1. Introduction

The Highways Agency is to widen approximately 102 kilometres of the M25 by adding a lane in each direction to make generally a 4-lane motorway. The widening is being carried out within the existing highway boundary. An Environmental Statement was published in 2007, and public exhibitions held throughout these Sections. Having considered the comments made in response, the Secretary of State for Transport announced the decision to proceed with the widening of the M25 in May 2008.

The widening project has been divided into six sections, three of which have been identified for construction by July 2012. These sections are:

Section 1  Junctions 16-23
Section 4  Junctions 27-30
Section 6  Hatfield Tunnel

Construction began in May 2009.

Construction of Section 1 is itself divided into three sections:

Section 1x  J16-J18 (May 2009-June 2010 – 57 weeks)
Section 1y  J18-J21 (June 2010-May 2011 – 48 weeks)
Section 1z  J21-J23 (May 2011-June 2012 – 45 weeks)

The Skanska Balfour Beatty Joint Venture (SBBJV) is the contractor appointed by Connect Plus, the Design Build Finance and Operate (DBFO) concession company. During consultation, SBBJV identified this area for construction of a bund which will provide a significant benefit in visual screening and noise reduction to local properties. A similar opportunity to provide noise and visual screening to this level is unlikely to arise in the future. This represents a unique opportunity to provide significant environmental benefit to residents adjacent to the scheme.

The location of the site is shown on plan 0731/J20/L.

2. Options Considered

The Highways Agency identified a series of locations during public consultation following the publication of the Environmental Statement (ES) where bunding could provide noise and visual screening to receptors.

Land between the A41 and the M25 south of Junction 20 has been selected to provide landscape and visual screening.

Reasons and benefits:

- Provides visual screening of motorway to properties at Abbots Langley with a crest height some 4m-6m above carriageway level
• Existing motorway planting needs to be removed and land used for works (i.e. limited replanting opportunities)
• Construction traffic will access site directly from the A41
• Immediate screening rather than waiting for landscaping to become established
• Potential for agricultural improvement of apparently previously disturbed land
• Sustainable use of construction materials to comply with Government guidelines.

3. Site Use

To re-contour the landform to provide permanent landscape and visual mitigation as part of M25 works, as shown on the attached plans and sections reference 0731/J20/S, 0731/J20/CW/1 and 0731/J20/CS/1.

4. Construction Methods

• The topsoil and subsoil will be stripped and retained in bunds (mounds) around the boundary of the site to a maximum height of 3m
• Transfer inert subsoil, arising from the motorway widening works, to stripped area and distribute to raise ground levels in accordance with the attached design drawing
  o these soils comprise only naturally occurring clay and chalk, collected by excavating existing cuttings and embankments alongside the motorway
  o dug by hydraulic excavator
  o loaded into rigid-bodied road lorries or articulated off-road dump trucks
  o spread by tracked bulldozer
  o compacted by rollers
• Continue over period of 18-24 months
• Replace stored topsoil and subsoil, and restore to viable farmland at original agricultural grade

5. Timescale

The works are programmed to take place over 18-24 months.

6. Access

Access will be via the A41 (see plan). Details of accesses will be agreed with the Highways Agency and Hertfordshire County Council Highways Department.

7. Impacts & Mitigation

SBBJV has registered the project with the Considerate Constructors Scheme, and abides by its principles. The JV recognises that the construction of the bund has a number of impacts on its location and environment. These impacts have been considered and assessed as follows.
i. **Visual Impact**

The existing established planting between the anticlockwise slip road and the main carriageway will be removed in order to provide space to widen the motorway. The re-engineered embankment has less space to be effectively landscaped. The removal of this landscaping will open up views of the traffic to a large number of properties on the higher ground at Abbots Langley.

The re-contouring of the landform will provide an effective permanent screen to these views. The new landform has been designed to fit within the local landscape and the crest will be re-planted with appropriate native species.

ii. **Ecology**

Detailed ecological surveys of the site were carried out during the production of the Environmental Statement for the Scheme. These were supplemented by a verification walkover survey during Autumn 2008. North Grove Wood to the south of the site is a County Wildlife Site.

These surveys identified two badger setts. An appropriate ‘stand off’ distance will be maintained to these setts. If deemed necessary, further mitigation measures will be agreed and implemented as agreed with the ecologist. Apart from the badger setts no other notable or legally protected species are present on site. However, the arable field may offer feeding opportunities for over-wintering birds, and in the summer may be suitable for nesting skylarks.

The trees and scrub adjacent to the site may provide potential nesting sites for birds during the bird breeding season.

iii. **Agriculture**

Much of the central part of the area has been previously disturbed by past placing/tipping of inert material. The area is currently in permanent grassland and the temporary loss of this area will not adversely affect the farm activities. At completion, the area will be improved by increasing the re-instated depth of top soil.

Prior to any topsoil strip or installation works, the JV will conduct a pre-entry survey. This survey will include detailed sampling and testing of soils in order to establish the soil condition. The existing condition is agreed with the landowner. The reinstatement process then has a record of the condition to which the land must be reinstated. An Agricultural Reinstatement Plan will be developed for agreement with the landowner, see Section 9 below.

iv. **Archaeology & Heritage**

Archaeological mitigation will be agreed with the County Archaeologist and carried out prior to construction of the bund. The principles of the archaeological mitigation strategy will be compliant with those set out in Section 12.5 of the ES for works outside the scheme boundary.
The Cultural Heritage Technical Report from the ES suggests that this area had previously been used as a construction compound or quarry. Any archaeological remains are likely to be severely truncated, although the suggested line of a Roman road passes to the south of the area.

There are two Listed Buildings (Lock House and outbuildings) situated on the Grand Union Canal. These buildings would benefit from additional screening and reduced noise levels as a result of the bund.

v. **Water**

Surface water from the field will be managed and controlled during the construction works. Where possible, any excess water will be collected and will be re-used within the works.

The site is in close proximity to the floodplain of the River Gade. It is also situated in Groundwater Source Protection Zones 1 and 2. The Environment Agency will be consulted to ensure that there are no adverse impacts on the floodplain or groundwater quality.

The project Construction Environmental Management Plan (CEMP) will include approved pollution protection measures. Pollution protection management will include liaison with the Environment Agency concerning the use, control and storage of hazardous materials. No storage of hazardous materials will take place at this site.

The permanent effects of the modified landform will be taken into account in the drainage design.

vi. **Noise**

The area suffers from very high background noise levels due to the M25. The nearest properties are North Grove Cottages some 100 metres to the north. In view of the proximity of these cottages to the M25, there will be a negligivle increase in noise due to construction works.

Control of Pollution Act 1974 s.61 agreements are being prepared for submission to the Environmental Health Office of the District Council. These will include details of working methods, equipment and noise predictions for agreement. Noise levels will continue to be monitored during the project.

The traffic noise level at North Grove Cottages is indicated as 73dB in the ES. This would reduce to 69.3dB as a result of the scheme. The bund will provide further attenuation over and above this improvement.

vii. **Air Quality/Dust**

All construction activities operations will be subject to dust control procedures. Dust suppression will include the use of water bowsers and seeding applied to the topsoil storage bunds.
viii. **Public Rights of Way**

No Public Rights of Way cross the site or will be affected.

ix. **Traffic**

The entrance to the working site will be a left-in-left-out arrangement to minimise congestion on the A41. Construction traffic will be spread throughout the working day, with no particular peak period during the day or during the construction process. Typically, a lorry enters and leaves the site every two minutes. Traffic management measures will be discussed with Hertfordshire Highways.

x. **Security**

Access to the site will be restricted to staff and authorised persons only. Whenever the site is idle, access will be securely closed to prevent unauthorised entry.

**8. Working Hours**

The construction contractual normal working hours are:

- 0700-1900hrs Monday-Friday
- 0700-1300hrs Saturday

From time to time, dependent on progress and the nature of works on the motorway, overnight and additional working hours and Sunday working will be required. These additional hours will be agreed in advance with the Environmental Health Office of Three Rivers District Council.

**9. Tree, Shrub & Site Reinstatement**

Apart from the verge-side clearance of vegetation to construct the bund, no other trees or hedges will be removed. Re-planting of a similar species mix and density will be carried out.

Protection of trees and hedges where required will be in compliance with BS 5837: *Trees in Relation to Construction*.

The field will be fully reinstated to its existing agricultural condition following completion of the works.

**10. Maintenance / Aftercare**

The JV will follow the process below to return the re-profiled land to its original / improved condition:

1. The reinstated subsoil will be de-compacted if required by “ripping” using appropriate agricultural equipment e.g. wing tined subsoiler.

2. The original topsoil will be taken from the storage bunds and supplemented by the additional soils and re-spread across the site to achieve a minimum thickness of 300mm.
3. The area will be ploughed, harrowed and seeded. Topsoil samples will be taken to identify the need for further amelioration e.g. fertiliser application. This would be carried out during the next appropriate season.

4. Reinstatement will not be considered complete until the landowner agrees its compliance with the pre-entry survey.

The owners will be compensated for the additional costs of maintenance and aftercare.

Planted areas will be maintained for an establishment period of 5 years. Following this period, the Connect Plus concession company will be responsible for continued maintenance.

11. Community Relations Manager

For further information and any questions, please contact the SBBJV Community Relations Manager, Andie Taylor: communityrelations16-23.m25@sbbjv.co.uk and 01923 727659 or 07736 056825