

Brent Cross Cricklewood Development



Area Wide Walking and Cycling Study: Addendum
60473918-TP-RPT-091
Rev 002

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Rev No	Comments	Checked by	Approved by	Date
001	For internal review	Mark Watson	Stuart Guarniere	17-Dec-15
002	For Authorities comments	Mark Watson	Stuart Guarniere	21-Dec-15

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1 Introduction

1.1 Submission Background

The Area Wide Walking and Cycling (AWWC) Study (document reference No. 47065005-TP-RPT-036 Rev 03, dated 27th November 2014) was submitted to the London Borough of Barnet (LBB) on 19th December 2014 to discharge Condition 1.20 Ref No 14/08105/CON attached to the Planning Permission Ref. No. F/04687/13 for the comprehensive mixed-use redevelopment of the Brent Cross Cricklewood Regeneration Area. An addendum to the document 47065005-TP-RPT-070 Rev 1 was issued in July 2015. The condition (Ref No 14/08105/CON) was discharged on 10 September 2015.

Following the approval of the Phase 1A North Infrastructure Reserved Matters Application (Ref No.15/ REF. 15/03312/RMA), discussions have taken place with LBB and Transport for London (TfL). As a result of these discussions, a number of alternative proposals for specific aspects of the approved infrastructure have been considered and alternative Reserved Matter Applications (RMA's) are to be submitted for Phase 1A North accordingly. The purpose of this addendum report is to detail where the alternative proposals would result in an amendment to the approved Area Wide Walking and Cycling Study.

1.2 Summary of Alternative Proposals

The alternative infrastructure items which are the subject of this Area Wide Walking and Cycling Study addendum are as follows:

- A406 Tempelhof Replacement Bridge (Bridge B1): alternative of two traffic lanes only in carriageway, including the removal of dedicated public transport lanes;
- Brent Terrace North/Tilling Road West junction: alternative alignment;
- River Bridge 1: alternative abutment locations;
- Omission of Temporary Bus Station: the ability to move from the existing Bus Station to the new Bus Station, therefore avoiding the need for a temporary facility; and
- Draft Staples Corner alternative proposals:
 - Bridge B6 or an at-grade crossing solution to be provided
 - Staples Corner footbridges to be retained or an at-grade solution to be provided.

1.3 Format of Addendum

This report provides a chapter on each of the alternative proposals set out in Section 1.2 above, and summarises the effect of the alternative proposals on the information provided in the approved Area Wide Walking and Cycling Study: 47065005-TP-RPT-036 Rev 03, and its addendum 47065005-TP-RPT-070 Rev 1, should each alternative proposal be delivered. The conclusions of the above report remain unchanged as a result of the alternative proposals and the amendments are for consistency purposes only.

For each alternative proposal, the previously approved scheme proposals will be set out, followed by the alternative proposals for this element of the scheme. The updates to the approved Area Wide Walking and Cycling Study as a result of the alternative proposal will then be detailed.

2 A406 Tempelhof Bridge (Bridge B1)

The A406 Tempelhof Bridge (Bridge Structure B1) is a replacement road bridge which provides an improved link over the A406 to connect Market Quarter and Brent Cross East & West Zones.

The Development Partners are investigating an alternative proposal for the specification for this bridge from that shown in the approved RMA so as to provide a replacement bridge which would include only one general traffic lane in each direction, rather than two lanes in each direction which allows for bus lanes as in the approved scheme.

2.1 Approved Scheme

The approved Bridge Structure B1 (Ref No. 15/03312/RMA) accommodates four traffic lanes, two for general traffic (one in each direction) and two bus only lanes (one in each direction). A segregated footway / cycleway will be provided alongside the northbound carriageway of New Tempelhof Avenue linking via High Street South (East works)/Market Square with a segregated facility and toucan crossing at Claremont Avenue.

To the north of the A406 the segregated footway / cycleway will link with a shared footway / cycleway facility connecting with the shopping centre car park access road and the shopping centre cycle parking provision. A toucan crossing will be provided across New Tempelhof Avenue in order to provide access to cycle parking located at the BXSC Tempelhof Circus entrance. A pedestrian only footway will be provided alongside the southbound carriageway between the toucan crossing across New Tempelhof Avenue and High Street South (East Works). In addition, a pedestrian only footway will be provided along the north side of the Tempelhof Link Road.

2.2 Alternative Proposal

The alternative proposal, which was submitted under Reserved Matters Application Ref No 15/06571/RMA in October 2015, includes proposed amendments to the approved highway alignment as set out above. The alternative proposal includes the provision of a narrower overall bridge structure, reducing the number of traffic lanes from four to two, by removing the two dedicated bus lanes. The alternative proposal will reduce the construction complexity and therefore reduces the potential temporary impact to the travelling public.

As per the approved highway alignment a slip lane would be provided for southbound traffic to filter into the Tempelhof Link Road.

The two approach structures will be constructed in a number of stages to ensure that the new highway alignments tie-in satisfactorily to the alternative proposals.

The two approach structures will be constructed in a number of stages to ensure that the new highway alignments tie-in satisfactorily to the alternative proposals. The proposed alternative design for the A406 Tempelhof Bridge as submitted under RMA Ref No 15/06571/RMA is shown in Drawing BXCR-URS-B1-HS-AP-SE-00001 in **Appendix A**.

2.3 Update to the Approved Area Wide Walking and Cycling Study (47065005-TP-RPT-036 Rev 03) and addendum (47065005-TP-RPT-070 Rev 1)

The alternative proposal for the A406 Tempelhof Bridge (Bridge Structure B1) will not alter any aspect of the conclusions of the AWWCS, primarily as the AWWCS considers walking and cycling matters between the BXC site red line boundary and the surrounding area, which Bridge Structure B1 does not affect given its location.

3 Brent Terrace North / Tilling Road West Junction

The approved scheme identifies a section of temporary roadway in Phase 1A North to link the existing Brent Terrace North with the improved Tilling Road West (Part 1). The Development Partners, in discussions with LBB, are investigating an alternative proposal for the design of the Brent Terrace North/Tilling Road West junction in Phase 1A North and whether this junction can be more closely aligned with the existing Brent Terrace North. This may reduce the need for any temporary roadworks at this location.

3.1 Approved Scheme Proposals

The approved scheme (Ref No.15/ REF. 15/03312/RMA) sets out the proposals for the realigned west section of Tilling Road (Part 1) as part of the proposals to link with the newly configured M1 / A406 junction and to provide a revised point of access to Brent Terrace North.

The approved highway alignment includes a revised layout for the junction to provide a signal controlled junction with additional lanes on Tilling Road in both directions.

The approved alignment of the Brent Terrace North / Tilling Road signal controlled junction is based on the junction location shown in the illustrative masterplan which supported the 2014 Permission. The junction location is a little distance west of the existing roundabout and therefore requires a short section of new carriageway in order to tie in with the existing Brent Terrace North.

A shared footway/cycleway will be provided alongside Tilling Road from Brent Terrace North towards Staples Corner to the west and a toucan crossing facility provided across Brent Terrace North. A footway will be provided alongside Tilling Road between Brent Terrace North and the retail access roundabout to the east to cater for pedestrians. This footway will provide access to two bus stops. Advanced cycle stop lines will be provided on the Brent Terrace North and Tilling Road (eastbound) approaches to the signal junction.

3.2 Alternative Proposal

The approved highway alignment for this junction impacts on the Cardiff House car park, the Compass House building and the Jesus House building (and associated car parking). As such, the Development Partners have investigated an alternative alignment for the junction to minimise the impact on the Jesus House plot and other plots in this vicinity.

The alternative highway alignment, as submitted under RMA Ref No 15/06572/RMA in October 2015, utilises the existing Brent Terrace North. On Tilling Road, the alternative alignment follows the current RMA design on the south side, modified only at the bellmouth to suit the new junction location. Modifications have been made on the northern kerb in order to provide adequate stacking capacity on Tilling Road for the westbound traffic. Queuing capacity on Tilling Road for eastbound traffic will increase, with no change in capacity for westbound Tilling Road and Brent Terrace North.

The Passenger Car Unit (PCU) stacking lengths on Tilling Road (westbound) and Brent Terrace North (northbound) are maintained and the PCU stacking length on Tilling Road (eastbound) is increased by approximately four PCU lengths.

A shared footway/cycleway will continue to be provided alongside Tilling Road from Brent Terrace North towards Staples Corner to the west and a toucan crossing facility provided across Brent Terrace North. A footway will still be provided alongside Tilling Road between Brent Terrace North and the retail access roundabout to the east. This footway will continue to provide access to two bus stops. Advanced cycle stop lines will be provided on the Brent Terrace North and Tilling Road (eastbound) approaches to the signal junction.

The alternative alignment for the Brent Terrace North / Tilling Road junction as submitted under RMA Ref No 15/06572/RMA is shown in Drawing BXCR-URS-AH-RM-DR-CE-00013 and BXCR-URS-AH-RM-DR-CE-00014, in **Appendix B**.

3.3 Update to the Approved Area Wide Walking and Cycling Study (47065005-TP-RPT-036 Rev 03) and its initial addendum (47065005-TP-RPT-070 Rev 1)

The alternative proposal for the Brent Terrace North/Tilling Road West junction will not alter any aspect of the conclusions of the AWWCS, primarily as the AWWCS considers walking and cycling matters between the BXC site red line boundary and the surrounding area, which the Brent Terrace North / Tilling Road junction does not affect given its location.

4 Review of River Bridge 1

The approved scheme includes the design arrangement developed for the vehicular River Bridges, including River Bridge 1.

4.1 Approved Scheme Proposals

The previously approved RMA submission includes River Bridge 1 which carries the west side of the new Western Roundabout over the re-aligned River Brent.

4.2 Alternative Proposal

The approved scheme for River Bridge 1, which carries the west side of the new Western Roundabout over the re-aligned River Brent, has been further developed and consideration has been given to an alternative alignment (as submitted under RMA Ref No 15/06573/RMA in October 2015).

4.3 Update to the Approved Area Wide Walking and Cycling Study (47065005-TP-RPT-036 Rev 03) and addendum (47065005-TP-RPT-070 Rev 1)

The alternative alignment of River Bridge 1 will not alter any aspect of the conclusions of the AWWCS, primarily as the AWWCS considers walking and cycling matters between the BXC site red line boundary and the surrounding area, which the alternative alignment of River Bridge 1 does not affect.

5 Omission of Temporary Bus Station

The approved scheme (Ref No.15/ REF. 15/03312/RMA) consists of relocating the existing bus station and providing a temporary bus station in the interim period between the demolishing of the existing bus station and the opening of the new bus station.

5.1 Approved Scheme Proposals

The approved scheme Ref No.15/ REF. 15/03312/RMA) consists of the existing bus station being relocated to a temporary location during sub-phase 1AN to allow the proposed highway network to be delivered. The temporary bus station will support the provision of the existing bus station (including all existing routes) and will be in operation until the new bus is completed. Additional bus stops for pick-ups and drop-offs will also be provided in the vicinity of the shopping centre to maintain good bus passenger accessibility during the period when the temporary bus station is in place.

5.2 Alternative Proposal

The temporary bus station may not be required in the alternative proposal as the alternative constructing sequencing may now result in the new bus station being available prior to the existing facility being demolished (however the temporary bus station may still be required should the new bus station not be complete prior to the demolishing of the existing bus station).

5.3 Update to the Approved Area Wide Walking and Cycling Study (47065005-TP-RPT-036 Rev 03) and addendum (47065005-TP-RPT-070 Rev 1)

The omission of the temporary bus station will not alter any aspect of the conclusions of the AWWCS, primarily as the AWWCS considers walking and cycling matters between the BXC site red line boundary and the surrounding area, which the omission of the temporary bus station does not affect, given its location.

6 Draft Staples Corner alternative proposals

Staples Corner is a large complex urban junction which links the M1, A406 and A5.

The Development Partners, in discussions with LBB, are investigating an alternative proposal to remove the existing footbridges at the junction and replacing them with a series of at grade crossings and to omit the proposed B6 pedestrian cyclist bridge across the A406 and replace it with a series of at-grade crossings to provide links for pedestrians and cyclists around the junction.

6.1 Approved Scheme Proposals

Under the current approved highway alignment, the existing footbridges at Staples Corner are to remain. However, the northeast footbridge will need to be re-provided with a longer span due to the realigned kerb position. In addition, a new pedestrian/cyclist bridge with ramp and steps will be provided (Bridge B6) to the east of the railway line across the A406.

6.2 Draft Alternative Proposal

Under the draft alternative proposals, either the existing footbridges, ramps and steps at Staples Corner will be improved or they will be removed and replaced with a series of at-grade toucan crossings around the junction. Similarly either the pedestrian/ cycle bridge (Bridge B6) will be provided across the A406 or a series of at-grade toucan crossings are proposed.

Detailed discussions are ongoing with the highway authorities as part of the highway technical approval process, following which a decision will be made on the preferred scenario. The alternative DRAFT proposals for Staples Corner are shown in Drawing BXCR-URS-SC-HW-SK-CE-00003 Rev P01, in **Appendix D**.

6.3 Update to the Approved Area Wide Walking and Cycling Study (47065005-TP-RPT-036 Rev 03) and addendum (47065005-TP-RPT-070 Rev 1)

The amendments outlined in Section 6.2 above result in some updates being required to the approved AWWCS. These changes, which are listed below, do not affect the conclusions of the document, and instead are made for consistency/accuracy purposes:

- Table 6.1 first line; remove text stating “Upgrade crossing on A5 to the north of Staples Corner to a toucan crossing”. This crossing upgrade forms part of the Phase 1A North approved and hence not will be delivered as part of the AWWCS improvements.
- Table 6.2 first line; remove text stating “Upgrade crossing on A5 to the north of Staples Corner to a toucan crossing”. This crossing upgrade forms part of the Phase 1A North approved and hence not will be delivered as part of the AWWCS improvements.
- Appendix A of AWWCS Addendum 47065005-TP-RPT-070 Rev 1 – Drawing ‘47066786/AWWCS/003 Rev C’ to be replaced with ‘47066786/AWWCS/003 Rev D’. The revised (Rev D) drawing can be found in **Appendix C** of this Addendum. The following changes have been made to this drawing in Revision D:
 - Note 6 to be added to the Notes section of the drawing: “either the existing footbridges, ramps and steps at Staples Corner will be improved or they will be removed and replaced with a series of at-grade toucan crossings around the junction. Similarly either the pedestrian/ cycle bridge (Bridge B6) will be provided across the A406 or a series of at-grade toucan crossings are proposed”
 - Add text prior to list in yellow box with yellow edging pointing to Staples Corner junction stating “If footbridges retained”
 - Convert grey box pointing to A5 north of Staples Corner to yellow box with blue edging
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Pedestrian Route Analysis and Recommendations, Brent Cross to Neasden LU Station (NE), Section NE PS3, Recommendation for Improvement, change red text (indicating an improvement that is considered to integrate the development into existing networks) stating “Upgrade

crossing on A5 to the north of Staples Corner to a toucan crossing" to blue text (indicating an improvement to be provided as part of other Brent Cross Cricklewood Regeneration Scheme works)

- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Pedestrian Route Analysis and Recommendations, Brent Cross to Neasden LU Station (NE), Section NE PS3, Recommendation for Improvement, amend blue text stating "Provide directional signage to the north of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction" to "Provide directional signage to the north of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained"
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Pedestrian Route Analysis and Recommendations, Brent Cross to Neasden LU Station (NE), Section NE PS3, Recommendation for Improvement, amend blue text stating "Provide lighting and CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction" to "Provide lighting and CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained"
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Pedestrian Route Analysis and Recommendations, Brent Cross to Dollis Hill LU Station (DH), Section DH PS3, Recommendation for Improvement, change red text (indicating an improvement that is considered to integrate the development into existing networks) stating "Upgrade crossing on A5 to the north of Staples Corner to a toucan crossing" to blue text (indicating an improvement to be provided as part of other Brent Cross Cricklewood Regeneration Scheme works)
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Pedestrian Route Analysis and Recommendations, Brent Cross to Dollis Hill LU Station (DH), Section DH PS3, Recommendation for Improvement, amend blue text stating "Provide directional signage to the north of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction" to "Provide directional signage to the north of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained"
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Pedestrian Route Analysis and Recommendations, Brent Cross to Dollis Hill LU Station (DH), Section DH PS3, Recommendation for Improvement, amend blue text stating "Provide lighting and CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction" to "Provide lighting and CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained"
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Cycle Route Analysis and Recommendations, Brent Cross to Dollis Hill via Crest Road (DH1), Section DH1-CS1, Recommendation for Improvement, amend blue text as follows:
 - "Improve lighting on footbridges" amended to "Improve lighting on footbridges if retained"
 - "Install CCTV on footbridges" amended to "Install CCTV on footbridges if retained"
 - "Improve cycle dismount signing on approaches to footbridges" amended to "Improve cycle dismount signing on approaches to footbridges if retained"
 - "Improve wayfinding signage at footbridges" amended to "Improve wayfinding signage at footbridges if retained"
- Appendix B of AWWCS Addendum 47065005-TP-RPT-070 Rev 1, Cycle Route Analysis and Recommendations, Brent Cross to Neasden (NS), Section NS-CS1, Recommendation for Improvement, amend blue text as follows:
 - "Improve lighting on footbridges" amended to "Improve lighting on footbridges if retained"
 - "Install CCTV on footbridges" amended to "Install CCTV on footbridges if retained"
 - "Improve cycle dismount signing on approaches to footbridges" amended to "Improve cycle dismount signing on approaches to footbridges if retained"
 - "Improve wayfinding signage at footbridges" amended to "Improve wayfinding signage at footbridges if retained"

Those schedules updated from Appendix B of the AWWCS Addendum 47065005-TP-RPT-070 Rev 1 are held in **Appendix E**.

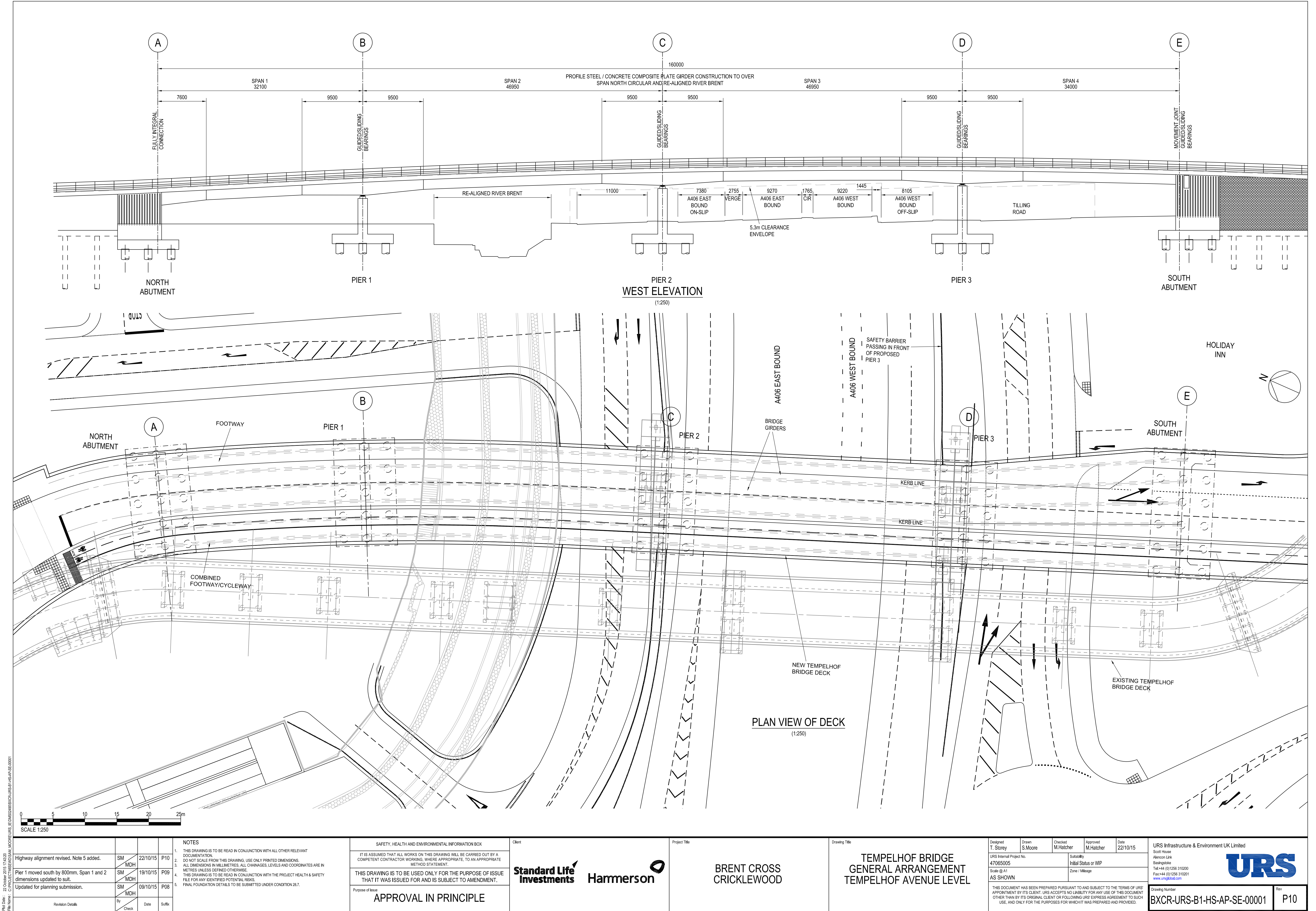
7 Conclusions

In light of the various alternative designs being considered, none will have any implications on the conclusions of the AWWC Study and the small changes required as a result of the draft Staples Corner alternative proposals are made for consistency/ accuracy purposes.

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Appendix A.A406 TEMPELHOF BRIDGE: DRAWING BXCR-URS-B1- HS-AP-SE-00001

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Plot Date: 22 October 2015 17:43:20
Plot Name: C:\PROJECTS\BENTWOOD\BENTWOOD\URS\B1-HS-AP-SE-0001

NOTES				
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.				
2. DO NOT SCALE FROM THIS DRAWING. USE ONLY PRINTED DIMENSIONS.				
3. ALL DIMENSIONS IN MILLIMETRES. ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES UNLESS DEFINED OTHERWISE.				
4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE PROJECT HEALTH & SAFETY FILE FOR ANY IDENTIFIED POTENTIAL RISKS.				
5. FINAL FOUNDATION DETAILS TO BE SUBMITTED UNDER CONDITION 28.7.				
Highway alignment revised. Note 5 added.	SM	MDH	22/10/15	P10
Pier 1 moved south by 800mm. Span 1 and 2 dimensions updated to suit.	SM	MDH	19/10/15	P09
Updated for planning submission.	SM	MDH	09/10/15	P08
Revision Details	By	Check	Date	Suffix

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Purpose of Issue	
APPROVAL IN PRINCIPLE	

Client

Standard Life Investments

Hammerson

Project Title

BRENT CROSS CRICKLEWOOD

Drawing Title

TEMPELHOF BRIDGE
GENERAL ARRANGEMENT
TEMPELHOF AVENUE LEVEL

Designed T. Storey	Drawn S. Moore	Checked M. Hatcher	Approved M. Hatcher	Date 22/10/15
URS Internal Project No. 47065005		Subsidiary Initial Status or WIP		
Scale @ A1 AS SHOWN		Zone / Mileage		

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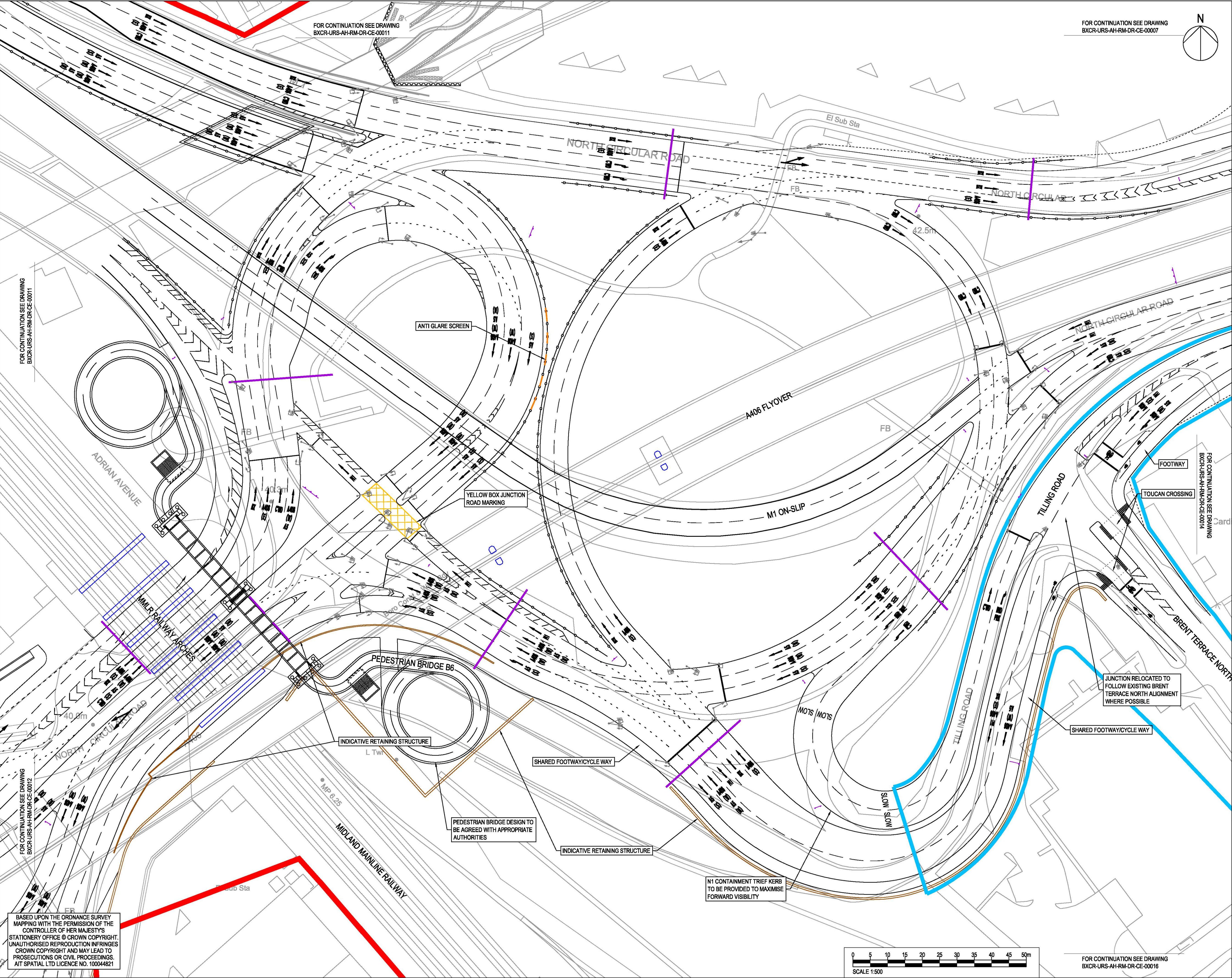
Drawing Number
BXCR-URS-B1-HS-AP-SE-00001

Rev
P10

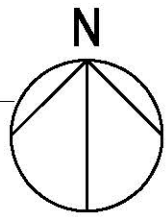
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**Appendix B. BRENT TERRACE NORTH / TILLING ROAD NORTH
JUNCTION DRAWING NO BXCR-URS-AH-RM-DR-CE-00013 AND
BXCR-URS-AH-RM-DR-CE-00014**

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FOR CONTINUATION SEE DRAWING
BXCR-URS-AH-RM-DR-CE-00007



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

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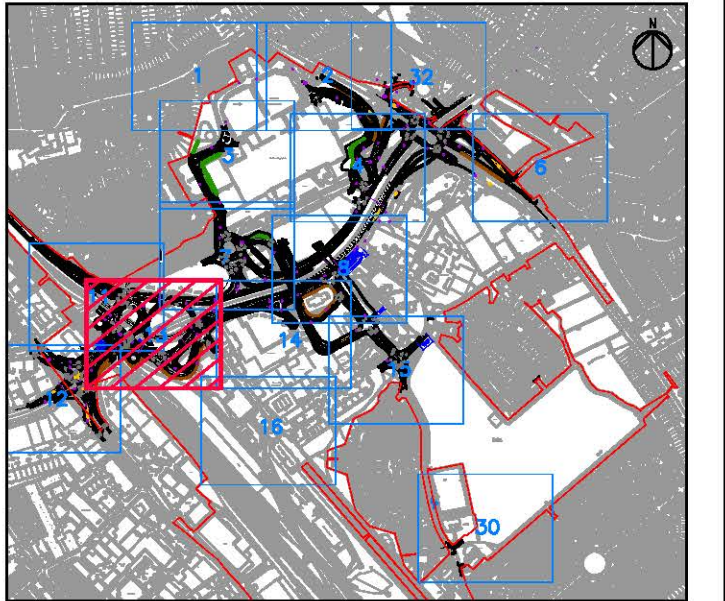
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NOTES

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5. BUS STOP LOCATIONS ARE INDICATIVE AND WILL BE AGREED WITH TL BUSES DURING DETAILED DESIGN.
6. FOR LOCATION, REFER TO KEYPLAN ON DRAWING BXCR-URS-AH-RM-SK-CE-00001.

KEY:

- RED LINE APPLICATION BOUNDARY
- INDICATIVE DIRECTION SIGNAGE LOCATION
- INDICATIVE VEHICLE RESTRAINT SYSTEM
- TEMPORARY CONSTRUCTION IN PHASE 1A NORTH TO BE APPROVED AS PART OF THE RESERVED MATTERS APPLICATION.
- INDICATIVE RETAINING WALL- DETAILS TO BE SUBJECT TO TECHNICAL APPROVAL
- EXTENT OF PUBLIC HIGHWAY
- INDICATIVE ANTI-DAZZLE SCREEN- DETAILS TO BE SUBJECT TO TECHNICAL APPROVAL
- DETAILS BEYOND THIS LINE TO REMAIN AS PER RMA REF 15/03312/RMA



KEY PLAN
SCALE 1:20,000

UPDATED FOR OCTOBER RMA SUBMISSION	JP	AnA	23.10.15	P06
BUS STOP NOTE ADDED	JP	AnA	16.07.15	P05
HIGHWAY ALIGNMENT AND NOTES UPDATED	JP	JB	27.05.15	P04
HIGHWAY ALIGNMENT UPDATED TO COMMENTS AND KEY PLAN ADDED	JP	JB	18.05.15	P03
HIGHWAY ALIGNMENT UPDATED	JP	AnA	01.05.15	P02
FIRST ISSUE	JP	AnA	02.04.15	P01
Revision Details	By	Check	Date	Subtr

RESERVED MATTERS

Client

Project Title

BRENT CROSS CRICKLEWOOD

Drawing Title

**HIGHWAY ALIGNMENT
GENERAL ARRANGEMENT
PHASE 1A NORTH
SHEET 13**

Designed J.Piper	Drawn J.Piper	Checked J. Boyman	Approved A. Alty	Date 23/10/15
URS Internal Project No. 47065005			Suitability Fit for Information Zone	
Scale @ A1 1:500				

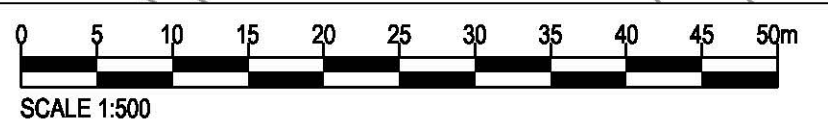
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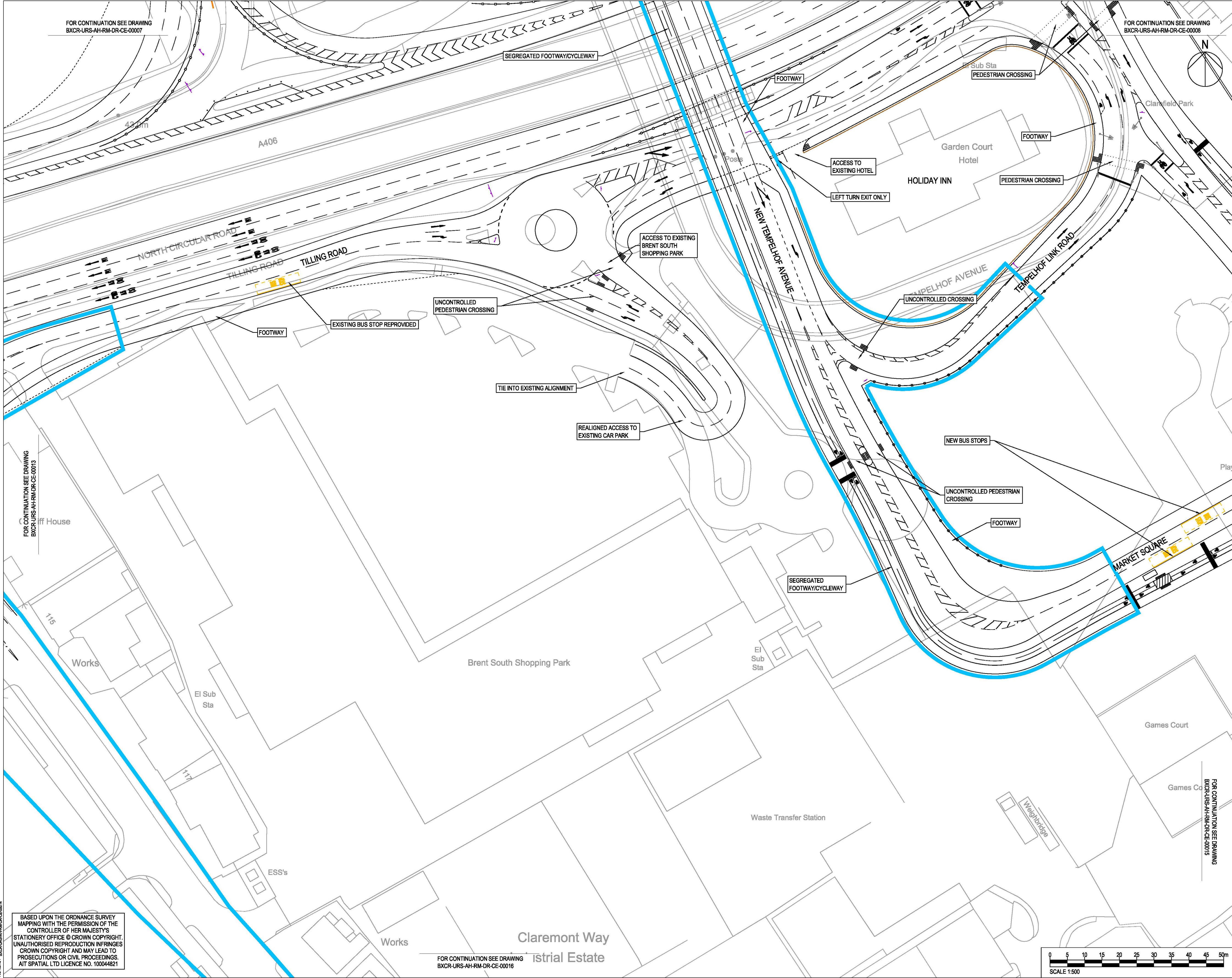
Drawing Number BXCR-URS-AH-RM-DR-CE-00013	Rev P06
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Plot Date: 10/10/2015 12:00 PM
File Name: BXCR-URS-AH-RM-DR-CE-00013

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FOR CONTINUATION SEE DRAWING
BXCR-URS-AH-RM-DR-CE-00016



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

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5. FOR LOCATION, REFER TO KEYPLAN ON DRAWING BOCR-URS-AH-RM-DR-CE-00001.

KEY:

RED LINE APPLICATION BOUNDARY

INDICATIVE DIRECTION SIGNAGE LOCATION

INDICATIVE VEHICLE RESTRAINT SYSTEM

TEMPORARY CONSTRUCTION IN PHASE 1A NORTH DETAILS TO BE APPROVED AS PART OF THE RESERVED MATTERS APPLICATION

INDICATIVE RETAINING WALL - DETAILS TO BE SUBJECT TO TECHNICAL APPROVAL

EXTENT OF PUBLIC HIGHWAY

BUS STOP LOCATIONS ARE INDICATIVE AND WILL BE AGREED WITH TL BUSES DURING DETAILED DESIGN

DETAILS BEYOND THIS LINE TO REMAIN AS PER RMA REF 15/03312/RMA

KEY PLAN

SCALE 1:20,000

UPDATED FOR OCTOBER RMA SUBMISSION

BUS STOP ADDED TO KEY

BUS STOP NOTE ADDED

HIGHWAY ALIGNMENT AND NOTES UPDATED

HIGHWAY ALIGNMENT UPDATED TO COMMENTS AND KEY PLAN ADDED

HIGHWAY ALIGNMENT UPDATED

HIGHWAY ALIGNMENT UPDATED

MINOR HIGHWAY ALIGNMENT CHANGES

Revision Details

By

Check

Date

Subtr

Purpose of Issue

RESERVED MATTERS

Client

Standard Life Investments

Hammerson

Project Title

BRENT CROSS CRICKLEWOOD

Drawing Title

HIGHWAY ALIGNMENT GENERAL ARRANGEMENT PHASE 1A NORTH SHEET 14

Designed

Drawn

Checked

Approved

Date

URS Internal Project No.

47065005

Suitability

Fit for Information

Scale @ A1

1:500

Zone

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Drawing Number

BXCR-URS-AH-RM-DR-CE-00014

Rev

P09

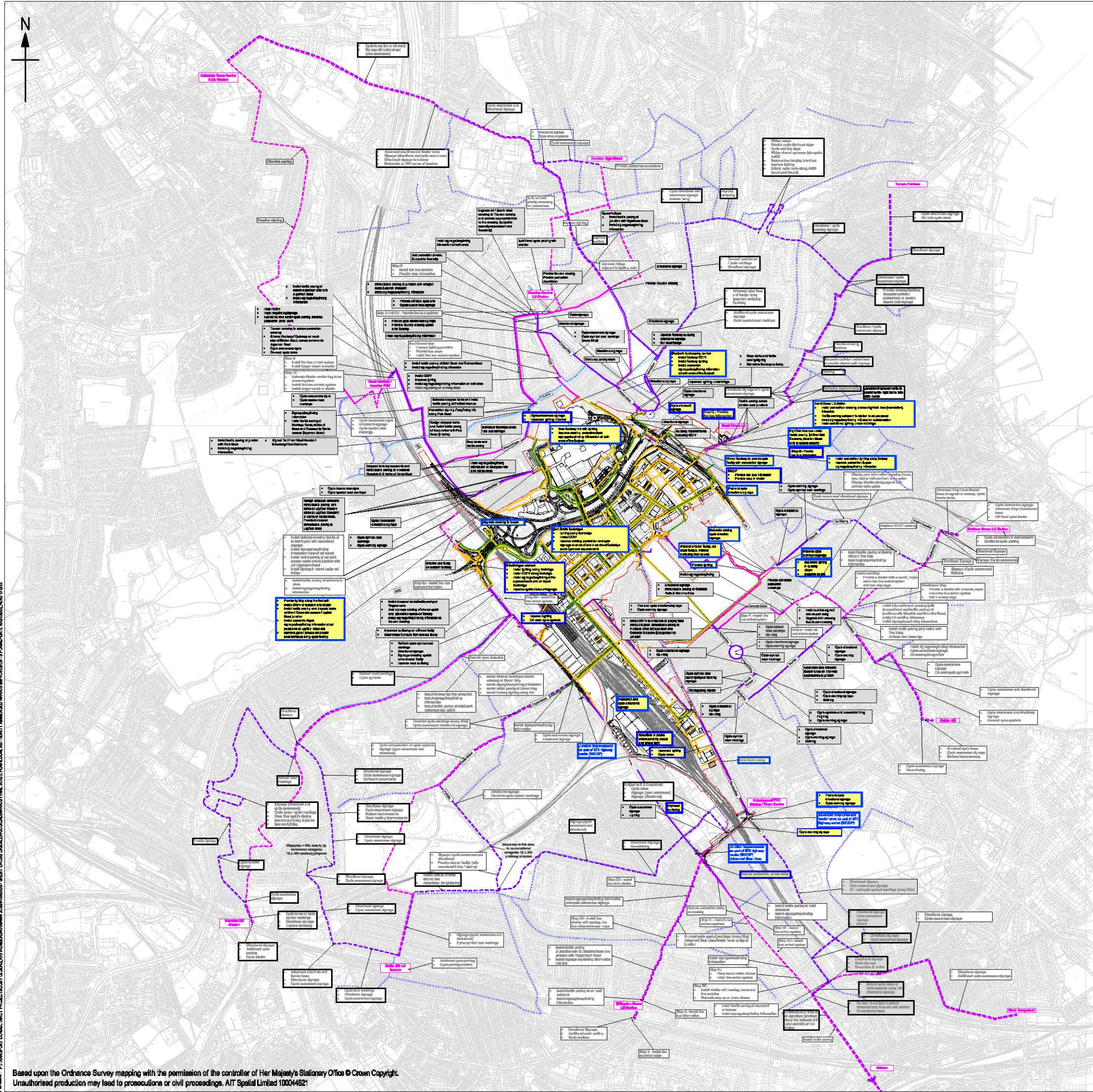
Plot Date: 10/02/2016 11:49 AM
File Name: BXCR-URS-AH-RM-DR-CE-00014

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FOR CONTINUATION SEE DRAWING BXCR-URS-AH-RM-DR-CE-00016

Appendix C. AWWCS DRAWING 47066786/AWWCS/003 REV D

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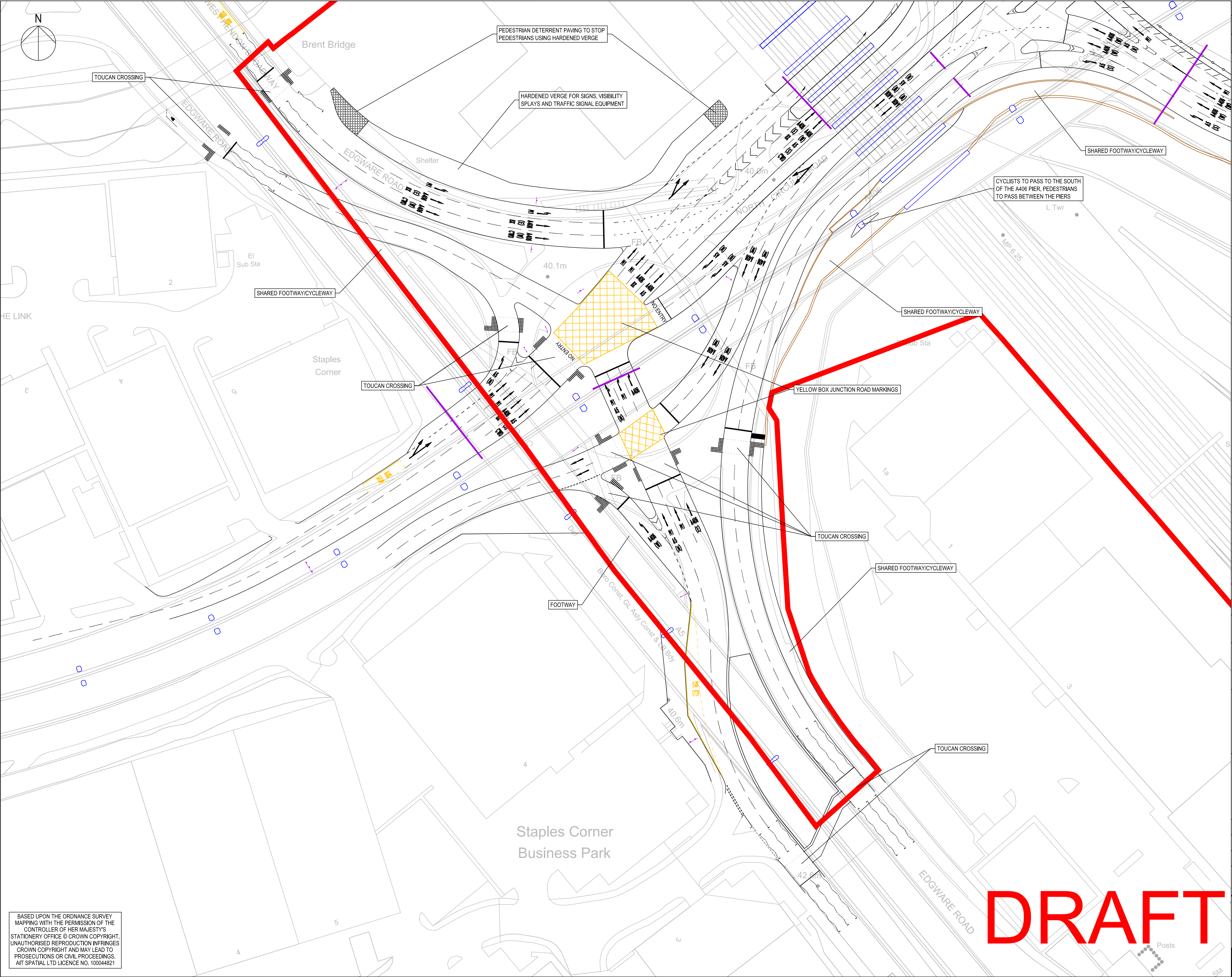
- Key**
- Redline boundary
 - Proposed BXC Pedestrian Route
 - Proposed BXC Cycle Route
 - AWWCS Pedestrian Route where Improvements to Integrate the Development into Existing Networks are Proposed
 - AWWCS Remaining Pedestrian Route
 - AWWCS Cycle Route where Improvements to Integrate the Development into Existing Networks are Proposed
 - AWWCS Remaining Cycle Route
 - Capital Ring Walkway
 - Existing Cycle Routes on Quieter Roads Recommended by Other Cyclists To Be Retained (TfL Local Cycling Guide 3)
 - Proposed BXC Pedestrian Route Below Structure
 - Proposed BXC Cycle Route Below Structure
 - Existing Routes Signed or Marked For Use By Cyclists On A Mixture of Quiet and Busier Roads
 - Existing Off Road Routes
 - Retained Path
 - Cycle Parking
 - Potential Improvements for Consideration by Local Authorities
 - Proposed Improvements to Integrate Development into Existing Networks
 - Proposed Improvement to be Provided as Part of the Section 73 Highway Works
 - Proposed Improvements Identified as part of the AWWCS Audits within BXC Redline Boundary (funded as part of other works)
 - Key Destination

CONSTRUCTION RISKS		MAINTENANCE / CLOSURE RISKS		DEMOLITION RISKS	
In addition to the hazard/risks normally associated with the types of work detailed on this drawing take note of above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.					
SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX					
NOTES					
1. Wayfinding signage to be considered alongside wayfinding strategy					
2. Improvements subject to feasibility					
3. Also includes identified improvements outside of AWWC Study					
4. This plan includes amendments / additions suggested by TfL, LBS, LSC and LBSr to the original plan 47066788/AAWCS001 (Rev C)					
5. End state pedestrian cycle network internal to the site (red line) is subject to change as it's work in progress.					
6. Either the existing footbridges, ramps and steps at Staples Corner will be improved or they will be removed and replaced with an at grade crossing solution around the junction. Similarly either the pedestrian / cycle bridge (Bridge B8) will be provided across the A408 or an at grade crossing solution (with passive provision for the new Bridge B8 with ramp and steps being maintained).					
This drawing is for preliminary purposes only and is subject to amendment during design development. UNDER NO CIRCUMSTANCES MUST THIS DRAWING BE USED FOR CONSTRUCTION PURPOSES					
End State Layout Updated and minor amendments made to feed following further local authority comments		JB	MRW	05.11.14	B
Minor amendments made to Improvements following local authority comments		KP	MRW	22.06.15	C
Minor text amendments for December 2015 addenda		JB	MRW	15.12.15	D
Revision Details		By	Check	Date	Ref
Purpose of issue		Draft			
Client		Hammerson Properties / Standard Life			
Project Title		Brent Cross Cricklewood Regeneration AAWCS			
Drawing Title		Area Wide Walking and Cycling Study (AAWCS) Improvements Plan and Proposed Pedestrian and Cycle Network			
Drawn JB	Checked KJP	Approved MRW	Date December 15		
URS Internal Project No. 47066788		Subsidiary		Zone / Mileage	
Scale 1:1 NTS		-		-	
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URS					
Drawing Number 47066786/AAWCS/003				Rev D	

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Appendix D. DRAFT STAPLES CORNER ALTERNATIVE PROPOSALS DRAWING BXCR-URS-SC-HW-SK-CE-00003 REV P01

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Safety, Health and Environmental Information Box

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5. BUS STOP LOCATIONS ARE INDICATIVE AND WILL BE AGREED WITH TFL BUSES DURING DETAILED DESIGN.

6.

KEY:

RED LINE APPLICATION BOUNDARY

INDICATIVE DIRECTION SIGNAGE LOCATION

INDICATIVE RETAINING WALL- DETAILS TO BE SUBJECT TO TECHNICAL APPROVAL

INDICATIVE VEHICLE RESTRAINT SYSTEM

BUS STOP LOCATIONS ARE INDICATIVE AND WILL BE AGREED WITH TFL BUSES DURING DETAILED DESIGN.

PEDESTRIAN DETERRENT PAVING

FIRST ISSUE	JP	AnA	08.12.15	P01
Revision Details	By	Check	Date	Subt
Purpose of Issue				
FOR INFORMATION ONLY				
Client				
<div>Standard Life Investments</div> <div>Hammerson</div>				
Project Title				
BRENT CROSS CRICKLEWOOD				
Drawing Title				
BRENT CROSS PHASE 1A NORTH GENERAL ARRANGEMENT AT GRADE CROSSINGS				
Designed	Drawn	Checked	Approved	Date
J.Piper	J.Piper	J. Boyman	A. Alty	08/12/15
URS Internal Project No.			Suitability	
47065005			Fit for Information	
Scale @ A1			Zone	
1:500				
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Drawing Number				Rev
BXC-RS-SC-HW-SK-CE-00003				P01

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Plot Date: 13/01/15 4:03 PM
File Name: BXC-RS-SC-HW-SK-CE-0003

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Appendix E. UPDATED ROUTE IMPROVEMENTS SCHEDULES

Pedestrian Route Analysis and Recommendations

Brent Cross to Neasden LU Station (NE)

A route analysis of this pedestrian route is provided below. The route has been separated into several 'Pedestrian Sections' (PS). A general description of each section and recommended improvements are provided for each section. With regards to the improvements:

- Those improvements shown in 'red' text are those that are considered to integrate the development into existing networks.
- Those improvements shown in 'blue' text are those that are to be provided as part of other Brent Cross Cricklewood Regeneration Scheme works.
- Those improvements shown in 'black' text denote 'potential improvements for consideration by local authorities' identified as part of the PERS/ CERS work.

A route network map with annotated sections is provided in drawing reference: 47066786/AWWCS/005 Rev 0.

The PERS audit results along with photos of the route are provided in Section 3.2 of the PERS and CERS Findings report (document reference: 47065005-TP-RPT-033 Rev 02).

Section NE PS1
Brent Cross Shopping Centre to (and including) the Layfield Road/Brent Park Road/Dallas Road junction via Layfield Road
General Description:
<p>Inadequate lighting and CCTV at the western end of the footpath which connects the shopping centre to Layfield Road</p> <p>Absence of dropped kerbs and tactile paving at the western end of the footpath which connects the shopping centre to Layfield Road, as well as across the Brent Park Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p> <p>Misaligned dropped kerbs and absence of tactile paving at the two Layfield Road/Layfield Close junctions, the two Layfield Road/Layfield Crescent junctions and across the Dallas Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p> <p>Absence of directional signage at the Layfield Road/Brent Park Road/Dallas Road junction and at the western end of the footpath which connects the shopping centre to Layfield Road</p>
Recommendation for Improvement:
<p><i>Improve lighting and CCTV at the western end of the footpath which connects the shopping centre to Layfield Road</i></p> <p>Provide dropped kerbs and install tactile paving at the western end of the footpath which connects the shopping centre to Layfield Road</p> <p>Provide dropped kerbs and tactile paving across the Brent Park Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p> <p>Realign dropped kerbs and install tactile paving at the two Layfield Road/Layfield Close junctions, the two Layfield Road/Layfield Crescent junctions and across the Dallas Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p>

Provide directional signage at the Layfield Road/Brent Park Road/Dallas Road junction

Provide direction signage at the western end of the footpath which connects the shopping centre to Layfield Road

Section NE PS2

Brent Park Road to (and including) the A5 Edgware Road/Brent Park Road junction

General Description:

Absence of crossing facility at the access to the builder's yard on Brent Park Road

Absence of tactile paving at the car park access roads (on Brent Park Road) and at the A5 Edgware Road/Brent Park Road junction

Absence of directional signage to the west of the railway tunnel on Brent Park Road

Inadequate lighting within the tunnel which passes underneath the railway line along Brent Park Road

Recommendation for Improvement:

Provide a build-out crossing facility at the access to the builder's yard on Brent Park Road

Install tactile paving at the car park access roads (on Brent Park Road) and at the A5 Edgware Road/Brent Park Road junction

Provide directional signage to the west of the railway tunnel on Brent Park Road

Provide lighting within the tunnel which passes underneath the railway line along Brent Park Road

Section NE PS3

A5 Edgware Road to (and including) the A5 Edgware Road/Oxgate Lane junction

General Description:

Absence of tactile paving at the business park access road to the west of the A5 Edgware Road/A406 North Circular Road junction

Absence of directional signage to the west of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction and at the toucan crossing to the east of the A5 Edgware Road/A406 North Circular Road junction

Inadequate lighting and absence of CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction

No live bus information available at bus stops SJ and SB to the east of the A5 Edgware Road/A406 North Circular Road junction

Poor surfacing, obstructions caused by on-street furniture and absence of shared use signage along the shared cycle/footway to the east of the A5 Edgware Road/A406 North Circular Road junction

Absence of dropped kerbs and tactile paving across the Oxgate Lane arm of the A5 Edgware

Road/Oxgate Lane junction
Recommendation for Improvement:
<p>Install tactile paving at the business park access road to the west of the A5 Edgware Road/A406 North Circular Road junction</p> <p>Provide directional signage along A5 Edgware Road near to Brent Park Road</p> <p>Provide directional signage to the north of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained</p> <p>Provide directional signage at the toucan crossing to the south of the A5 Edgware Road/A406 North Circular Road junction</p> <p>Provide lighting and CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained</p> <p>Provide live bus information at bus stops SJ and SB to the east of the A5 Edgware Road/A406 North Circular Road junction</p> <p><i>Improve surfacing, remove on-street furniture causing an obstruction and provide shared use signage along the shared cycle/footway to the east of the A5 Edgware Road/A406 North Circular Road junction</i></p> <p>Provide dropped kerbs and install tactile paving across the Oxgate Lane arm of the A5 Edgware Road/Oxgate Lane junction</p> <p>Upgrade crossing on A5 to the north of Staples Corner to a toucan crossing</p> <p>Provide a shared footway/cycleway along eastern side of A5 (north of Staples Corner) between Staples Corner and Brent Park Road.</p> <p><i>Provide directional signage at the A5 Edgware Road / Oxgate Lane Junction</i></p>

Sections NE PS4 and PS5 do not include any recommendations for improvements.

Cycle Route Analysis and Recommendations

Brent Cross to Neasden (NS)

A route analysis of this cycle route is provided below. The route has been separated into several sections Cycle Sections (CS). A general description of each section and recommended improvements are provided for each section. With regards to the improvements:

- Those improvements shown in 'red' text are those that are considered to integrate the development into existing networks.
- Those improvements shown in 'blue' text are those that are to be provided as part of other Brent Cross Cricklewood Regeneration Scheme works.
- Those improvements shown in 'black' text denote 'potential improvements for consideration by local authorities' identified as part of the PERS/ CERS work.

A route network map with annotated sections is provided in drawing reference: 47066786/AWWCS/006 Rev 0.

The CERS audit results along with photos of the route are provided in Section 3.2 of the PERS and CERS Findings report (document reference: 47065005-TP-RPT-033 Rev 02).

Section NS-CS1 (partly within redline boundary)
Pedestrian footbridges to A5/Oxgate Lane junction (including junction)
General Description:
Footbridge over A5 poorly lit Poor sense of personal security on footbridges Cycle dismount signage at approaches to footbridges poor Shared facility poorly signed Directional signage to BXCSC poor at footbridges, toucan crossing and at A5/Oxgate Lane junction Shared facility poorly surfaced Street furniture in shared facility Faded cycle symbol road markings Road surfacing poor at A5/Oxgate Lane junction
Recommendation for Improvement:
<i>Improve lighting on footbridges if retained</i> <i>Install CCTV on footbridges if retained</i> <i>Improve cycle dismount signage on approaches to footbridges if retained</i> <i>Improve wayfinding signage at footbridges if retained</i> <i>Improve shared facility signage (directing cyclists onto facility and informing users of presence of facility)</i>

Install wayfinding signage at toucan crossing and at A5/Oxgate Lane junction

Improve surfacing on shared facility

Clear street furniture on shared facility

Refresh on-road cycle symbol road markings (on A5 northbound off-slip)

Improved road surfacing at A5/Oxgate Lane junction

Section NS-CS2

A5/Oxgate Lane junction (not including junction) to Randall Avenue (not including junction with Tanfield Avenue)

General Description:

No cycle facilities along Oxgate Lane / Crest Road / Tanfield Avenue

Faded road markings

Recommendation for Improvement:

Provide cycle symbol road markings along Oxgate Lane / Crest Road / Tanfield Avenue

Refresh road markings along links

Review cycle detection

Section NS-CS3

Randall Avenue (including junction with Tanfield Avenue) to pedestrian footbridge over A4088 (not including pedestrian footbridge)

General Description:

Faded road markings at Tanfield Avenue/Kenwyn Drive junction

Lack of directional signage

Lack of cycle awareness signage

No cycle facilities

Litter and fly tipping along route (particularly in alleyway and behind shops)

Poor surfacing

Poorly lit (particularly in un-overlooked sections of the route, i.e. alleyway and behind shops)

Recommendation for Improvement:

Refresh road markings at Tanfield Avenue/Kenwyn Drive junction

Provide cycle lanes or cycle symbol road markings along route

Improve road surfacing in places

Provide directional signage

Provide cycle awareness signage
Clear fly tipping / litter (particularly in alleyway and behind shops)
Improve lighting (particularly in un-overlooked sections of the route, i.e. alleyway and behind shops)

Section NS-CS4
Pedestrian footbridge over A4088 (including pedestrian footbridge) to Neasden London Underground station
General Description:
<p>Lack of lighting on footbridge</p> <p>Poor cycle awareness signage along Ballogie Avenue/ Landsdowne Grove</p> <p>No cycle facilities along Neasden Lane</p> <p>Directional signage to station poor</p> <p>Poor surface along Neasden Lane</p> <p>Insufficient cycle parking capacity</p> <p>No cycle parking shelter</p>
Recommendation for Improvement:
<p>Provide lighting on pedestrian footbridge</p> <p>Provide cycle awareness signage along Ballogie Avenue/ Landsdowne Grove</p> <p>Provide cycle lanes / cycle symbol road markings along Neasden Lane</p> <p>Improve directional signage to station along Neasden Lane</p> <p>Surfacing improvements on Neasden Lane</p> <p>Additional cycle parking with shelter at station</p>

Pedestrian Route Analysis and Recommendations

Brent Cross to Dollis Hill LU Station (DH)

A route analysis of this pedestrian route is provided below. The route has been separated into several 'Pedestrian Sections' (PS). A general description of each section and recommended improvements are provided for each section. With regards to the improvements:

- Those improvements shown in 'red' text are those that are considered to integrate the development into existing networks.
- Those improvements shown in 'blue' text are those that are to be provided as part of other Brent Cross Cricklewood Regeneration Scheme works.
- Those improvements shown in 'black' text denote 'potential improvements for consideration by local authorities' identified as part of the PERS/ CERS work.

A route network map with annotated sections is provided in drawing reference: 47066786/AWWCS/005 Rev 0.

The PERS audit results along with photos of the route are provided in Section 3.3 of the PERS and CERS Findings report (document reference: 47065005-TP-RPT-033 Rev 02).

Section DH PS1
Brent Cross Shopping Centre to (and including) the Layfield Road/Brent Park Road/Dallas Road junction via Layfield Road
General Description:
<p>Inadequate lighting and CCTV at the western end of the footpath which connects the shopping centre to Layfield Road</p> <p>Absence of dropped kerbs and tactile paving at the western end of the footpath which connects the shopping centre to Layfield Road, as well as across the Brent Park Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p> <p>Misaligned dropped kerbs and absence of tactile paving at the two Layfield Road/Layfield Close junctions, the two Layfield Road/Layfield Crescent junctions and across the Dallas Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p> <p>Absence of directional signage at the Layfield Road/Brent Park Road/Dallas Road junction and at the western end of the footpath which connects the shopping centre to Layfield Road</p>
Recommendation for Improvement:
<p><i>Improve lighting and CCTV at the western end of the footpath which connects the shopping centre to Layfield Road</i></p> <p>Provide dropped kerbs and install tactile paving at the western end of the footpath which connects the shopping centre to Layfield Road</p> <p>Provide dropped kerbs and tactile paving across the Brent Park Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p> <p>Realign dropped kerbs and install tactile paving at the two Layfield Road/Layfield Close junctions, the two Layfield Road/Layfield Crescent junctions and across the Dallas Road arm of the Layfield Road/Brent Park Road/Dallas Road junction</p>

Provide directional signage at the Layfield Road/Brent Park Road/Dallas Road junction

Provide direction signage at the western end of the footpath which connects the shopping centre to Layfield Road

Section DH PS2

Brent Park Road to (and including) the A5 Edgware Road/Brent Park Road junction

General Description:

Absence of crossing facility at the access to the builder's yard on Brent Park Road

Absence of tactile paving at the car park access roads (on Brent Park Road) and at the A5 Edgware Road/Brent Park Road junction

Absence of directional signage to the west of the railway tunnel on Brent Park Road

Inadequate lighting within the tunnel which passes underneath the railway line along Brent Park Road

Recommendation for Improvement:

Provide a build-out crossing facility at the access to the builder's yard on Brent Park Road

Install tactile paving at the car park access roads (on Brent Park Road) and at the A5 Edgware Road/Brent Park Road junction

Provide directional signage to the west of the railway tunnel on Brent Park Road

Provide lighting within the tunnel which passes underneath the railway line along Brent Park Road

Section DH PS3

A5 Edgware Road to (and including) the A5 Edgware Road/Oxgate Lane junction

General Description:

Absence of tactile paving at the business park access road to the west of the A5 Edgware Road/A406 North Circular Road junction

Absence of directional signage to the west of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction and at the toucan crossing to the east of the A5 Edgware Road/A406 North Circular Road junction

Inadequate lighting and absence of CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction

No live bus information available at bus stops SJ and SB to the east of the A5 Edgware Road/A406 North Circular Road junction

Poor surfacing, obstructions caused by on-street furniture and absence of shared use signage along the shared cycle/footway to the east of the A5 Edgware Road/A406 North Circular Road junction

Absence of dropped kerbs and tactile paving across the Oxgate Lane arm of the A5 Edgware Road/Oxgate Lane junction
Recommendation for Improvement:
<p>Install tactile paving at the business park access road to the west of the A5 Edgware Road/A406 North Circular Road junction</p> <p>Provide directional signage along A5 Edgware Road near to Brent Park Road</p> <p>Provide directional signage to the north of the A5 Edgware Road/A406 North Circular Road junction, on the approaches to and along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained</p> <p>Provide directional signage at the toucan crossing to the south of the A5 Edgware Road/A406 North Circular Road junction</p> <p>Provide lighting and CCTV along the footbridge crossing the A5 Edgware Road/A406 North Circular Road junction if footbridge is retained</p> <p>Provide live bus information at bus stops SJ and SB to the east of the A5 Edgware Road/A406 North Circular Road junction</p> <p><i>Improve surfacing, remove on-street furniture causing an obstruction and provide shared use signage along the shared cycle/footway to the east of the A5 Edgware Road/A406 North Circular Road junction</i></p> <p>Provide dropped kerbs and install tactile paving across the Oxgate Lane arm of the A5 Edgware Road/Oxgate Lane junction</p> <p>Upgrade crossing on A5 to the north of Staples Corner to a toucan crossing</p> <p>Provide a shared footway/cycleway along eastern side of A5 (north of Staples Corner) between Staples Corner and Brent Park Road.</p> <p><i>Provide directional signage at the A5 Edgware Road / Oxgate Lane Junction</i></p>

Section DH PS4
A5 Edgware Road to (and including) the A5 Edgware Road/Oxgate Gardens junction
General Description:
<p>Inadequate footway lighting and absence of directional signage along the A5 Edgware Road</p> <p>Absence of tactile paving at the retail park entrance and exits (on the A5 Edgware Road) and at the A5 Edgware Road/Geron Way junction</p> <p>Absence of crossing facility at the A5 Edgware Road/Geron Way junction</p>
Recommendation for Improvement:
<p>Improve footway lighting and provide directional signage along the A5 Edgware Road</p> <p><i>Provide directional signage at the A5 Edgware Road/Oxgate Gardens Junction and along A5</i></p> <p>Install tactile paving at the retail park entrance and exits (on the A5 Edgware Road) and at the A5 Edgware Road/Geron Way junction</p>

Provide an island crossing facility at the A5 Edgware Road/Geron Way junction

Improve the A5 Edgware Road/Geron Way junction as part of S73 highway works (BXCDP)

Section DH PS5

Oxgate Gardens to (and including) the entrance to Gladstone Park via Coles Green Road and Dollis Hill Lane

General Description:

Absence of directional signage along Oxgate Gardens

Recommendation for Improvement:

Provide directional signage along Oxgate Gardens and Coles Green Road

Section DH PS6 and PS7 do not include any recommendations for improvements.

Cycle Route Analysis and Recommendations

Brent Cross to Dollis Hill via Crest Road (DH1)

A route analysis of this cycle route is provided below. The route has been separated into several sections Cycle Sections (CS). A general description of each section and recommended improvements are provided for each section. With regards to the improvements:

- Those improvements shown in 'red' text are those that are considered to integrate the development into existing networks.
- Those improvements shown in 'blue' text are those that are to be provided as part of other Brent Cross Cricklewood Regeneration Scheme works.
- Those improvements shown in 'black' text denote 'potential improvements for consideration by local authorities' identified as part of the PERS/ CERS work.

A route network map with annotated sections is provided in drawing reference: 47066786/AWWCS/006 Rev 0.

The CERS audit results along with photos of the route are provided in Section 3.3 of the PERS and CERS Findings report (document reference: 47065005-TP-RPT-033 Rev 02).

Section DH1-CS1 (partly within redline boundary)
Pedestrian footbridges to A5/Oxgate Lane junction (including junction)
General Description:
Footbridge over A5 poorly lit Poor sense of personal security on footbridges Cycle dismount signage at approaches to footbridges poor Shared facility poorly signed Directional signage to BXCSC poor at footbridges, toucan crossing and at A5/Oxgate Lane junction Shared facility poorly surfaced Street furniture in shared facility Faded cycle symbol road markings Road surfacing poor at A5/Oxgate Lane junction
Recommendation for Improvement:
<i>Improve lighting on footbridges if retained</i> <i>Install CCTV on footbridges if retained</i> <i>Improve cycle dismount signage on approaches to footbridges if retained</i> <i>Improve wayfinding signage at footbridges if retained</i> <i>Improve shared facility signage (directing cyclists onto facility and informing users of presence of facility)</i>

Install wayfinding signage at toucan crossing and at A5/Oxgate Lane junction

Improve surfacing on shared facility

Clear street furniture on shared facility

Refresh on-road cycle symbol road markings (on A5 northbound off-slip)

Improved road surfacing at A5/Oxgate Lane junction

Section DH1-CS2

A5/Oxgate Lane junction (not including junction) to Randall Avenue (not including junction with Tanfield Avenue)

General Description:

No cycle facilities along Oxgate Lane / Crest Road / Tanfield Avenue

Faded road markings

Recommendation for Improvement:

Provide cycle symbol road markings along Oxgate Lane / Crest Road / Tanfield Avenue

Refresh road markings along links

Review cycle detection

Section DH1-CS3

Tanfield Avenue/Randall Avenue (including junction) to Lennox Gardens/ Dudden Hill Lane junction (including junction)

General Description:

Poor directional signage provision

No cycle awareness signage along section

Poor road surface along Randall Avenue, at Randall Avenue/ Park View Road junction

Faded road markings at Randall Avenue/ Park View Road junction

Recommendation for Improvement:

Provide directional signage at Tanfield Avenue / Randall Avenue junction, Randall Avenue/ Park View Road and Lennox Gardens / Dudden Hill Lane junctions

Provide cycle awareness signage along Randall Avenue, Park View Road and Lennox Gardens and at Lennox Gardens / Dudden Hill Lane junction

Road surface improvements along Randall Avenue, at Randall Avenue/ Park View Road junction

Refresh road markings at Randall Avenue/ Park View Road junction

Section DH1-CS4
Lennox Gardens/ Dudden Hill Lane junction (not including junction) to Dollis Hill station
General Description:
<p>Poor directional signage provision</p> <p>No cycle awareness signage along section</p> <p>No cycle facilities at Dudden Hill Lane / Burnley Road junction</p> <p>No cycle facilities along Burnley Road</p> <p>Inadequate spare cycle parking capacity at station</p> <p>No cycle parking shelters at station</p>
Recommendation for Improvement:
<p>Provide directional signage along Dudden Hill Lane, at Dudden Hill Lane / Burnley Road junction and on approach to station</p> <p>Provide cycle awareness signage along Dudden Hill Lane, at Dudden Hill Lane / Burnley Road junction and on Burnley Road</p> <p>Provide advanced stop lines and feeder lanes at the Dudden Hill Lane / Burnley Road junction</p> <p>Provide cycle lanes along Burnley Road</p> <p><i>Provide additional cycle parking and shelters at Dollis Hill Station</i></p>

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AECOM (NYSE: ACM) is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 100,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and collaborative technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments. A Fortune 500 company, AECOM serves clients in more than 100 countries and has annual revenue in excess of \$6 billion.

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