

Transport and Works Act 1992

**Transport and Works (Applications and
Objections Procedure) (England and Wales)
Rules 2006**

**The Network Rail (East West Rail Western
Section Phase 2) Order**

Draft Design and Access Statement

June 2017

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EWR Alliance

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Executive Summary

This draft Design and Access Statement (draft DAS) sits alongside a suite of draft Planning Statements being submitted as part of the Round Two consultation for the East West Rail Western Section Phase 2 (EWR2) Project. This consultation will inform design development and a submission for a Transport and Works Act Order (TWAO) to authorise the construction of the Project. The TWAO submission is scheduled for Spring 2018.

This draft DAS addresses the requirements of the Town and Country Planning (Development Management Procedure) (England) (Amendment) Order 2010 as amended. It discusses the design rationale of the proposed development included in the scheme across all local authority areas within the context of national and local design planning policies, as well as consultation feedback. This draft DAS focuses on the design rationale behind the proposed highway and accommodation overbridges, footbridges, the proposed footbridge / platforms at Winslow Station, and the proposed high level platforms at Bletchley Station.

The design of most proposed structures, in particular overbridges and footbridges, has been dictated for the most part by the functional needs of the structures. However, it is considered that the design of such proposed structures comply with the design objectives of national and local planning policy. As outlined in this draft DAS, proposed development at Winslow and Bletchley Stations has been designed in consideration of planning policy design principles, as well as feedback from consultation.

It is considered that the scheme can deliver a development which is of a design, scale, layout and appearance appropriate to its required function and which provides an attractive, safe and easily navigated environment that is accessible to all users.

1. Introduction

1.1. Project Overview

- 1.1.1. Network Rail Infrastructure Limited (Network Rail) intends to apply for a Transport and Works Act Order (TWAO) to authorise the construction of East West Rail Western Section Phase 2 (EWR2). This involves the construction, operation and maintenance of an upgraded and reinstated rail link between Bicester and Bedford, Milton Keynes and Princes Risborough, as well as the construction of new railway infrastructure (including new overbridges, footbridges, a new station and station platforms) and improvements to existing infrastructure (such as station platform extensions).
- 1.1.2. On behalf of Network Rail, the East West Rail Alliance (EWR Alliance) is responsible for the design and construction of the scheme. The EWR Alliance (made up four equal parts between Network Rail, Atkins, Laing O'Rourke and VolkerRail) will prepare and make the TWAO submission.

1.2. Legislative Context

- 1.2.1. Network Rail intend to seek authority to build and operate EWR2 via an application under the Transport and Works Act 1992. The application would be determined by the Secretary of State for Transport.
- 1.2.2. As EWR2 involves the construction, operation and maintenance of an upgraded rail line and improvements to existing railway infrastructure beyond the scope of Network Rail's permitted development rights, and includes powers of compulsory acquisition, a TWAO is required to authorise the scheme. The application will be determined in accordance with a process governed by the Transport and Works Act 1992 ('The 1992 Act') and the Transport and Works (Applications and Objections) (England and Wales) Rules 2006 ('The Application Rules').
- 1.2.3. Network Rail will also seek, as part of a TWAO submission, a direction from the Secretary of State for Transport under Section 90(2A) of the Town and Country Planning Act 1990, which, if given, would deem the grant of planning permission for EWR2. Although it is not required by the Application Rules, Network Rail has made available this draft DAS for comment as part of the Round Two Consultation.
- 1.2.4. In addition to the statutory authorisation by TWAO, Network Rail will also be seeking Listed Building Consents under the Planning (Listed Buildings and Conservation Area) Act 1990 for the works affecting listed structures that will be necessary to implement the scheme. Although these applications will be made to the relevant Local Planning Authorities, they will automatically be called-in for determination by the Secretary of State (for Communities and Local Government) in parallel with the TWAO submission, in accordance with the Transport and Works Applications (Listed Buildings, Conservation Areas and Ancient Monuments Procedure) Regulations 1992. Separate DASs will be prepared for submission in support of those applications as required by the Planning (Listed Buildings and Conservation Areas) Regulations 1990 (as amended).

1.2.5. Listed Building Consent will be required for works at the following locations:

- Woburn Sands Station (platform extensions);
- Ridgmont Station (platform extensions); and
- Quanton Road Station (platform reduction and protective fencing).

1.3. Purpose of the Design and Access Statement

1.3.1. A suite of draft planning documents has been prepared for comment as part of the Round Two Consultation. This comprises five draft Planning Statements, which set out the proposed development in each local authority area within which the scheme travels through and provides an assessment against the prevailing national and local planning policy framework. Reference should therefore be made to the following draft Planning Statements for a full description of the proposed development, identification of all relevant planning policies and consideration of relevant planning considerations:

- Draft Planning Statement 1: Cherwell District Council / Oxfordshire County Council;
- Draft Planning Statement 2: Aylesbury Vale District Council / Buckinghamshire County Council;
- Draft Planning Statement 3: Milton Keynes Council;
- Draft Planning Statement 4: Central Bedfordshire Council; and
- Draft Planning Statement 5: Bedford Borough Council.

1.3.2. This draft DAS sits alongside the above draft Planning Statements as part of the suite of planning documents submitted for consultation. This draft DAS covers proposed development across the whole route within the following District, Borough and County Council administrative areas:

- Cherwell District Council;
- Aylesbury Vale District Council;
- Milton Keynes Council (Unitary Authority);
- Central Bedfordshire Council (Unitary Authority);
- Bedford Borough Council (Unitary Authority);
- Buckinghamshire County Council; and
- Oxfordshire County Council.

1.3.3. This draft DAS addresses the requirements of the Town and Country Planning (Development Management Procedure) (England) (Amendment) Order 2010 as amended. In particular, this draft DAS addresses:

- The design principles and concepts applied to the development;
 - Measure taken to address the functional needs of development;
 - Measures taken to address the physical context in which the development is to take place;
 - The approach to matters of access; and
 - How local planning policy has influenced the scheme, in particular those that relate to accessibility, design and heritage assets.
- 1.3.4. This draft DAS focuses on the design rationale behind the proposed highway and accommodation overbridges, footbridges, the proposed footbridge / platforms at Winslow Station, and the proposed high level platforms at Bletchley Station. Reference should be made to the draft Planning Statements for details on other types of proposed development which fall outside this scope.
- 1.3.5. Prior Approval has been granted for a platform extension at Princes Risborough Station and for the new platforms and a footbridge at Aylesbury Vale Parkway Station. As such, these works are not discussed in this draft DAS and reference should be made to the details provided in the Prior Approval applications (see application references 17/05136/PNP18A for Princes Risborough Station and 17/00318/ARW for Aylesbury Vale Parkway Station, available on the Wycombe District Council and Aylesbury Vale District Council websites respectively).

2. Summary of Proposed Works

2.1.1. This section provides a summary of proposed development works in each local authority area. A full description of the proposed development is provided in the relevant Planning Statements. A discussion of the proposed design rationale for the proposed works described below is provided in section 6.

2.2. Cherwell District Council / Oxfordshire County Council

2.2.1. Proposed works within the Cherwell sub-section would commence where the Chiltern Main Line crosses the EWR2 line, approximately 1km north east of Bicester Town. Development in this section would continue the double track railway from EWR Phase 1 (east of the where the Chiltern Main Line crosses the EWR2 line) and extend to the eastern boundary of Cherwell District Council near Marsh Gibbon. Such works would comprise the replacement of 3.6km of existing single track railway with new double track railway, centred about the existing railway corridor.

2.2.2. Alongside the installation of a double track, the proposed works along this section of the route would include the construction of six new bridges over the railway, comprising three highway overbridges, two footbridges and one accommodation bridge. These are listed in Table 1 below.

Table 1: Proposed Structures within the Cherwell Sub-section

Type of structure	Structure name/reference
Highway Overbridges	Charbridge Lane (A4421)
	Bicester Road (Launton)
	Launton (Station Road)
Footbridges	Jarvis Lane
	Grange Farm
Accommodation Bridge	Manor Farm (Launton)

2.3. Aylesbury Vale District Council / Buckinghamshire County Council

- 2.3.1. Proposed works within the Aylesbury Vale sub-section of the route would commence as the railway line crosses through the western boundary of Aylesbury Vale District Council near Marsh Gibbon. This section would see a continuation of the double track railway from Cherwell District Council and would proceed eastbound to the boundary of Aylesbury Vale District Council and Milton Keynes Council. Development along this section would comprise the replacement of 18.5km of existing single track railway and 1.5km of mothballed railway with a total of 20km of new double track railway, centred about the existing railway corridor.
- 2.3.2. This sub-section of the route also diverts southbound to Aylesbury Station from the railway junction at Claydon and would see the continuation of the double track railway line. Proposed works along the southbound section of the route from Claydon would comprise the replacement of 11km of existing single track railway and 1km of existing double track railway with a total of 12km of new double track railway, centred about the existing railway corridor.
- 2.3.3. There would be a new station at Winslow, sited immediately west of the A413 Buckingham Road. The station would comprise two side platforms, connected via a footbridge with steps and lifts.
- 2.3.4. Development in this sub-section would also include the construction of 15 new bridges over the railway. These 15 bridges comprise three highway overbridges, eight footbridges and four accommodation bridges. These are listed in Table 2 below.

Table 2: Proposed Works within the Aylesbury Vale Sub-section

Type of structure	Structure name/reference
Highway Overbridges	Queen Catherine Road
	Furze Lane (OXD 20)
	Salden (OXD 10)
Footbridges	Poundon No.2
	Twyford No.2 and No.3
	Middle Claydon No. 8
	Middle Claydon No. 4 and 6
	Winslow Footpath No. 6
	Moco Farm No. 2
	Swans Way

Type of structure	Structure name/reference
Footbridges	North Bucks Way No1
Accommodation Bridges	Marsh Gibbon Poundon (OXD 31)
	Verney Junction
	Moco Farm
	Lower Blackgrove No. 1
Station Works	Winslow Station (new station, including two new platforms and footbridge).

2.4. Milton Keynes Council

- 2.4.1. Proposed works within the Milton Keynes sub-section would commence at the western boundary of Milton Keynes Council at the west edge of Bletchley, continuing the double track railway travelling from Aylesbury Vale District Council. The route would later merge with the West Coast Mainline to the north of Bletchley station. Proposed works in this section comprise the replacement of 1.3km of existing double track railway, centred about the existing railway corridor.
- 2.4.2. Proposed works within the section of the route between the junction at Bletchley station and to the eastern boundary of Milton Keynes Council beyond Woburn Sands to the east comprise the replacement of 0.5km of existing single track railway and 2km of existing double track railway with a total of 3.8km of new double track railway, centred about the existing railway corridor.
- 2.4.3. There would be an addition to Bletchley Station in the form of two elevated side platforms, either side of the railway at the north end of Bletchley Flyover. The new platforms will be connected to each other via a new underpass, effectively at ground level. The platforms will be connected to the existing station cross-platform concourse via a new footbridge. In addition to proposed works at Bletchley Station, the scheme includes extensions to both platforms at Woburn Sands Station.
- 2.4.4. Development in this sub-section would also include the construction of two new bridges over the railway, comprising an accommodation bridge and a footbridge. These are listed in Table 3 below.

Table 3: Proposed Works within the Milton Keynes Sub-section

Type of structure	Structure name/reference
Footbridge	School Crossing, Woburn Sands (planning permission was granted for this structure on 17 th November 2016. Reference should be made to application number 16/01639/FUL on the Milton

Type of structure	Structure name/reference
	Keynes Council website).
Accommodation Bridge	Woodley's Farm
Station Works	Bletchley Station (two new platforms and footbridge)
	Woburn Sands (platform extensions)

2.5. Central Bedfordshire Council

- 2.5.1. This Central Bedfordshire sub-section of the route already benefits from the existing double track railway, which is located on the original double track embankments /cuttings. Therefore there are no proposed works to the railway line itself within this sub-section. The proposed scheme includes extensions to both platforms at Ridgmont Station.
- 2.5.2. Within this section of the route only one new bridge over the railway is proposed. This is located at Marston Road, Lidlington where a new highway overbridge would be constructed to replace the existing highway level crossing.
- 2.5.3. The works are listed in Table 4 below.

Table 4: Proposed Works within the Central Bedfordshire Sub-section

Type of structure	Structure name/reference
Highway Overbridge	Marston Road
Station Works	Ridgmont Station (platform extensions)

2.6. Bedford Borough Council

- 2.6.1. The Bedford sub-section of the route benefits from a predominantly double track railway, which is located on the original double track embankments/cuttings. As such there are no proposed works to the railway line itself within this sub-section.
- 2.6.2. Development in this sub-section would include the construction of two new bridges over the railway, comprising a highway overbridge and a footbridge. These are listed in Table 5 below.

Table 5: Proposed Structures within the Bedford Sub-section

Type of structure	Structure name/reference
Highway Overbridge	Manor Road (Kempston Hardwick)
Footbridge	Woburn Road, Kempston

3. Scheme Context

3.1. Physical Context

- 3.1.1. The proposed route of EWR2 commences at Bicester and proceeds eastbound to Bletchley before dividing to travel northbound to Milton Keynes and eastbound to Bedford. The route also divides at Claydon Junction to travel southbound through Aylesbury before concluding at Princes Risborough.
- 3.1.2. For the most part, the route travels through large rural areas that predominantly comprise agricultural land. Whilst travelling through such areas, the line runs in close proximity to a number of isolated dwellings and farmhouses. It also travels through and adjacent to several settlements, including Launton, Verney Junction, Woburn Sands, Lidlington and Stewartby. In such settlements, as well as the towns of Bicester, Winslow, Aylesbury, Princes Risborough, Bletchley, Milton Keynes and Bedford, the line travels alongside or in close proximity to residential dwellings, commercial units and sites in industrial use. A significant length of the existing route benefits from screening from the surrounding area by virtue of existing belts of trees and hedgerows positioned along both sides of the line.
- 3.1.3. Over the length of the route, the line is crossed by the highway network at a large number of locations. Whilst the majority of highway crossings accommodate minor rural roads there are also a number of major routes such as the A5, A421, A509, A413 and A44, as well as the M1 (at Junction 13) that intersect the line. The line is also crossed at a large number of locations by footpath and working level crossings. In addition, several watercourses also cross the line, including the River Great Ouze (Bedford), River Ouzel (Bletchley), River Thames (Aylesbury) and Grand Union Canal (Bletchley). The proposed development includes the extinguishment, replacement or alteration to existing crossings at a number of locations along the route.

3.2. Social Context

- 3.2.1. The proposed development would provide a sustainable transport alternative to car travel and would significantly contribute towards reducing congestion on the highway network. The development of EWR2 would extend the use of an environmentally friendly mode of transportation and would greatly improve air quality in the region through the reduction in carbon dioxide emissions that arise from traffic.
- 3.2.2. The improved connectivity between key centres of Bicester, Aylesbury, Princes Risborough, Milton Keynes, Bedford and Oxford would not only increase access to job opportunities but also to wider retail, leisure, recreational destinations, as well as other communities.
- 3.2.3. In addition, the scheme proposes to remove a number of level crossings along the route. Level crossings are considered to be the greatest source of safety risk on the rail network and therefore the closure of such crossings and diversion of PROWs and highways via new footbridges and overbridges would ensure significant improvement in safety.

3.3. Economic Context

- 3.3.1. One of the main benefits of EWR2 is to support Local Authorities' ambitions for substantial economic growth based on the creation of new private sector jobs and the development of major areas of new housing.
- 3.3.2. The proposed development would have a significant positive impact on the local and regional economy. The scheme would deliver improved connectivity between the key centres of Bicester, Aylesbury, Milton Keynes, Bedford and Oxford, which would provide access to wider employment prospects, as well as new business opportunities. The substantial improvement in connectivity would not only support growth in jobs but also in the delivery of new houses. It would also support the future success of the Cambridge – Milton Keynes – Oxford corridor.
- 3.3.3. In addition, the scheme would provide an efficient and sustainable alternative mode of transport to the use of the trunk road network in the area, where, at present, there is no high-capacity road network that links important growth areas.

4. Planning Policy Context

- 4.1.1. This section of the draft DAS reviews national and local planning policies and guidance that have informed the design of works along the route. Reference should be made to the relevant draft Planning Statements, which provide a full assessment of the proposed scheme against all relevant planning policy.

4.2. National Planning Policy

National Policy Statement for National Networks

- 4.2.1. National Policy Statement for National Networks (NPS) sets out the need for and Government's policies to deliver development of national significant infrastructure projects on the national road and rail networks in England. The Secretary of State is to use the NPS as the primary basis for making decisions on development consent applications for national networks national significant infrastructure projects.
- 4.2.2. The NPS requires design to be an integral consideration from the outset of a national network infrastructure proposal. The NPS states:
- 4.2.3. 'Visual appearance should be a key factor in considering the design of new infrastructure, as well as functionality, fitness for purpose, sustainability and cost. Applying "good design" to national network projects should therefore produce sustainable infrastructure sensitive to place, efficient in the use of natural resources and energy used in their construction, matched by an appearance that demonstrates good aesthetics as far as possible' (paragraph 4.29).
- 4.2.4. The NPS highlights that, as far as possible, both functionality (including fitness for purpose and sustainability) and aesthetics (such as the contribution of a scheme to the quality of the local area) should be taken into account during the design of a proposal.

National Planning Policy Framework

- 4.2.5. The National Planning Policy Framework (NPPF) was published on 27th March 2012 and provides the Government's planning policies for England and sets out how these are expected to be applied.
- 4.2.6. The NPPF highlights 12 Core Planning Principles which should underpin decision-taking (paragraph 17), one of which is to 'always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings'.
- 4.2.7. [Section 7 'Requiring Good Design'](#) of the NPPF advises that good design should be indivisible from good planning and make a positive contribute towards making places better for people. Paragraph 58 states that new developments should:
- Function well and add to the overall quality of an area, not just for the short term but for the lifetime of a development;

- Establish a strong sense of place, using streetscapes and buildings to create attractive, comfortable places to live, work and visit;
- Optimise the potential of the site to accommodate development, create and sustain an appropriate mix of uses and support local facilities and transport networks;
- Respond to local character and history and respect the identity of local surroundings and materials, whilst not preventing or discouraging appropriate innovation;
- Create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion; and
- Be visually attractive as a result of good architecture and appropriate landscaping.

National Planning Policy Guidance

4.2.8. The National Planning Policy Guidance (NPPG) provides further context to the NPPF and it is intended that the two documents are read together. The NPPG provides guidance in relation to the design of developments proposals, stating that good quality design is an integral part of sustainable development.

4.2.9. The NPPG states that decision takers should always seek to secure high design quality and that the design of a proposal should be assessed against Local Plan policies and national policies. It recommends that in determining development proposals with regards to design, the following issues should be considered:

- local character (including landscape setting);
- safe, connected and efficient streets;
- a network of greenspaces (including parks) and public places;
- crime prevention;
- security measures;
- access and inclusion;
- efficient use of natural resources; and
- cohesive & vibrant neighbourhoods.

4.3. Local Planning Policy

4.3.1. The proposed route is located within the administrative boundaries of six local planning authorities that have planning policies related to the design of development proposals in adopted or emerging Local Plans. These local planning authorities and their local planning policy documents of relevance to design are as follows:

- **Cherwell District Council** - Cherwell Local Plan 2011-2031 Part 1, Non-Statutory Cherwell Local Plan 2011 and Adopted Local Plan 1996 (Saved Policies);
- **Aylesbury Vale District Council** - Aylesbury Vale District Local Plan (Saved Policies) and Vale of Aylesbury Local Plan: Issues and Options Draft (Emerging);
- **Milton Keynes Council** - Milton Keynes Core Strategy and Milton Keynes Local Plan (Saved Policies);
- **Central Bedfordshire Council** - Core Strategy and Development Management Policies (North Bedfordshire) and Mid-Bedfordshire Local Plan (Saved Policies);
- **Bedford Borough Council** - Core Strategy and Rural Issues Plan and Bedford Local Plan 2002 (Saved Policies); and
- **Wycombe District Council** - Core Strategy and Wycombe District Local Plan (Saved Policies).

Cherwell District Council

Cherwell Local Plan 2011 – 2031 Part 1

- 4.3.2. The Cherwell Local Plan 2011-2031 Part 1 was formally adopted by Cherwell District Council in July 2015. The Local Plan forms part of the statutory development plan and sets out strategic planning policies for the district against which all development proposals are to be assessed.
- 4.3.3. **Strategic Objective 14** of the Local Plan seeks to create more sustainable communities through the provision of high quality, locally distinctive and well-designed environments which increase the attractiveness of Cherwell and contribute towards the well-being of residents.

Non-Statutory Cherwell Local Plan 2011

- 4.3.4. The Non-Statutory Cherwell Local Plan was published by the Council in December 2004. The Plan is not part of the statutory development plan but has been approved as interim planning policy and therefore it is necessary for development proposals to consider policies within the document. Design policies contained with the Plan are outlined below.
- 4.3.5. **Policy D1: Urban Design Objectives** requires development proposals to demonstrate the following:
- “Local distinctiveness in built development and landscape;
 - Continuity and enclosure, where consistent with local character, through building lines that front onto and clearly define the public realm;
 - Public spaces and routes that are attractive, safe and uncluttered;

- Permeability through ease of movement for pedestrians, particularly disabled people, and cyclists in preference to vehicles;
 - Legibility through recognisable routes, junctions and landmarks to help people find their way around;
 - Adaptability through building types that enables their use for different purposes over time; and
 - Diversity through inclusion of a mix of compatible land uses”.
- 4.3.6. [Policy D2: Planning Application Design Statements](#) requires the submission of a Design Statement alongside applications for built development.
- 4.3.7. [Policy D3: Local Distinctiveness](#) states that development which reflects or interprets the locally distinctive character of the site and its context will be permitted provided the proposal achieves the following:
- Respect the site’s landform and natural features;
 - Are well integrated into the landscape setting;
 - Reflect the traditional pattern of the arrangement of street blocks, plots and their buildings and spaces;
 - Include the retention and enhancement of existing open spaces and undeveloped gaps of local importance that contribute positively in visual terms to the public realm although in private ownership relate well to the local palette of building and surfacing materials;
 - Relate well to the local architectural styles and the local palette of elements of construction, elevational detailing, window and doors;
 - Respect the scale, proportion, massing and height of adjoining buildings and the street scene;
 - Do not interfere with valued views, vistas and landmarks.
- 4.3.8. [Policy D4: The Quality of Architecture](#) requires the delivery of high quality contemporary architecture that expresses its use and importance, whilst possessing visual interest.
- 4.3.9. [Policy D5: The Design of the Public Realm](#) sets out criteria that development which has an impact on the public realm should meet. Such development should:
- Retain and enhance existing features of landscape, ecological and archaeological value in accordance with relevant local policies;
 - Be planned as an integral part of the design process and relate well to other open spaces in the vicinity;
 - Provide a hard and soft landscape scheme that is appropriate for the use and location;
 - Include a co-ordinated range of street furniture that is robust and high quality;

- Provide for contemporary public art and craftwork as an integral part of the design where opportunities to do so exist;
- Provide ground floor uses that contribute to creating activity, interest and natural surveillance;
- Be accessible to all, putting the needs of pedestrians above those of car drivers;
- Avoid vehicle parking and servicing intruding into the public realm;
- Avoid waste recycling and storage facilities intruding into the public realm;
- Maximise the reuse of materials through sorting of demolition materials and the use of recycled material in new and extended buildings;
- Utilise opportunities to improve existing and create new pedestrian links; and
- Incorporate measures to minimise the potential for crime and anti-social behaviour including maximising natural surveillance, allowing for social contact and providing adequate lighting.

Adopted Local Plan 1996 (Saved Policies)

- 4.3.10. The Council adopted the Local Plan in November 1996 for the purpose of assessing development proposals. A number of policies within the Local Plan were saved by the Secretary of State in September 2007 and these continue to form part of the local development plan. The saved policies of the Local Plan include a single policy of relevance to design as outlined below.
- 4.3.11. [Policy C28: Layout, design and external appearance of new development](#) requires the layout, design, appearance and external-finish materials are sympathetic to the character of the local context. The policy also states that in sensitive areas such as conservation areas, AONBs and Areas of High Landscape Value, development proposals will be required to be of a high standard and will normally be required to use traditional local building materials.

Aylesbury Vale District Council

Aylesbury Vale District Local Plan

- 4.3.12. Aylesbury Vale District Council adopted the Local Plan in December 2004 which sets out the strategic planning policies for the district for the purpose of assessing development proposals. A number of Local Plan policies were saved by the Secretary of State in September 2007 and these continue to form part of the development plan. Saved policies of the Local Plan that relate to design are discussed below.
- 4.3.13. [Saved Policy GP35 \(Design of new development proposals\)](#) of the adopted Local Plan requires new developments to respect and complement the following:
- The physical characteristics of the site and the surroundings;

- The building tradition, ordering, form and materials of the locality;
 - The historic scale and context of the setting;
 - The natural qualities and features of the area; and
 - The effect on important public views and skylines.
- 4.3.14. [Saved Policy GP45 \(“Secured by Design” Considerations\)](#) also sets out design requirements. The policy requires the design and layout of development proposals to incorporate crime prevention measures and reduce risks to personal safety. The policy states that regard will be given to “the security aspects of development including personal visibility, the arrangement of buildings, landscaping and walls, and lighting and closed circuit television surveillance”.

Milton Keynes Council

Milton Keynes Core Strategy

- 4.3.15. Milton Keynes Council adopted the Milton Keynes Core Strategy in June 2013 for the purpose of setting out strategic local planning policy up to 2026. Included within the Core Strategy is a single policy that seeks to ensure the delivery of high quality design, which is outlined below.
- 4.3.16. [Policy CS13: Ensuring High Quality, Well Designed Places](#) of the Core Strategy requires new development to be of high design quality and make a positive contribution to the character of the local area. To ensure high design quality, the policy states that new development should:
- *“Comply with best practice urban design principles in [By Design, Manual for Streets and Safer Places](#), or future best practice guidance;*
 - *Champion new approaches to sustainable urban form and structure, which build on the concept of the grid, so that everyone lives within walking distance of a viable bus route, local shops and other day-to-day facilities;*
 - *Provide a choice of contemporary, innovative, exemplar architecture that reflects Milton Keynes’ reputation as an ambitious, forward-thinking, innovative 21st Century city*
 - *Integrate energy efficiency and solar performance in the layout and orientation of buildings and neighbourhoods;*
 - *Provide sustainable and strategic surface water drainage as part of a network of multi-purpose open spaces;*
 - *Provide visual landmarks to help with orientation, particularly from the grid road and redway networks;*
 - *Provide a range of housing densities with more high density in Central Milton Keynes and close to good public transport nodes, with lower densities elsewhere, to contribute towards variety in visual appearance and create diverse, sustainable neighbourhoods;*

- *Effectively integrate the Council's car parking standards into the layout of new developments;*
- *Redways (another unique element of MK) should be built within the landscape corridor of all new grid roads, as well as elsewhere within new developments, having regard to delivery of other sustainable transport and landscape character requirements; and*
- *Continue the sustainable and well-maintained green character of the city through appropriate use of planting on streets and in public open spaces, and respecting the existing landscaped grid road corridors, allowing for strategically-managed change in and adaptation of the city's landscape”.*

Milton Keynes Local Plan (Saved Policies)

- 4.3.17. The Council adopted the Milton Keynes Local Plan in December 2005 which set out planning policies for the local area for the period up to 2011. A large number of the Council's existing development management policies are still contained in the Local Plan. Following the adoption of the NPPF, the Council undertook a review of Local Plan policies to identify those that comply with national planning policy. Policies identified as being compliant with the NPPF were subsequently saved and these accompany the Core Strategy as part of the local development plan.
- 4.3.18. **Saved Policy D2A: Design Aspects of New Development** of the Local Plan seeks to achieve high quality urban design in new development. It requires development proposals to meet the following objectives:
- *“Character in townscape and landscape by identifying and reinforcing better quality and locally distinctive design elements;*
 - *Continuity of street frontage and enclosure of space by clearly defining public and private areas and locating main building entrances on the street;*
 - *Quality public realm consisting of spaces and streets that are accessible, attractive, well related to and overlooked by buildings providing natural surveillance, with active ground floor uses along main streets and with parked vehicles not being visually dominant;*
 - *Ease of movement by creating places that are permeable and well connected with safe, attractive, convenient routes along streets giving priority to walking, cycling and public transport;*
 - *Legibility by providing recognisable streets, junctions and landmarks to help people to find their way around;*
 - *Adaptability of buildings and spaces, capable to use by a range of activities in response to changing conditions; and*
 - *Variety of layout, building form, use and tenure through the site”.*
- 4.3.19. **Saved Policy D2: Design of Buildings** sets out design requirements that proposals for new buildings are to meet. The policy states that proposals for buildings will be refused unless they:

- *“Are in scale with other buildings in the immediate vicinity in terms of their height and massing, except where a greater scale is necessary to reflect the development’s function and importance;*
 - *Relate well to and enhance the surrounding environment;*
 - *Provide access for those with impaired mobility;*
 - *Allows for visual interest through the careful use of detailing, where this is appropriate to the character of the area;*
 - *Include landscaping and boundary treatments that integrate with those of the surrounding area; and*
 - *Have regard to the need to design layout and screening in the interests of the prevention of crime and the surveillance of the public realm”.*
- 4.3.20. Policy D2 also states that *“the extension of existing buildings will only be permitted providing the scale of the proposed extension does not detract from the character of the original building”.*

Plan:MK Draft Preferred Options (Emerging)

- 4.3.21. The Council is currently in the process of preparing a new Local Plan, the Preferred Options draft of which was published for public consultation in March 2017. Emerging design policies of relevance to EWR2 are set out below.
- 4.3.22. **Policy D1: Impact of Development Proposals on Locality** – supports development proposals if they meet the following:
- Additional traffic generation would not overload the existing road network;
 - An acceptable surface water drainage system is proposed;
 - Privacy and visual intrusion has been considered and mitigated;
 - Environmental health matters, including noise, air, water and land pollution has been considered within the design;
 - The design does not cause damage to the site or neighbouring property; and
 - Adequate access is provided for vehicles to move to and within the site.

Central Bedfordshire Council

Core Strategy and Development Management Policies (North Bedfordshire)

- 4.3.23. Central Bedfordshire Council adopted the Core Strategy and Development Management Policies document in November 2009 which sets out the spatial strategy and policy framework for the north of the district against which development proposals are to be assessed.

4.3.24. **Policy DM3: High Quality Development** sets out criteria for all new development to ensure high quality design. These are as follows:

- *“Be appropriate in scale and design to their setting;*
- *Contribute positively to creating a sense of place and respect local distinctiveness through design and use of materials;*
- *Use land efficiently;*
- *Use energy efficiently;*
- *Respect the amenity of surrounding properties;*
- *Enhance community safety;*
- *Comply with the current guidance on noise, waste management, vibration, odour, water, light and airborne pollution;*
- *Incorporate appropriate access and linkages, including provision for pedestrians, cyclists and public transport;*
- *Provide adequate areas for parking and servicing;*
- *Provide hard and soft landscaping appropriate in scale and design to the development and its setting;*
- *Incorporate public art in line with the thresholds determined by the Planning Obligations Strategy;*
- *Ensure that public buildings are accessible for all, and comply with current guidance on accessibility to other buildings; and*
- *Respect and complement the context and setting of all historically sensitive sites particularly those that are designated”.*

Bedford Borough Council

Core Strategy and Rural Issues Plan

4.3.25. The Core Strategy and Rural Issues Plan was adopted by Bedford Borough Council in April 2008 and sets out a long term spatial strategy and planning policies against which development proposals are to be assessed.

4.3.26. **Policy CP21: Designing in Quality** outlines design criteria that new development is required to fulfil. These are as follows:

- *“Be of the highest design quality in terms of both architecture and landscape;*
- *Have regard to good practice in urban design;*
- *fully consider the context within which it will sit and the opportunities to enhance the character and quality of an area and local distinctiveness;*

- *preserve and, where appropriate, enhance conservation areas, scheduled ancient monuments and other important archaeological remains, and listed buildings and their settings;*
- *be fully accessible by all members of the community;*
- *incorporate measures to promote crime prevention and community safety; and*
- *address sustainable design principles including renewable energy resources, energy efficiency, recycling, and sustainable construction practices and*
 - *mitigate against the effects of any pollution including air quality, noise, water, light and land contamination;*
 - *improve the character and quality of the area”.*

Bedford Local Plan 2002 (Saved Policies)

- 4.3.27. The Bedford Local Plan was adopted in October 2002 and provides planning policies for development management purposes. A large number of policies in the Local Plan were deleted in 2007, with the remaining saved policies still currently in use as part of the development plan.
- 4.3.28. [Saved Policy BE39: High Standard of Design](#) requires new development to be designed to the highest standards and promotes good design by means of design guides, good design principles and other appropriate measures.
- 4.3.29. [Saved Policy BE31: Statement of Design Principles](#) requires the submission of a short statement which sets out the urban design principles adopted and how the development has had regard to the Local Plan and planning guidance.

Bedford Local Plan 2035: Consultation Paper

- 4.3.30. Bedford Borough Council is currently preparing a new Local Plan, which, when adopted, will supersede planning policies contained in the Bedford Core Strategy and Rural Issues Plan and Bedford Local Plan 2002. Preparation of the new Local Plan is currently at an early stage, with the Council consulting on a Consultation Paper from 18th April to 2nd June 2017. At this stage, no planning policies have been drafted, including any related to the design of new development.

4.4. Neighbourhood Planning

- 4.4.1. In addition to the above Local Plans adopted by each local authority, proposed development along the route should also take into consideration any design policies set out in Neighbourhood Plans. Such policies form part of the local development plan framework. Neighbourhood Plans with relevant design policies are set out below.

Steeple Claydon Neighbourhood Plan (Aylesbury Vale)

- 4.4.2. The Aylesbury Vale sub-section of the route travels through the Neighbourhood Plan Area of Steeple Claydon. A Pre-submission draft of the document was published in February 2017.
- 4.4.3. **Emerging Policy SC8: Design** requires the design of development proposals to reflect the architectural and historic character and scale of surrounding buildings and landscape.

Woburn Sands Neighbourhood Plan (Milton Keynes)

- 4.4.4. The Milton Keynes sub-section travels through the Woburn Sands Neighbourhood Plan Area. The Neighbourhood Plan was adopted in 2014 and includes the following design policy.
- 4.4.5. **Policy WS1: Design Parameters** – Sets out a number of design principles with which all developments in the town are to comply. These principles are as follows:
- Developments within the Plan Area should respect the existing distinct vernacular character of the settlement;
 - Any development which takes place within the Conservation Area or affects its setting is required to apply the guidelines set out in the Woburn Sands Conservation Area Review;
 - The detailed design appearance of housing should contribute to the character of the area; and
 - Landscaping plays an important role in determining the acceptability of any new development. Detailed landscaping plans will be required for all major developments.

Walton Neighbourhood Plan (Milton Keynes)

- 4.4.6. The Milton Keynes sub-section travels through the Walton Neighbourhood Plan Area. The Neighbourhood Plan was adopted in 2017 and includes the following design policy.
- 4.4.7. **Policy WNP16: Design Principles** – states that any new development within the Plan area must adhere to key principles, such as design and materials being in keeping with properties in the vicinity of the site, as well as existing footpath links being left unconstrained and extended where practical.

5. Consultation

5.1. Introduction

- 5.1.1. The NPPF recognises the importance of early engagement with stakeholders and local communities in the preparation of development proposals, including design. NPPF paragraph 188 highlights the advantages of pre-application engagement and front loading. It states that *‘Good quality pre-application discussion enables better coordination between public and private resources and improved outcomes for the community’*.
- 5.1.2. Network Rail undertook a first round of public consultation (referred to as Round One consultation) with a range of statutory and non-statutory consultees, landowners and members of the public between 4th September and 16th October 2015. The purpose of the public consultation was to acquire feedback on initial proposals for the purpose of informing the progression of EWR2, including the design of proposed structures and station works.
- 5.1.3. A summary of the consultation process undertaken at Round One consultation is provided in this section with particular reference to how this has informed the design process.

5.2. Statutory Consultees, Non-Statutory Consultees and Landowners

- 5.2.1. A number of statutory and non-statutory consultees, as well as landowners, were engaged at the same time as the public. Consultees and landowners were sent a pack comprising a letter and CD containing a consultation document setting out the key proposals, consultation drawings, highway overbridges and accommodation bridges drawings, and environmental features plans. Following receipt of the consultation material, consultees and landowners were given a 42 day period to provide written responses.

5.3. Community Engagement

- 5.3.1. In addition to consultees and landowners, members of the public were also engaged. In order to present the proposals of the scheme to as wide an audience as possible, a thorough programme of publicity was undertaken. This included the distribution of flyers to households and businesses along the rail corridor, advertisements in local newspapers and other media, press releases and posters in local libraries. Additionally, consultation packs were provided and plans displayed for public viewing in nine locations along the route. Members of the public were encouraged to provide written feedback to Network Rail. Members of the public were also directed to the Network Rail website, which provided an interactive online consultation tool designed to provide easily accessible information on the scheme and encourage feedback.

- 5.3.2. Eight public consultation events were held in six locations in close proximity to the route corridor. The events were attended by professionals across a number of technical disciplines including, noise, construction, engineering, environment, structures, footbridges and town planning. Attendees were provided the opportunity to ask questions to and seek clarification from the technical specialists. Attendees were encouraged to provide written or electronic feedback.

5.4. Evaluation

- 5.4.1. Feedback received during this period of public consultation covered a range of topics associated with the scheme. Such topics included the location and alignment of overbridges and footbridges, station and platform designs, amenity impacts and visual/landscape impacts.
- 5.4.2. Comments and feedback received during the period of consultation from consultees and members of the public has informed the design process for the scheme. This includes the design options selected for all proposed structures, including development at Winslow and Bletchley Stations. Feedback from the Round One consultation has informed the positioning of proposed structures and their design, as well as the design of proposed station platforms, with a view to reducing visual, amenity impacts and land take.
- 5.4.3. Round Two consultation is scheduled to take place between 30 June and 11 August 2017. Feedback will be sought from consultees and members of the public on a full range of topics associated with the scheme. The Round Two consultation materials include a Draft Environmental Statement which provides environmental information available to date and describes the environmental impacts assessed so far, as well as the proposed measures identified for managing and reducing them. Scheme drawings and draft planning drawings will also be provided which show further design of proposed structures. The feedback provided during this period of consultation will further inform the design process and options selected for proposed development across the scheme.
- 5.4.4. Further information on the public and stakeholder consultation activity will be provided in a Consultation Report which will detail the consultation process that was undertaken and provide a description and analysis of the feedback that was received. It will also detail how the feedback arising from the consultation process overall has informed the development of EWR2. The report will accompany the TWAO submission.

6. Design Appraisal

6.1. General Design Principles

6.1.1. The design of all proposed structures within EWR2 are to be considered in the context of national and local planning policy objectives described in Section 4. Common design objectives and principles across planning policy can be identified. These are as follows:

- Apply sustainable design and construction principles;
- Respond to local character and context where possible;
- Integrate into the landscape setting where possible;
- Be of an appropriate scale within the local setting;
- Deliver visually attractive development and good aesthetics where possible;
- Ensure a safe and accessible environment; and
- Deliver development that functions well and ensures ease of movement.

6.1.2. With regards to scale, the design of most proposed structures, in particular overbridges and footbridges, has been dictated for the most part by the functional needs of the structure. Such examples include the need to comply with minimum height requirements above railway tracks, minimum width of highway carriageways and footbridge pathways, as well as ensure the safety of users through appropriate parapet and truss heights, along with restraint barriers. It is considered that the scale of overbridges and footbridges are appropriate to achieve the functional need of the structures to provide safe ease of movement over the railway line and do not exceed more than is necessary to achieve such requirements. In this regard, and through the implementation of appropriate mitigation measures, the proposed structures do not result in significant adverse visual impact.

6.1.3. Although the design of overbridges and footbridges are largely dictated by their functional requirements, proposed development at Winslow Station and Bletchley Station has been designed in consideration of the principles outlined in national and local planning policy, as well as feedback from consultation.

6.1.4. Mitigation planting is proposed across the scheme to screen or integrate proposed structures into the landscape setting so as to prevent or reduce the landscape and visual impact. Chapter 12 – Landscape and Visual Impact Assessment of the Draft Environmental Statement concludes that although there is potential for visual impact arising from new structures, including overbridges and footbridges, such impact would be prevented or significantly reduced by mitigation planting, in particular when such planting matures.

6.1.5. This chapter describes the design rationale for the proposed highway and accommodation overbridges across the route, the proposed platforms and footbridge at Winslow Station, and new platforms at Bletchley Station.

6.2. Highway and Accommodation Overbridges

- 6.2.1. The design approach to the development of new highway and accommodation overbridges has been largely similar across the scheme. The design of such structures is largely dictated by their functional requirements.
- 6.2.2. All overbridges would be constructed using high containment pre-cast concrete parapets on both sides of the carriageway across the span. Parapets on all overbridges would be a minimum of 1.8m in order to provide sufficient protection to users of the bridge. Overbridges would be supported by a reinforced concrete abutment or reinforced earth abutment, as well as concrete wingwalls on both sides of the line.
- 6.2.3. Vehicle restraint barriers would be erected on both sides of the carriageway in the approach to the overbridge span, as well as handrails along the wingwalls. The vehicle restraint barriers and handrails would provide pedestrian and vehicle protection along the edges of the highway.
- 6.2.4. The height of all overbridges is dictated by the need to provide minimal clearance over the rail tracks to allow trains to safely travel under. The minimum vertical clearance that all new overbridges achieve from track level to the base of the bridge span is 5.6m. Earthworks are required for most overbridges to gradually raise the level of the highway from the existing ground level up to and down from the bridge span.
- 6.2.5. In width, highway and accommodation overbridges would accommodate a carriageway of least 5m wide. The provision of verges, footpaths and cycleways over the overbridges varies, including their width, and has been determined by the highway needs of each specific location.

6.3. Footbridges

- 6.3.1. A similar design approach has been applied to all proposed new footbridges across the scheme, which would follow the principles of Network Rail standard design. The footbridges would be constructed of steelwork. The use of colours for the frames around the staircase and main span, as well as the handrails, will be appraised according to the surrounding environment of each footbridge and established at the time of the TWAO submission. This is similar to other footbridges located elsewhere along the rail network. The staircase would rest on individual support structures. No proposed footbridges would be lit with the exception of the proposed Woburn Sands School Crossing footbridge, which would incorporate low level lighting in the handrails. As such no adverse impact arising from light pollution would occur.
- 6.3.2. The purpose of the proposed new footbridges is to provide safe access over the railway line for pedestrians and, at appropriate locations, cyclists. The majority of footbridges would support existing Public Rights of Way (PRoW) by replacing level crossings that would be closed. Footbridges would either be located at the same location as existing level crossings or would be in close proximity. Such provision would enable existing PRoW routes to continue unaltered or accommodate diversions.

- 6.3.3. All footbridges would provide a staircase on both sides of the line to provide access to pedestrians. Ramped provision would also be included at locations where existing users of the PRoW include those with impaired mobility. The appropriate provision of stepped and ramped access at proposed footbridges has been informed by a Diversity Impact Assessment to ensure compliance with the Equality Act 2010.
- 6.3.4. The provision of a staircase and ramps on both sides of the line would connect to the main span of each footbridge which would provide a 2m wide walkway over the line. The proposed footbridges would include 1.8m high solid elevation trusses along the main span to provide safety to users and would comprise GRP bridge deck.
- 6.3.5. As with the proposed overbridges, the height of the proposed footbridges is dictated by the need to provide minimum vertical clearance from the rail tracks. A minimum clearance of 5.6m is provided from track level to the bottom of the bridge span at all proposed footbridges. The scale of all footbridges is determined by the need to provide minimum vertical clearance and to be suitable to meet the needs of users at each specific location. In this context the scale of the proposed footbridges is considered to be necessary and appropriate given their functional requirements.

6.4. Winslow Station

- 6.4.1. Outline consent has been granted for the development of Winslow Station, with the exception of the platforms and footbridge linking the station building to the platforms and was obtained in November 2013 (reference 13/02112/AOP). This has been followed by a reserved matters application (reference 16/03132/ADP), which seeks approval for the detailed design of the elements benefiting from outline planning permission. The development with outline consent comprises a single storey rail station building, a two storey car park providing 360 spaces and internal road including a bus layby and vehicle drop-off point.
- 6.4.2. The TWAO submission will seek planning consent for the remaining features of the proposed rail station site not covered by the extant planning permission. These features are two platforms, along with a footbridge providing stepped and lift access from the station building to the platforms. The design rationale for the footbridge, platforms and station building is discussed below.

Footbridge

- 6.4.3. The proposed footbridge would provide access for passengers from the concourse of the station building to the two proposed platforms. The footbridge would provide enclosed access leading to steps and lifts down to the platforms. The access stairs to the platforms would be open.
- 6.4.4. The lifts have been designed to standard NR guidance and they are proposed to be hydraulically operated with a remote plantroom (as per the preferred Network Rail specification). There are three flights to each stair, the upper two of which are in the same direction before the last (lowest) leg turns back through 180 degrees towards the lift as it reaches platform level.

- 6.4.5. The superstructure of the footbridge would include two lift shafts and be a single span across the track, with an additional span linking the footbridge to the station building. The footbridge would have a total span length of 37.86m. In width, the span would measure 3.1m whilst the span height would measure 3.17m. The span would have a vertical clearance of 7.85m over the rail tracks. The platform to footbridge level change is dictated by the existing cutting and is therefore slightly higher than would typically be the case on other footbridges.
- 6.4.6. The spans would comprise braced steel trusses, with perforated aluminium cladding panels. In width, the span would measure 3.1m. The span would be constructed using perforated aluminium profiled cladding and exposed stainless steel bracing. The lift shafts would be finished using rustic brick cavity wall to provide consistency with the material used for the approved station building.

Platforms

- 6.4.7. The two proposed platforms would be located within the existing cutting alongside the railway lines. Both platforms would have a total operational length of 212m, along with an additional 15m refuge area on the east end of the platforms. The width of the platforms would measure 3.5m. Covered shelters for passengers would be provided on both platforms under the steps of the footbridge.
- 6.4.8. Both proposed platforms would be constructed from pre-cast slabs on pre-cast riser walls and ground bearing strip foundations. Tactile paving and copper edge would be incorporated into the precast unit along the edge of the platforms
- 6.4.9. Low retaining structures would be positioned behind the platform canopies and equipment mounts, as the back of the platforms would encroach upon the existing cutting. Traditional masonry riser walls or pre-cast concrete retaining wall units have therefore been considered to be an appropriate option. This would require fill material to be imported, but the additional weight of fill at the toe of the cutting would improve slope stability.
- 6.4.10. To assist maintenance, channel drains situated at the back of the platforms would discharge to the track drainage system via a carrier drain located behind the platform retaining wall.

Station Building

- 6.4.11. The design of the proposed station at Winslow has been informed by a Diversity Impact Assessment to ensure compliance with the Equality Act 2010. The station building has been designed to support access to all users and those with protected characteristics, as defined in the Equality Act 2010. The ticket barriers on the concourse would include wheelchair and pushchair access. The proposed footbridge has been designed to ensure safe and convenient access to the platforms for all users through the provision of lifts in addition to stepped provision.

6.5. Bletchley Station

6.5.1. In order to support increased services along the EWR2 route, there will be an extension to Bletchley Station. This will be in the form of two side platforms, elevated to the same height as Bletchley Flyover, either side of the railway at the north end of Flyover. The platforms will be connected to each other via a new underpass, effectively at ground level. This station extension will be connected to the existing station cross platform concourse. This will provide the sole means of (non-emergency) access/egress to the station extension. The design rationale for the footbridge and platforms is discussed below.

Platforms

6.5.2. Both platforms are proposed to be positioned on the flyover and retained embankment to the east of the existing station platforms. Access to these platforms would be obtained via an extension to the existing footbridge at the station that serves platforms 1 to 6.

6.5.3. The operational length of the two new platforms is proposed to be 212m each in order to be of a length suitable to accommodate services travelling along the EWR route. The width of the proposed platforms would measure 3.5m. A new shelter and cross-platform access structure would be provided approximately halfway along the platforms. The shelter would have a sloped ply membrane canopy roof.

6.5.4. In addition to the operational length, the new platforms would have approximately 40m of emergency refuge at the northern ends at cress level on the existing retained embankment. The emergency refuge would be accessed via a full-width ramp, compliant with the Equality Act 2010. The ramp would constitute part of the cumulative area associated with the refuge area. Additional emergency egress staircases would be provided at the southern end of both platforms.

6.5.5. Approximately 100m of each platform length would be positioned over the existing flyover, whilst the remaining length would be situated on the existing retained embankment to the north. As such, it has been necessary to create two different design solutions for the platforms:

- Raised/suspended platforms along the existing flyover.
- Ground bearing platforms along the existing retained embankment.

Raised Platform Design

6.5.6. The proposed raised platforms along the existing flyover would be supported from ground level by a new structure. This is to prevent any additional loading on the existing flyover. This requires the new platforms to cantilever over the sides of the existing flyover to provide a horizontal stepping distance of 740mm from rail to platform edge. The scheme shall raise the new platforms above the existing flyover on a steel framed structure, with primary frames typically at 13.4m centres to match the existing flyover spans.

- 6.5.7. The platform structure would comprise precast concrete units spanning transversely from the front of platform to the back. The front of platform would be supported by a deep steel beam. The back of platform would be supported by an upstand steel truss with diagonal cross-bracing; which also provides a back-of-platform-barrier.

Proposed Platform Design on Retained Embankment

- 6.5.8. The platform construction along the existing retained embankment would remain similar to the raised platforms; utilising precast concrete units spanning front to back. The back of platform would continue to be supported on the upstand truss. However, the front of platform would be supported on precast concrete riser walls. The upstand truss would continue from the raised platform section to provide a consistent back of platform barrier and integrated upstand service zone.

Proposed Station Extension Design

- 6.5.9. The proposed station extension is split into two sections located either side of the flyover. Both sides of the station contain a staircase and lift to access platform level, along with a covered waiting area adjacent to the platform. The covered waiting area comprises a 20m long triangular shaped platform widening to the south of the stairs and lift.
- 6.5.10. The lift cores shall be constructed in precast reinforced concrete to provide stability to the steel framed structure with blue mosaic tiles. The height from ground level to the peak of the lift shafts (the tallest proposed structure) would measure 9.70.
- 6.5.11. The façade of the station extension shall consist of a continuous full-height steel truss around the building and platform widening. The truss would span from the steel frame of the raised platform structure to cantilevered beams from the lift core. A full height Vierendeel truss would span from the raised platform structure to the lift core along the back of platform (3.5m from platform edge). Both full-height trusses would support the floor slab on the bottom boom and the canopy structure on the top boom. The floor structure would comprise precast concrete units supported at three locations; a deep beam along the front of the platform, the bottom boom of the Vierendeel truss and the bottom boom of the truss along the façade of the building.

Proposed Footbridge

- 6.5.12. A new footbridge would be constructed to connect the existing footbridge at Bletchley Station to the new high level platforms. This is to ensure that access can be gained from the main station building to the new proposed platforms and movement between all platforms is achieved. The total length of the footbridge from the main station building to the new platforms would be 40m. The proposed footbridge would not be covered.

- 6.5.13. The proposed footbridge extension would comprise a two-span steel trusses. The trusses would comprise diagonal cross-bracing to provide consistency with the proposed upstand trusses along the platforms. It would comprise double glazed curtain walling and perforated sinusoidal profiled aluminium cladding. The footbridge deck would comprise precast concrete units, tied to the bottom boom of the trusses with shear studs and in-situ concrete connections. The new footbridge is supported at the west end by a pair of braced steel columns adjacent to the existing footbridge. The appearance of the extension would be compatible with that of the existing footbridge.
- 6.5.14. The access from the existing station to the new platforms, platform 7 and platform 8 would be through the existing footbridge linking platforms 1 through 6. This would extend the existing footbridge from platform 6 towards the new built platforms. Across track access (between platforms 7 & 8) would also exist from the first span ground level of the flyover (adjacent to the north abutment) via stairs and two lifts. The lifts have been sized to comply with NR guidance and specifications and would ensure access to the platforms for all users.

6.6. Sustainability

- 6.6.1. One of the main objectives of EWR2 is to positively contribute to tackling climate change by providing a more sustainable means of meeting travel demands and it is committed to delivering a low carbon and water footprint throughout the whole scheme lifecycle.
- 6.6.2. In order to achieve the above objective, sustainable design principles are at the heart of the proposals for EWR2. Network Rail's Sustainable Development Strategy outlines the strategy for sustainable development and vision for a railway fit for the future. The development of the concept has been based on arriving at a holistic design solution. This integrates the needs and aspirations of various stakeholders. This is a continuous process for all involved and must take full cognisance of refining the design with consideration of the broadest definition of sustainability.
- 6.6.3. The EWR Alliance is also committed to an Alliance Sustainability Strategy. The Sustainability Strategy is underpinned by four key principles, one of which is 'Environmental Protection and Resilience'. Under this principle the EWR Alliance is committed to minimising adverse impacts on the environment and to deliver environmental benefits through achieving the following:
- Delivering a low carbon and water footprint, throughout the whole project lifecycle;
 - Resource efficiency, delivering the right level of quality (right first time);
 - Using ethical and responsibly sourced materials and services;
 - Delivering measureable net biodiversity gain and positively contributing to the conservation of nature in the region; and
 - Managing environmental risk (avoid, reduce and mitigate) throughout the project lifecycle.

- 6.6.4. As referenced in paragraph 6.1.1, a key design principle for EWR2 has been to apply sustainable design and construction principles. In this context, EWR2 has been identified as suitable for consideration against the CEEQUAL scheme, which is a tool designed to assess the sustainability of all proposed development across the scheme. There are a number of areas which CEEQUAL considers (but not limited to), these include people and communities, land use and landscape, ecology and biodiversity, water environment and physical resources. A key objective of EWR2 is to achieve CEEQUAL 'Excellent' score.
- 6.6.5. The proposed Winslow Station, including the main building, footbridge and platforms, will be subject of a BREEAM assessment. BREEAM is an environmental assessment method and rating system for buildings. The target rating for Winslow Station is 'Very Good' and as part of achieving this, consideration of the BREEAM scoring criteria has influenced the design to seek sustainable outcomes from the outset.

7. Conclusion

- 7.1.1. It has been demonstrated that the EWR2 scheme, as proposed at this stage, can deliver a development which is of a design, scale, layout and appearance appropriate to its required function and which provides an attractive, safe and easily navigated environment that is accessible to all users.
- 7.1.2. Although the design of proposed overbridges and footbridges are largely dictated by functional requirements, it is considered that such structures are still fully compliant with the design objectives and principles of national and local planning policy. The proposed development at Winslow Station and Bletchley Station has been designed in consideration of these principles, as well as feedback from consultation. This draft DAS demonstrates that the proposed development at Winslow Station and Bletchley Station has been designed to make a positive contribution to the local area that responds to the surrounding character and appearance. It is demonstrated that all proposed development across the scheme can be developed to be functional, as well as safe and accessible to all users.
- 7.1.3. Section 38 (c) of the Town and Country Planning Act 1990 (TCPA 1990) confirms that planning applications should be determined in accordance with the Development Plan unless material circumstances indicate otherwise. This is reiterated in NPPF paragraph 14 which provides a presumption in favour of sustainable development, stating that development proposals which accord with the Development Plan should be approved without delay.
- 7.1.4. In respect of the design of proposed development across the scheme, this must be considered in the context of the TCPA 1990 and NPPF paragraph 14. The scheme, as proposed at this stage, is considered to comply with and deliver the design objectives and principles of national and local planning policy. As such, the current scheme is considered to be acceptable in design terms and representative of sustainable development.
- 7.1.5. Changes to the findings of this draft DAS may be subject to change at the time of the TWAO submission should aspects of the proposed development be amended.