneficial.

Temporary effects during the fifteen month construction period will inevitably result in vegetation loss and disturbance to local wildlife, although these impacts will be limited to Slight adverse for bats, otter, birds and reptiles. Badger populations to the north of the River Nene, and the river corridor habitats will incur a Moderate adverse effect. Temporary loss of vegetation will be replaced with the aim of increasing the ecological value of reinstated habitats, the effect of which will be Moderate beneficial.

Water

The construction of the CVLR occurs within a floodplain and requires the realignment of a 150m section of the River Nene. The works will modify the drainage and rainfall-runoff relationship at the site, and will increase the risk of pollution events. To address this, the Contractor's Environmental Management Plan will require the preparation and implementation of specific drainage and pollution management plans consistent with the Environment Agency's Pollution Prevention Guidelines.

As the CVLR will form part of the proposed Upton Flood Attenuation Area, the completed scheme may have a slight adverse impact upon the risk of flooding in the immediate vicinity of the site, but it will not increase the risk of flooding in Kissingbury. Three road bridges will be designed to span the river and floodplain, therefore ensuring no restriction to flood flows and minimal encroachment on the floodplain.

As the impermeable road pavement would modify the existing rainfall-runoff relationship, the proposed scheme incorporates a sustainable drainage system which seeks to maintain the pre-development hydrological regime and minimise the export of pollutants to receiving waterbodies.

Ground conditions and contamination

The topsoil underlying the southern part of the application site consists of well-drained, non-alluvial loamy or clayey soils. Within the northern part of the site, the topsoil consists of slowly permeable clayey soils. These soils are underlain by alluvium and glacial deposits. Local geology consists of Jurassic mudstone and marls.

A contaminated land assessment of the Proposed Scheme area has shown that the route lies within agricultural land which has not been developed. However, immediately adjacent to Camp Lane are two fields which are Registered Closed Landfill Sites. These landfill sites were former mineral extraction pits which were backfilled within inert waste. The Proposed Scheme will not disturb these landfill sites.

Key:

- Proposed Road
- Carriageway
- Footway/footpath
- Combined footway/cycleway
- Bus Lane
- Verge & soft margin
- Extent of 1 in 200 year flood plain

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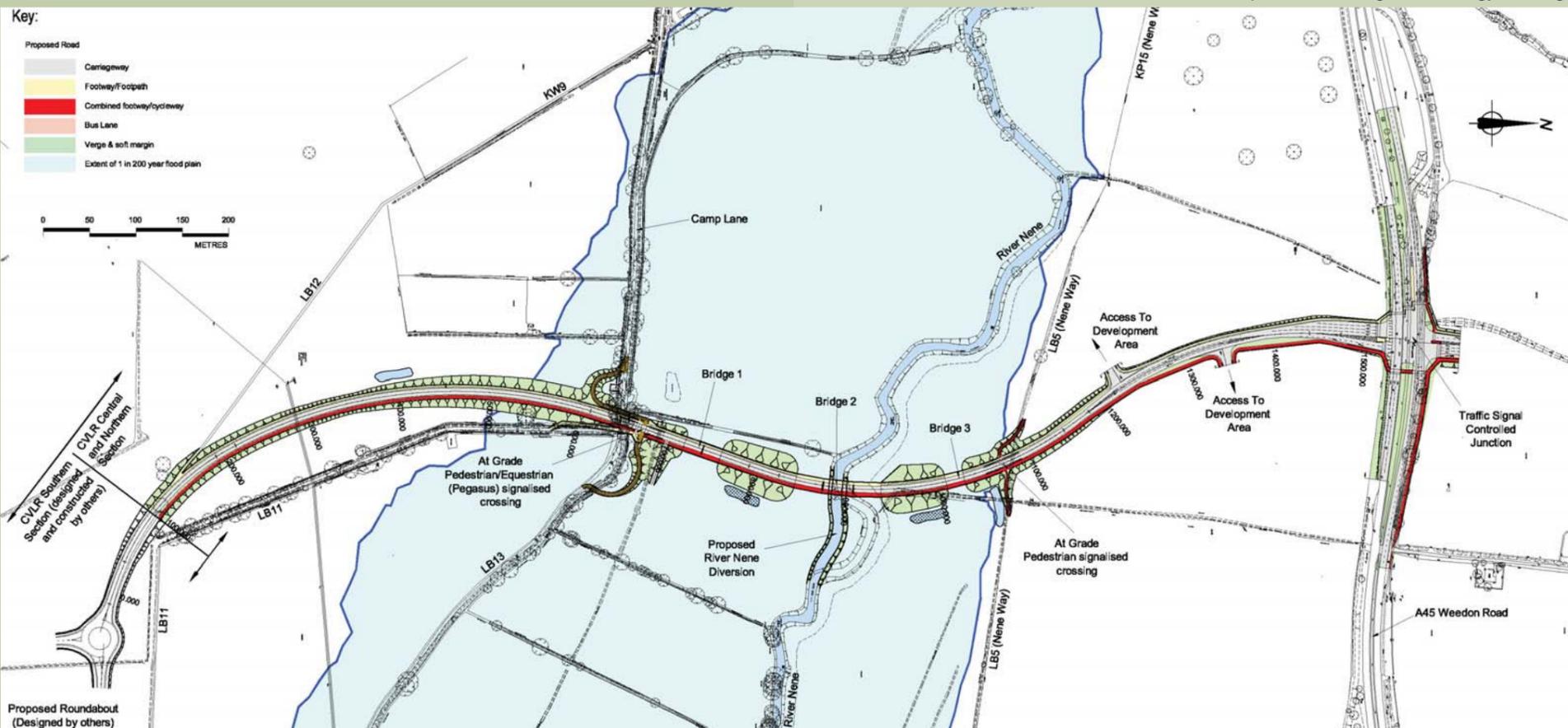


Figure 2 - The Proposal