

LOCATION: Brent Cross Cricklewood Regeneration Area, London, NW2

REFERENCE: 15/03312/RMA **Received:** 29 May, 2015
Accepted: 02 June, 2015

WARD: Childs Hill, Golders Green, West Hendon **Expiry:** 01 September, 2015

APPLICANT: Brent Cross Development Partners

PROPOSAL: Reserved Matters application within Phase 1a (North) of the Brent Cross Cricklewood Regeneration scheme relating to Layout, Scale, Appearance, Access and Landscaping for infrastructure including roads, bridges and River Brent diversion works. Submission is pursuant to conditions 1.2.1.A, 2.1 and for the part discharge of condition 13.1 of planning permission F/04687/13 dated 23 July 2014 for the comprehensive mixed use redevelopment of the Brent Cross Cricklewood regeneration area.

Application is accompanied by an Environmental Statement Further Information Report.

RECOMMENDATION

Resolution to approve subject to:

Part 1:

The completion of a satisfactory Deed of Variation to make the necessary amendments the existing Section 106 Agreement dated 22nd July 2014 attached to planning permission F/04687/13, to secure the following:

- 1) Amendment to introductory text to Schedule 1 to allow the minor amendment of defined terms in Schedule 1 of the S106 agreement to be agreed in writing between the Brent Cross Partners, CRL, the LPA and / or TFL where applicable;
- 2) Amendment to Definitions to accord with submissions against agreed definition changes under section 96A applications and changes resulting from conditions 2.4 and 2.5 and in accordance with approvals of Phase 1A (North) Reserved Matters Applications; and
- 3) A contribution of £200,000 (Index Linked) for naturalisation works to an area of Mutton Brook upstream of the application site to compensate for the loss of 1217m² to The Brent River Corridor.

Part 2:

That upon completion of the Deed of Variation specified in Part 1 of the recommendation above, the Assistant Director of Development Management and Building Control approve reserved matters application reference 15/03312/RMA under delegated powers subject to the conditions set out in Appendix 1 to this report and any changes to their wording and or deleting and or adding conditions as considered necessary by the Assistant Director for Development Management and Building Control.

1. APPLICATION SUMMARY**What matters does this Reserved Matters Application (RMA) for Infrastructure consider and how does it relate to the Section 73 Application approved in January 2014?**

This application relates to Phase 1A (North) of the Brent Cross Cricklewood regeneration scheme and seeks approval of detailed matters reserved under the 2014 Section 73 outline planning permission (the '2014 S73 Consent').

The application was originally submitted in January 2015 as part of a suite of four separate reserved matters applications in relation to Phase 1A (North) covering the following:

- Development Plots 53 and 54, Brent Terrace (Reserved Matters consent granted on 9 June 2015);
- Clitterhouse Playing Fields and Claremont Park Open Spaces (Reserved Matters consent granted 10 July 2015);
- Central Brent Riverside Park (also on this agenda before the committee); and
- Infrastructure (resubmitted in June 2015 following on-going discussions with the Council and the subject of this report)

The 2014 S73 Consent provided full planning permission for major highway works to key junctions including the M1/A406/A5 (including pedestrian and cycle bridge B6), Brent Cross A406 Ingress/Egress, A406/A41, A5/A407 and A407/Claremont Road. These are referred to as the 'gateway junctions', and as such do not form part of this RMA.

This RMA relates to the transport enabling infrastructure to facilitate the development of the whole of the Northern part of the Brent Cross Cricklewood scheme, as well as providing the key transport infrastructure to allow development south of the A406 to also commence. In addition to the gateway junctions listed above which were granted planning permission under the 2014 S73 Consent the works include:

- Prince Charles Drive and western and eastern roundabouts at either end
- New connection from the A406/A41 inbound to the eastern roundabout
- Modified Car Park Access Roads
- New Tempelhof Avenue and bridge over A406
- Living bridge over the A406
- Tempelhof Link Road and junction with Claremont Avenue
- Market Square and junction with Claremont Avenue and School Lane
- Claremont Avenue
- Modified connections to Tilling Road, Brentfield Gardens and other local roads in the vicinity of the A41
- Changes and improvements to Tilling Road, junction with Claremont Avenue and modified junction with Brent Cross South retail park
- Orchard Lane and junction with Claremont Avenue, Claremont Park Road and Claremont Road
- Various minor modifications to tie-in with the existing road network, such as Brent Terrace North, Spalding Road, Prince Charles Drive east
- Temporary bus station facilities on the south west and north west car park sites
- Other accompanying bridges, structures and retaining walls, particularly those associated with the diversion of the river Brent.

The plan at **Appendix 8** highlights the approved Gateway Junctions in yellow and the road and bridge infrastructure proposed under this RMA in red.

The committee is being asked to approve the detailed layout and network for vehicles, cycles and pedestrians that provide connections to the gateway junctions, completes the networks for the Northern development and provides sufficient connections across and to the south of the A406 to facilitate the start of the Southern development. The application being recommended for approval therefore includes roads, footways, cycle paths, indicative bus stops, amended A406 coach stops, bridges and indicative retaining wall structures. It also includes the diversion of a stretch of the River Brent to facilitate the expansion of the Brent Cross Shopping Centre.

A separate RMA application is also before Members in relation to the associated landscaping works for the central section of a new green corridor and riverside park along the diverted section of the River Brent, known as Central Brent Riverside Park, which includes a pedestrian and cycle path.

What progress has been made since the approval of the 2014 Section 73 Application?

The 2014 Section 73 planning conditions require a number of transport strategies, reports and feasibility studies to be submitted to LBB prior to submission of the first RMAs for the Development. These conditions are known as Pre-RMA conditions, and a number relate to overall transport strategies which affect the whole development, information required that relates to the whole of Phase 1 and information required for just Phase 1A (North). They comprise the following:-

Condition 1.9	Construction Consolidation Centre Feasibility Study
Condition 1.20	Area Wide Walking and Cycling Study (AWWCS)
Condition 1.21	Framework Servicing and Delivery Strategy
Condition 1.22	Phase 1A (North) Servicing and Delivery Strategy
Condition 2.7	A5 Corridor Study (Subject of a separate report also before this Committee)
Condition 2.8	Pedestrian and Cycle Strategy for Phase 1A (North)
Condition 7.1	Estate Management Framework
Condition 11.1	Car Parking Management Strategy
Condition 11.2	Phase 1A (North) Parking Standards and Strategy
Condition 37.2	Phase 1 Transport Report
Condition 1.17	Illustrative Reconciliation Plan

At the time of writing this report, the necessary information needed to satisfy these conditions has been submitted and agreed with Officers. An update on the discharge of these conditions will be provided in the Addendum. Details in relation to the content of these pre RMA conditions are addressed later in this report under section 5.2.

In order to do any alterations to existing adopted roads, the developers will need approval from the relevant highway authority responsible for looking after the road (either London Borough of Barnet, Transport for London (TfL) or Highways England (HE)) for the technical design and engineering for the roads. This approval process is separate to the Planning process and is done under Section 278 of the Highways Act. Therefore in addition to the above reports and assessments, the highways feasibility design of the new roads and junctions for Phase 1A (North), including the gateway junctions which already have planning approval, has also been progressed in conjunction with HE and TfL.

To support the highway design and approval process the authorities previously agreed that a new transport model (BXC detailed design model - DDM) for predicting traffic flows should be built based on TfL's latest sub-regional model. It was further agreed that this transport model would be used for the A5 Corridor Study as TfL's latest sub-regional model network contained more detail than the model previously used at outline application stage. The BXCDDM has been used to sense check the Phase 1A (North) highways scheme and junction layouts. The results of the junction feasibility design and modelling work (excluding the already approved gateway junctions) are set out in the Reserved Matters Transport Report (RMTR) and explained in this report.

The Transport Advisory Group (TAG) has also been established and has met on a number of occasions to discuss the draft plans, studies and strategies. The TAG members include LBB, TfL, HE, and the Developers team, and one of the main tasks has been to liaise with and inform other key stakeholders of progress on the project. Various meetings have been held involving LB Brent and LB Camden, particularly with regard to the A5 Corridor Study.

How will these proposals change the existing vehicle access to Brent Cross Shopping Centre?

Vehicles will have new and improved access to and from the Brent Cross Shopping Centre (BXSC) and to the Southern development, as a result of the new Phase 1A (North) road layout. The key changes include a new slip road directly from the improved western roundabout onto the A406 and a new slip road for traffic exiting the A406 from the west, connecting via the A41 junction to the new eastern roundabout. Traffic from the A406 east will be able to access the BXSC directly via the A41 junction, thus avoiding Tilling Road and Tempelhof bridge. Traffic from the A41 south similarly benefits. To the south of the shopping centre, traffic crossing Tempelhof Bridge has a more direct route to and from Claremont Road, avoiding Tilling Road altogether.

How will these proposals improve access and facilitate regeneration to the South of the North Circular?

Traffic will have easier access to the Southern development by the end of Phase 1 via the M1/A406/A5, A406/A41, A5/A407 and A407/Claremont Road gateway junctions. The Tempelhof bridge and its approach roads on both sides of the A406 are being widened to provide additional capacity, particularly for pedestrians, cyclists and buses. In addition the junctions of Tilling Road with Brent Terrace North, Tilling Road with Claremont Avenue, Market Square / Claremont Avenue / School Lane and Claremont Road / Claremont Avenue / Claremont Park Road / Orchard Lane are all being provided with new traffic signals, and the roundabout west of the Holiday Inn is being improved. Southern development plots will be accessed in due course from Brent Terrace North, Tilling Road, School Lane and Claremont Park Road. There are also improvements for pedestrians, cyclists and bus users, as discussed below.

How does this application relate to future phases of the project? How does it provide a transport network necessary to accommodate future phases?

Nearly all the new Phase 1A (North) roads and junctions are being designed with enough capacity to accommodate the predicted traffic levels for the whole development at end-state. The only exception is Tilling Road west of the Holiday Inn which is only being improved to accommodate the early phases. Otherwise, the network created in Phase 1A (North) provides all necessary connections to facilitate the rest of the northern development and in addition, some of the key roads south of the A406. Key elements of the road network for the Southern development are provided for, including the

western end of School Lane (which will eventually connect to Whitefield Avenue when complete); Claremont Park Road eastern end (which will extend in a future phase to link with Spine Road North); and the corner forming Market Square / New Tempelhof Avenue which will be the point at which High Street South joins. The RMA for Phase 1A South is anticipated soon and will include some additional roads in the southern area to further facilitate the southern development.

The new diverted Prince Charles Drive will provide vehicle links to the new bus station and proposed basement servicing between the western and eastern roundabouts. The bus station and basement servicing area will be provided as part of the BXSC in Phase 1B North.

The Phase 1A (North) part of the pedestrian and cycle network is also provided.

As the new highway layout will be incomplete at this stage some temporary road layouts and associated amendments to traffic flows are proposed in order to provide intermediate arrangements pending the completion of the road layout at end-state. Some details of these temporary road layouts are granted permission under this RMA, with others to be submitted under Conditions 1.8 and/or 1.8a.

What will be the impact on the highway network (including local roads in Barnet, Brent and Camden)? What mitigation is proposed and how will it be monitored?

The highway impacts of the overall scheme were assessed in the Section 73 Transport Assessment using the previously approved transport model (BXCTM). However, an updated assessment was carried out in more detail as part of the A5 Corridor Study which, as mentioned above, used the new BXCCDM. The A5 Corridor Study identified there would be additional impacts on local roads in Brent and Camden and an additional capped contribution of £300,000 has been secured from the Brent Cross Development Partners (as per letter dated 2nd September 2015) towards future Supplementary Transport Measures if monitoring of traffic flows indicates increases due to the BXC development. The traffic impacts of Phase 1, based on the BXCTM, are detailed in the Phase Transport Report (submitted pursuant to Condition 37.3). This report includes several sensitivity tests to alleviate the authorities concerns regarding the traffic impact due to the interim highway layouts, in relation to the various amounts of future development expected to be implemented prior to the delivery of the new Thameslink train station. The impacts on Phase 1 junctions are assessed in the RMTR as explained above. Monitoring of the impact of the development is controlled through a Monitoring Strategy, which is a pre-commencement condition and so the exact detail is yet to be agreed, however, in broad terms, this will involve various traffic and other transport surveys being undertaken on a regular basis to help understand the on-going impacts of the development, inform future reserved matters applications and assist in the development of any further mitigation measures.

Additionally, there is a control mechanism included in the Conditioned scoping of each Phase Transport Report that ensures that the impacts of the Development remain within the overall predictions identified in the Section 73 Transport Assessment. If there are any adverse impacts identified through the monitoring then the scoping of the next Phase Transport Report must propose Supplementary Transport Measures in order to provide further mitigation.

How will the proposals deal with concerns in relation to the impact of the development on the A5 and on surrounding roads in Brent and Camden?

The A5 Corridor Study is one of the Conditions (2.7) that under the Section 73 2014 Section 106 agreement must be considered before or at the same time as the RMA that is the subject of this report. The A5 Corridor Study is subject of a separate report before Members at this meeting and includes an assessment of any local impacts of the BXC scheme, including in the adjoining areas within LB Brent and LB Camden, and builds on the outline scope contained in the 2010 Section 106 Agreement for the 2010 consented scheme. The full scope for the study has been agreed with the relevant transport authorities and encompasses a detailed model of the A5 and an assessment of all transport facilities along the corridor. The assessment of local impacts uses a new BXCDDM traffic model. The Developers are required under the Revised S106 Agreement to fund any supplementary mitigation measures in Barnet, Brent and Camden that may be identified as part of the study, and the separate report provides full detail of the agreed measures and funds arising out of the study, including several junction improvement schemes and the £300,000 mentioned above.

It should be noted that the LB Brent and LB Camden have both objected to the A5 Corridor Study (although this was prior to the funding of the study proposals being agreed with the Developers). LB Brent expressed concerns about a lack of mitigation measures along the A5 and in Brent itself, and parking pressures in the Dollis Hill area. LB Camden are also concerned about the identification of traffic and parking impacts in Camden. The full objections and detailed responses are contained in the separate report before Members, which explains how concerns about traffic and parking impacts, both predicted and potential, are proposed to be dealt with.

Officers are satisfied that the study has been carried out in accordance with the agreed and approved scope, and that the key impacts have been correctly identified and assessed. A package of supplementary mitigation measures and additional contributions has been agreed which is considered to adequately address expected impacts, as well as providing additional safeguards should additional supplementary mitigation be needed in future phases.

What are the proposed arrangements for car parking – both in the new shopping centre and on local roads?

Parking standards set out in the 2014 S73 Consent may lead to 6,330 car parking spaces for residential use with an additional 11,565 spaces intended for non-residential use. 7,600 car parking spaces are allocated for retail and related uses within the BX East zone. The majority of residential spaces and spaces for office, industrial and community use are proposed to the south of the A406. The vast majority of parking proposed is on plot with only a small proportion located on street. The car parking levels and arrangements are not affected by this RMA.

Car parking charges at Brent Cross Shopping Centre will be introduced when the shopping centre extension within Phase 1B (North) is first occupied, as set out in paragraph 2.1 of Schedule 16 of the S106 Agreement, reproduced below:

Less than 1 hour: £1	3-4 hours: £2.50	6-7 hours: £12.00
1-2 hours: £1	4-5 hours: £3.50	7-8 hours: £14.00
2-3 hours: £2	5-6 hours: £6.00	8 hours plus: £30.00

The whole BXC site (northern and southern developments) within the red line boundary will be a designated Controlled Parking Zone and all residents and visitors within the area will be given the opportunity to be issued with resident/visitor parking permits. Any new residents provided with the opportunity for dedicated off-road parking will normally be excluded from applying for on-street residents parking permits.

The decision to introduce any other new Controlled Parking Zones or extensions to existing ones outside the red line boundary, whether related to construction activity or due to the resultant development, is controlled through the S106 (schedule 3), and other elements of the framework of control. In any event any new or amended CPZ will need careful consideration, involving the TAG as appropriate, and will be subject to comprehensive monitoring prior to and post implementation.

What are the proposals for public transport?

The key change as part of the Phase 1 development for public transport is the replacement of the existing bus station with a new fully integrated high quality facility within the extended BXSC. The new permanent bus station will be considered in detail as part of the next phase – Phase 1B North.

Subject to the proposed Phase 1 construction programme (which is still under consideration) a temporary bus station may be required for up to 4 years. The temporary bus station facility is proposed to be located on the southwest car park site comprising a number of bus stops, bus stands and driver facilities. This bus station will operate 24 hours a day as the existing Brent Cross bus station does. Further temporary bus stops will also be located on part of the existing shopping centre car park to the rear of properties in Layfield Close, known as plot 113. During daytime operating hours (7:30am to 9:30pm on weekdays and Saturdays and 9am to 9:30pm on Sundays and Bank holidays) buses would set down and pick up passengers from the temporary stops on

plot 113 which is closer to the BXSC, with the southwest car park being utilised to park up buses between shifts and provide bus services overnight.

Other changes and improvements as part of Phase 1A (North) include new bus lanes across Tempelhof Bridge in both directions and along part of the new Tempelhof Avenue, 5 new bus stops and 10 replacements, as well as modifications to the 2 coach stops currently on the A406 western slip roads to the A41 junction. The illustrative location of these bus stops are shown on the RMA drawings and the final locations will be agreed with TfL during the S278 Agreement process.

How will this application improve the pedestrian and cycle network in the Regeneration Area?

Within the development area the network of local streets will provide substantially improved pedestrian and cycle routes as part of Phase 1A (North), as set out in the Pedestrian and Cycle Strategy (submitted pursuant to Condition 2.8 of the S73 Consent). The development improves access across the A406 by providing two new pedestrian and cycle bridges, one at Staples Corner and one close to the shopping centre, known as the Living Bridge. Access over the A406 will be further enhanced by the improved replacement Tempelhof Bridge and the improvement of facilities at the A406 / A41 junction. Cycle routes across the A406 provide a link to the proposed A41 Cycle Superhighway CS11 via a mostly segregated cycle route through Clitterhouse Playing Fields. Both pedestrians and cyclists will be able to access and use the new walkway/cycleway through the new riverside park which will run along the new diverted River Brent, thus avoiding the eastern and western roundabouts and Prince Charles Drive, which have not been designed to accommodate pedestrians and cyclists.

Pedestrian and cycle networks will connect to the development's hinterland via the routes approved in the Area-Wide Walking and Cycling Study (AWWCS) submitted pursuant to Condition 1.20 of the Section 73 Consent. These will connect to Brent, Camden and other locations in Barnet including Hendon (Brent Street), Hendon Central tube station, Hendon railway station, West Hendon, Temple Fortune, Golders Green and Childs Hill. Key connecting points completed as part of Phase 1A (North) include via Sturgess Park, Claremont Park, Clitterhouse Playing Fields, Staples Corner and across the A41 via existing improved subways at Haley Road and Ridge Hill, and via the A41 / A406 junction.

It should be noted that a developer contribution of £1,250,000 towards routes providing connections beyond the Regeneration Area has been agreed with the Development Partners (letter dated 2nd September 2015) as part of the Area Wide Walking and Cycling study and will be secured through the existing mechanisms within the Section 106 agreement.

The London Borough of Brent objected to the AWWCS, key concerns being that the measures proposed were too limited to provide a sufficient incentive for people to walk or cycle and that the measures did not mesh with LB

Brent's own cycle route plans and proposals. However, officers consider that the agreed measures arising out of the AWWCS does provide sufficient proposals to comprehensively improve key local walk and cycle routes in the vicinity of the BXC development opportunity. The £1,250,000 mentioned above includes a £300,000 contribution towards a separate cycle route requested by LB Brent between BXC and Wembley.

How will the Construction Impacts be dealt with?

The construction of the new roads and junctions are currently expected to take place over a similar time period as the BXSC expansion, Phase 1B North, which will be the subject of a future RMA. Construction work on Phase 1A (North) is currently due to start in 2016 and take approximately 4 years, although it should be noted that a detailed development delivery programme for Phase 1A (North) will be submitted under condition 5 and will set out the sequencing and approximate duration of works within the phase. During this time various temporary road layouts and routes for buses, cyclists and pedestrians will be needed, together with parking controls to manage on-street parking for up to 3,300 anticipated construction workers who are expected to be on-site at the busiest times. There are controls within the Section 106 legal agreement to protect the transport network in the local area, including a requirement for a Construction Transport Management Plan and a Construction Workers Travel Plan, which must be submitted and approved before any construction can commence. There are also other conditions attached to the Section 73 Consent which require various Construction Mitigation and Management Plans to be submitted to and approved by the Council before the main construction work can begin.

How does this RMA relate to the detailed highway designs to follow as part of the Section 38 and 278 Highways works?

Feasibility design work on all Phase 1A (North) transport infrastructure, whether related to the gateway junctions already approved by the Section 73 Consent or to the remaining road and transport infrastructure within this RMA, has been progressing between the Developer and LBB, TfL and HE. This process and the associated technical approvals that the Developers will need to obtain through Section 38 and 278 agreements with the highway authority is separate to the Planning process, however the technical design work on these roads and junctions has progressed to the stage where it is now considered appropriate to determine this RMA. If Members are minded to approve this application then the detailed design of the schemes will continue under the appropriate highways legislative control (Section 38 / 278 of the Highways Act 1980), as per all other planning-approved highway schemes. It should be noted that it is normal for there to be minor changes, such as to the exact alignment of particular carriageways, as part of the detailed design processes but there has been a significant amount of design and assessment already undertaken and officers consider the RMA designs robust and unlikely to change significantly.

What changes are proposed for the River Brent?

Included in the Infrastructure RMA is the diversion of the River Brent and the associated formation of a new river channel corridor running east to west. The River Brent in its current form is a canalised concrete channel running east to west through the car parks to the south of the existing Shopping Centre. Diverting the river to the south, to reflect the line of the A406 North Circular Road, will enable a more deliverable regeneration development to be undertaken within Brent Cross. Diverting the River also affords an opportunity to create a more naturalised river course. The proposals, in broad outline, create a meandering river course that will re-connect at the eastern and western ends of BXC into the existing river course. The opportunity arises to create a naturalised parkland riverside environment with marginal and wetland landscaping throughout the river channel, improved biodiversity throughout and ultimately improved water quality. In the latter case, improved water quality will benefit the River Brent and the Welsh Harp Reservoir Site of Significant Scientific Interest (SSSI) that it leads into. Outwith the river channel, land is provided to form a parkland setting and public access. Overall the intention is to improve access and enrich biodiversity.

What is the Living Bridge?

The Living Bridge is a key element of the BXC regeneration scheme which aims to link the existing and proposed southern and northern development areas at Brent Cross via a 'City Garden' bridge structure that will connect the areas. The bridge will provide a seamless quiet connecting route for pedestrians and cyclists from south to north avoiding the A406 North Circular. The route is approached by 1:30 graded southern bridge approach which rises gently to the bridge through future development plots and which then crosses Tilling Road, the A406, Prince Charles Drive and the diverted River Brent Corridor. On the north side the bridge will connect into the Brent Cross Shopping Centre development. The bridge will be 16m wide with a clear through route not less than 6m in width.

2. BACKGROUND TO THE BRENT CROSS CRICKLEWOOD REGENERATION

2.1 Outline Consent

The principle of development at Brent Cross Cricklewood was first established by way of a site-specific Development Framework produced in April 2004 as Supplementary Planning Guidance (SPG) in accordance with the London Plan. The SPG established a vision to *'to create a new gateway for London and a vibrant urban area for Barnet'*.

The comprehensive redevelopment of the wider Brent Cross Cricklewood regeneration area was subsequently granted planning permission in outline in 2010 under planning permission C/17559/08 (the 2010 permission). Subsequently, this permission was revised under a Section 73 Planning

application (F/04687/13) which was approved on 23 July 2014 (the 2014 permission) described below:

Section 73 Planning application to develop land without complying with the conditions attached to Planning Permission Ref C/17559/08, granted on 28 October 2010 ('the 2010 Permission'), for development as described below: Comprehensive mixed use redevelopment of the Brent Cross Cricklewood Regeneration Area comprising residential uses (Use Class C2, C3 and student/special needs/sheltered housing), a full range of town centre uses including Use Classes A1 - A5, offices, industrial and other business uses within Use Classes B1 - B8, leisure uses, rail based freight facilities, waste handling facility and treatment technology, petrol filling station, hotel and conference facilities, community, health and education facilities, private hospital, open space and public realm, landscaping and recreation facilities, new rail and bus stations, vehicular and pedestrian bridges, underground and multi-storey parking, works to the River Brent and Clitterhouse Stream and associated infrastructure, demolition and alterations of existing building structures, CHP/CCHP, relocated electricity substation, free standing or building mounted wind turbines, alterations to existing railway including Cricklewood railway track and station and Brent Cross London Underground station, creation of new strategic accesses and internal road layout, at grade or underground conveyor from waste handling facility to CHP/CCHP, infrastructure and associated facilities together with any required temporary works or structures and associated utilities/services required by the Development (Outline Application).

Both the 2010 and 2014 permissions were subject to Environmental Impact Assessment.

The transport aspects of the approved BXC planning permission include the creation of new strategic highway accesses, a new internal road layout, infrastructure and associated facilities together with temporary works, structures and associated utilities/services required by the development. Rail based measures include provision of a new railway station and freight facilities. A new bus station is planned, together with vehicular and pedestrian bridges, underground and multi-storey car parking. Works to the River Brent and Clitterhouse Stream and associated infrastructure are also included together with improvements to Brent Cross London Underground Station. Pedestrian and cycle connectivity will be improved with the provision of the Living Bridge over the A406 North Circular Road which will provide better integration between the northern and southern components of the development.

The following transport documents were issued in support of the 2014 S73 application:

- BXC05 Volume 1 Consolidated Transport Assessment Main Report;
- BXC05 Volume 2 Consolidated Transport Assessment Appendices;
- BXC05 Volume 3 Consolidated Transport Assessment Travel Plans;

- BXC05 Volume 4 Consolidated Transport Assessment Highway Engineering Proposals;
- BXC05 Volume 5 S73 Transport Report; and
- BXC05 Volume 6 S73 Highway Engineering Report.

2.2 Phasing of the BXC Regeneration Scheme

The 2014 S73 Consent is a multi-phase scheme for delivery over a period of 16 years. The permission proposes the phased delivery of acceptable comprehensive development for the whole site in accordance with the planning policy.

Phase 1 is proposed to be delivered in sub phases which are divided between north and south. This is to reflect the new delivery responsibilities including the Council's intention to procure a new development partner for the area south of the A406. The sub phases are as follows:

- Phase 1A (North) – this includes all the highways infrastructure to support the northern development including the key highways infrastructure to support the Phase 1 South, such as the improvements to the southern junctions of the A5/A407 Cricklewood Lane and the A407 Cricklewood Lane/Claremont Road Junction improvements. In addition the River Brent re-routeing and Bridge works will be delivered as part of Phase 1A (North), along with the Clitterhouse Playing Fields Part 1 (excluding the Nature Park) and the Claremont Park Improvements. The Living Bridge is included in (and its details will be approved before the commencement of) Phase 1A (North). Under the Revised Section 106 Agreement, its delivery will be triggered by the commencement of Phase 1B (North) and its delivery will be programmed to commence and be completed no later than before the occupation of Phase 1B North plots.
- Phase 1A (South) – A number of highway improvements needed to support Phase 1 of the Southern Development will be provided including the Waste Handling Facility (Diverted Geron Way/A5 junction; Claremont Park Road (Part 1); School Lane Works. In addition Waste Handling facility Rail Sidings and Gantry Craneworks and Threshold spaces at Layfield Place, Fenwick Place and Templehof Circus and Access to Plot 28 would come forward.
- Phase 1B (North) – This includes all of the plot development on the north side with the exception of the residential development within the Brent Cross West Zone. The sub phase also includes the new bus station, reconfigured shopping centre, Brent Cross Main Square, High Street North and other northern pedestrian routes, as well as the Riverside Park, Sturgess Park Improvements and around 300 housing units. Commencement of this Sub-Phase will trigger the BXP's obligations to deliver the Living Bridge which will link into the buildings

and public realm to be provided on the Plots forming part of this Sub-Phase.

- Phase 1B (South) – This includes the Market Square, the Clarefield Park Temporary Replacement Open Space, the replacement food store, the Waste Handling facility, the CHP and the new and expanded Claremont School, in addition to more than 1000 residential units.
- Phase 1C – This will include the remaining plot development on the south side.

2.3 Phase 1A (North)

This application is one part of the Phase 1A (North) Reserved Matters applications.

Phase 1A (North) is largely an infrastructure phase. It includes necessary highways infrastructure to support the northern development as well as improvements to critical southern junctions including A5/A407 Cricklewood Lane and the A407 Cricklewood Lane/Claremont Road Junction improvements. The infrastructure required relevant to the River Brent re-routeing and Bridge works are also delivered as part of Phase 1A (North), along with the Living Bridge, Replacement Tempelhof Bridge, Clitterhouse Playing Fields Part 1 (excluding the Nature Park) and the Claremont Park Improvements.

The highways and infrastructure improvements to the gateway junctions of the M1/A406/A5, Brent Cross A406 Ingress/Egress, A406/A41, A5/A407 and A407/Claremont Road will also be delivered in Phase 1A (North). However, the design of these gateway junctions has already been approved as part of the 2014 Section 73 Consent. The plan at **Appendix 8** highlights the approved Gateway Junctions in yellow and the road and bridge infrastructure proposed under this RMA in red.

The reserved matters for Phase 1A (North) have been broken down into four separate reserved matters submissions due to the size, scale and complexity of this initial sub phase of the Brent Cross Cricklewood Regeneration scheme.

The reserved matters that make up Phase 1A (North) are shown in the table below:

Table 1.0

No.	Summary Description	Planning Reference	Status
1.	The residential development of Plots 53 and 54.	15/00720/RMA	Approved at Committee on 18 th May, 2015.
2.	The Open Space Improvements of Clitterhouse Playing Fields	15/00769/RMA	Approved at Committee on

	(Part 1) and Claremont Park		25 th June, 2015.
3.	Open Space proposals for Central Brent Riverside Park	15/03315/RMA	Re-Submitted in June 2015 and the subject of a separate report before Members at this committee.
4.	Infrastructure Proposals including Roads and Junctions, Tempelhof and Living Bridges and diversion of the River Brent corridor.	15/03312/RMA	Re-Submitted in June 2015 and the subject of this report.

Four Reserved Matters Applications were submitted to London Borough of Barnet for Phase 1A (North) in January, 2015. However as a result of discussions with the Development Partners, it was agreed that the Infrastructure and Central Brent Riverside Park Reserved Matter Applications would be withdrawn prior to registration whilst the designs and supporting information was progressed further. These two RMAs were subsequently submitted together in June 2015.

2.4 Pre-Reserved Matters Conditions

The 2014 S73 Consent for the Brent Cross Regeneration project includes a number of Pre-Reserved Matters conditions intended to establish key principles of the forthcoming development. The majority of these require submission of reports and strategies prior to applications for reserved matters being submitted to the Council. Reserved Matters applications are required to accord with commitments and strategies approved under these conditions where relevant. The relevant Pre-RMA Conditions related to this application are discussed in section 5.2 and detailed in Appendix 4.

The wording of these conditions does not specifically require their discharge prior to the approval of Reserved Matters but in some instances there is a direct material relationship between the details of the reserved matters submission and the principals being captured within the conditions.

Appendix 4 of this report shows those 2014 S73 Consent Pre Reserved Matters Conditions for Phase 1A (North) which have relevance to the Infrastructure RMA but have yet to be formally determined. At the time of writing this report, the necessary information needed to satisfy these conditions has been submitted and agreement reached with Officers but conditions may not have yet been formally discharged. An update on the discharge of these conditions will be provided in the Addendum.

Condition 1.31 allows for the determination of relevant reserved matters applications in circumstances where conditions have yet to be approved:

“Where in these conditions any document strategy plan or other document or information is required to be submitted prior to any Reserved Matters Application or Other Matters Application required under this Permission, the grant of the relevant Reserved Matters Approval(s) or Other Matters Approval(s) shall be subject to the LPAs prior or simultaneous approval or confirmation (as the case may require) of the relevant document strategy plan or other document or information.

Reason: To ensure that an accurate and consistent interpretation is applied in the application and enforcement of these Conditions and the corresponding provisions in the S106 Agreement.”

As the relevant aspects of these conditions are acceptable to the LPA in the development of the Infrastructure RMA, Members are in a position to make a decision prior to the formal approval of these outstanding conditions.

3. DESCRIPTION OF THE SITE, SURROUNDINGS AND PROPOSALS

3.1 Site Description and Surroundings

The application site currently comprises car parking and associated urban form related to Brent Cross Shopping Centre. The wider site comprises a mix of different land uses broken up by major road and rail infrastructure. As part of the wider Brent Cross Cricklewood Regeneration proposals (BXC) the River Brent will be diverted from its current channelled/canalised course to create a more naturalised meandering river course.

The consented development site is located in the southern part of the London Borough of Barnet. The site is bounded by Park Road to the north, the A41 to the east (including Brent Cross Underground Station), the A5 and the border with London Borough of Brent to the west and the A407 Cricklewood Lane to the south.

Parking in and around the site is currently provided by way of controlled on-street zones, charged on-street bays, charged public off-street car parks, free off-street car parks and extensive free on-street car parking particularly in residential areas south of the A406.

A range of bus services, operated on behalf of TfL, pass through or close to the BXC site. The area is well served by the bus route network, with frequent services to a variety of destinations in London. The majority of the bus services start from or pass through the bus station at BXSC. This bus station serves the shopping centre and also operates as a local bus hub. Other bus hubs in the vicinity are located at North Finchley and Golders Green.

The Midland Mainline railway corridor passes through the western edge of the BXC site. The BXC site is served at the southern end by the existing

Cricklewood Railway Station. Hendon Station is approximately 3km to the north, outside of the BXC site boundary.

The Edgware branch of the Northern Line passes to the east of the BXC site and the Jubilee Line passes to the southwest through Willesden Green and West Hampstead. Brent Cross Underground Station is nearest the site and is located to the southeast of the A406/A41 junction. To the north, Hendon Central is approximately 750metres from BXSC.

The existing facilities for pedestrians are in general poor. Facilities for cyclists are somewhat better, with a number of signed routes and areas of both shared surface facilities and cycle lanes. However cycle parking facilities in the Brent Cross area remain limited and cyclists still face traversing a number of busy junctions and highways.

Appendix 3 provides a full description of the existing transport conditions for the site and surrounding area.

3.2 Description of the RMA Proposals

As explained at section 2.3 and table 1.0 above, Phase 1A (North) comprises four separate RMAs covering infrastructure, enhanced open spaces provision, the delivery of residential development plots and the provision of the River Brent Riverside Park.

A separate RMA for the Central Brent Riverside Park (15/03315/RMA) which provides details of the proposed landscaping and ecological enhancements for the Central section of the proposed Riverside Park, including public access and maintenance access provision, is also before the Committee for consideration.

The application which is the subject of this report (15/03312/RMA) seeks reserved matters approval for the detailed road layout and network within Phase 1A (North) for vehicles, cyclists and pedestrians which provide connections to the gateway junctions; the diversion works for the River Brent to enable the future extension of the shopping centre; and the provision of bridges across the A406 and diverted River Brent, including the replacement Tempelhof bridge and proposed Living Bridge. The proposals complete the networks for the Northern development and provide sufficient connections across and to the south of the A406 to facilitate the start of the Southern development. The proposals are briefly summarised in this section, with a fuller discussion provided in section 5. More detail can be found in Appendix 2. The plan at Appendix 8 highlights the approved Gateway Junctions in yellow and the road and bridge infrastructure proposed under this RMA in red

As a result of the proposed Phase 1A (North) road layout, vehicles will have new and improved access to and from the BX Shopping Centre, as well as to the Southern development. The key changes include a new slip road directly from the improved western roundabout onto the A406 and a new slip road for

traffic coming off the A406 from the west connecting via the A41 junction to the new eastern roundabout. Traffic from the A406 east will be able to access the BXSC directly via the A41 junction, thus avoiding Tilling Road and Tempelhof Bridge. Traffic from the A41 south similarly benefits. On the southern side shopping centre traffic using Tempelhof Bridge has a more direct route to and from Claremont Road avoiding Tilling Road altogether.

The Tempelhof Bridge and its approach roads on both sides of the A406 are being widened to provide additional capacity, particularly for pedestrians, cyclists and buses. In addition the junctions of Tilling Road with Brent Terrace North, Tilling Road with Claremont Avenue, Market Square / Claremont Avenue / School Lane and Claremont Road / Claremont Avenue / Claremont Park Road / Orchard Lane are all being provided with new traffic signals, and the roundabout west of the Holiday Inn is being improved. Southern development plots will be accessed in due course off Brent Terrace North, Tilling Road, School Lane and Claremont Park Road. There are also improvements for pedestrians, cyclists and bus users, as discussed later in this report.

Nearly all the new Phase 1A (North) roads and junctions are being designed with enough capacity to accommodate the predicted traffic levels for the whole development at end-state. The only exception is Tilling Road west of the Holiday Inn which is only being improved to accommodate the early phases. Otherwise, the network created in Phase 1A (North) provides all necessary connections to facilitate the rest of the northern development and in addition, some of the key roads south of the A406. Key elements of the road network for the Southern development are provided for, including the western end of School Lane (which will eventually connect to Whitefield Avenue when complete); the eastern end of Claremont Park Road (which will extend in a future phase to link with Spine Road North); and the corner forming Market Square / New Tempelhof Avenue which will be the point at which High Street South joins. The RMA for sub-phase 1A South is anticipated soon and will include some additional roads in the southern area to further facilitate the southern development.

The Phase 1A (North) part of the pedestrian and cycle network is also provided. The new diverted Prince Charles Drive will provide vehicle links to the new bus station and basement servicing between the western and eastern roundabouts. The bus station and basement servicing area will be provided as part of the BXSC in sub-phase 1B North.

It should be noted that the phasing of improvements in the vicinity of the A41 requires an interim highway layout until the A41 / Whitefield Avenue junction is built in phase 2. Traffic from the A41 south will be unable to access the dedicated left turn slip lane onto the A406 as the existing connection to Tilling Road will need to be maintained until the left turn at the new Whitefield Avenue junction is available. Traffic will be required to travel via the main signalised roundabout. For traffic travelling in the opposite direction, from the eastern part of the development to the A41 south, until the A41 / Whitefield

Avenue junction is built the route will be Tilling Road, Brentfield Gardens and via short parts of Highfield Avenue, Hamilton Road and Woodville Gardens.

A plan showing the location of the key roads and junctions that are part of this RMA, together with the gateway junctions is provided in Appendix 2.

The proposed River Brent diversion works will, in broad outline, create a meandering river course that will re-connect at the eastern and western ends of BXC into the existing river course. The River Brent diversion runs east to west from the A41 Hendon Way, following the route of the A406, North Circular to its junction with the M1. The opportunity arises to create a naturalised parkland riverside environment with marginal and wetland landscaping throughout the river channel, improved biodiversity throughout and ultimately improved water quality. The riverside park elements are provided in three separate reaches. The reaches reflect the different character of the adjoining development areas. Reaches 1 and 2 are situated adjacent to the Shopping Centre and this is reflected in their narrower width and desire to create a landscaped setting for the diverted river as well as the Shopping Centre. Reach 3 on the other hand is in an area that is closer to residential property and the opportunity here is to create a more expansive ecological habitat area where the public has greater access to both banks of the river.

The reserved matters submission under consideration in this report therefore provides details of site layout, scale, appearance, access and landscaping in for infrastructure including roads, bridges and River Brent diversion works comprised in Phase 1A (North) of the Brent Cross Cricklewood regeneration scheme.

The application is supported by the following documents:

- Application Covering Letter
- Explanatory Report
- Reserved Matters Transport Report
- Environmental Statement Further Information Report
- Landscape Infrastructure Design Development Report
- Bridge Design Development Report
- Temporary Bus Station Design Report
- Flood Risk Assessment Addendum
- Illustrative Reconciliation Plan
- Statement of Community Involvement.

4. MATERIAL CONSIDERATIONS

4.1 Key Relevant Planning Policy

In this case, the Development Plan comprises the London Plan (Consolidated with Further Alterations since 2011) (March 2015) at the strategic level and, at the local level, Barnet's Local Plan (Core Strategy (2012)) and the Saved UDP Policies GCRICK and C1-C11, which apply to the application site and are supplemented by the Cricklewood, Brent Cross and West Hendon Regeneration Area Development Framework (2005).

The Council's Development Management Policies DPD (2012) states at paragraph 1.4.3 that it will not apply to planning applications for comprehensive development in the Brent Cross unless and until the Core Strategy is reviewed in accordance with Policy CS2 and Section 20:13 of the Core Strategy.

Detailed consideration of the application against key London Plan and London Borough of Barnet policies can be found in Appendix 5. In summary the application is considered to be in accordance with relevant planning policies. The application is for matters reserved following the grant of the outline planning permission under the 2014 permission and as such the policy considerations and principles have previously been considered and have been found to have been met.

National Planning Policy Framework

The 'National Planning Policy Framework' (NPPF) was published on 27 March 2012. This is a key part of Government reforms to make the planning system less complex and more accessible, and to promote sustainable growth.

In March 2014 the National Planning Practice Guidance was published (online) as a web based resource. This resource provides an additional level of detail and guidance to support the policies set out in the NPPF.

4.2 Public Consultations and Views Expressed

Public Consultation

4,177 local residents were consulted by letter. The application was advertised in the local press on 11th June 2015 and 17 site notices were put up on site on 11th June 2015. The consultation letters allowed a 5 week period to respond. 5 letters of objection were received in response to this initial consultation period. Statutory consultees and other interest groups were also consulted on the application.

Following the receipt of amendments and clarification to the submitted plans and documentation; 4,177 local residents were re-consulted by letter on 21st July 2015. The letters allowed a three week period for the re-consultation

period expiring 12th August 2015. The application was re-advertised in the local press on the 22nd July 2015 and 18 site notices were put up on site on this date. Statutory consultees and other interest groups were also re - consulted.

10 Letters of objection from residents were received in response to this second consultation period.

A summary of the objections and comments received and officer comments in response can be found under Appendix 6 of this report.

The consultation process carried out for this application is considered to be appropriate for a development of this nature. The extent of consultation exceeded the requirements of national planning legislation and the Council's own adopted policy.

The S73 Consent includes a requirement under Condition 1.23 for submission of a Public Consultation Strategy This was submitted to the Council and considered under planning reference 14/07891/CON. It was approved on 31 March 2015. Details of the developer's own consultation process are set out in the Statement of Community Involvement submitted with the Phase 1A (North) Reserved Matters Submission and accorded with the requirements of the approved strategy.

Consultation Responses from Statutory Consultees and Other Bodies

A summary of the comments received from statutory consultees and other bodies and officer comments in response can be found under Appendix 6 of this report.

Environment Agency:

The Environment Agency have assessed the Infrastructure proposals in conjunction with the parallel RMA for the Brent Riverside Park and have provided comments that respond jointly to both applications given the interrelationship of the river diversion with the riverside park landscaping. The EA have reviewed the applications from the perspectives of the impacts on the ecological environment, the Water Framework Directive (WFD), flood risk and the risks of surface water pollution. More detail on their comments is provided in Appendix 6.

The EA have confirmed that they do not object to the approval of the Infrastructure RMA or the Central Brent Riverside Park RMA subject to securing a S106 financial contribution towards procurement of Ecological Environment and Water Framework Directive improvements to a stretch of the Mutton Brook within Barnet; and subject to the imposition of a number of conditions relating to the construction of the river channel, installation of furniture within the riverside park, and construction method statement to demonstrate how pollution to surface water will be prevented. Appropriate conditions and informatives are included in Appendix 1 to this report.

Transport for London:

TfL does not object to the approval of this Reserved Matter Application; subject to the comments and advice summarised in Appendix 6 of this report.

London Fire Brigade:

No objection Raised

Highways Agency:

No objection Raised

Brent Council:

Whilst Brent Council have raised concerns with regards to the A5 Corridor Study (14/07402/CON) and the Area Wide Walking and Cycling Study (14/08105/CON); no objections have been raised to the approval of this Reserved Matters Application.

Greater London Authority:

No objection Raised

Thames Water:

No objection Raised

Consultative Access Forum (CAF):

The Consultative Access Forum has assessed the Infrastructure proposals in conjunction with the parallel RMA for the Brent Riverside Park and have provided comments that respond jointly to both applications given the interrelationship of the river diversion with the riverside park landscaping. The Consultative Access Forum does not object to the approval of the Central Brent Riverside Park RMA and have provided comments regarding inclusive access to the Riverside Park including in relation to the pedestrian/cycle ramp and lift access to the lower level riverside walkway. Their comments are summarised in Appendix 6.

Internal Consultation responses**Environmental Health:**

The EH officers have reviewed the Infrastructure RMA information and have recommended conditions in relation to the hours of operation of the proposed temporary bus stops on Plot 113. Subject to the imposition of these conditions EH have no objections to the approval of the Phase 1A (North) Infrastructure RMA.

4.3 Application under Conditions 2.4 and 2.5 for the variation to the provision of open spaces (ref: 15/05040/CON)

Conditions 2.4 and 2.5 of the 2014 permission allow for amendments to be made to the DSF, DAS and DG where changes brought about, through for example a Reserved Matters Application, necessitate such amendment.

An application (reference 15/05040/CON) has been submitted under condition 2.4 and 2.5 to vary a number of provisions relating to the principal Infrastructure RMA and also to the Central Brent Riverside Park RMA. Full detail of the changes proposed is provided in a separate report also before this committee.

In relation to the Infrastructure RMA, the application proposes the following changes:

- Reducing the size of Brent Riverside Park to 3.07ha (from 3.1ha);
- Reducing the size of Nature Park 5 to 0.13ha (from 0.2ha) with a corresponding increase in the size of Nature Park 4 (from 0.2ha to 0.27ha);
- Alterations to the width measurement for roads to back of pavement to back of pavement (rather than building line to building line);
- Minor changes to scale thresholds (length, width and height) for the River Brent Bridges;
- Minor changes to the access ramp in the river corridor;
- Reduction in the minimum width for the pavements to 2.5m (save for Tempelhof Link Road);
- Reduction in the number of intermediate piers at Bridge B1 (Tempelhof Bridge); and
- Confirmation that the lift access from the Living Bridge will connect to the lower ground bus station level and the lower riverside walkway level.

In addition, a related Section 96a application (reference 15/04734/NMA) has also been submitted to the local planning authority which seeks to amend definitions to the Planning Permission as a result of this submission under Condition 2.4 and 2.5.

The changes are minor in nature and a number are described in more detail as follows.

The Revised Development Specification and Framework (“RDSF”) includes a number of approved Parameter Plans including those that relate specifically to infrastructure. Parameter Plan 002 relates to Transport Infrastructure and the supporting text requires a maximum building line to building line width of 28m and a minimum width of 13m to include a pedestrian footpath of 3m minimum width. In addition Parameter Plan 003: Public Realm and Urban Structure requires a minimum distance of 10m between buildings. The requirements reflected assumptions that in all cases buildings would face Primary Routes.

The design process however has shown that this will not always be the case. With regard to the Living Bridge southern approach for example buildings will not frame both sides of Claremont Avenue and the road width consequently exceeds the maximum building line to building line threshold. The change in Parameter Plan 002 supporting text consequently seeks to provide a

threshold relating to 'back of pavement to back of pavement' measurement width of 28m and a minimum width of 13m with pedestrian footways a minimum of 2.53m ,as opposed to a building line to building line measurement. The exceptions are Tempelhof Avenue which will have a maximum width of 34m, Claremont Avenue which will have a maximum width of 31m and Tempelhof Link Road which will have a minimum pedestrian width of 2m.

Parameter Plan 011 relates to the development within Brent Riverside Park and defines for example the general location of road and pedestrian/cycle bridges, the height threshold of the bridges and bridge length. Due to an increase in the width of Prince Charles Drive, to ensure that the highway meets the requirements of the relevant Highways authority, the width of Riverside Park has reduced within its central section. The riverside park width continues to accord with the 2014 permission however the Parameter Plan definitions relating to bridge length and head height have been amended to reflect the reduction in bridge span due to the reduction in overall width in the riverside park and a marginal increase in height. In addition minor design changes amend the general location of some of the road bridges. The detail of the Environment Agency access ramp within Riverside Park has also altered to reflect these design changes.

The detailed design process for the road infrastructure has resulted in a roadway being driven through the western internal roundabout. This roadway is to be delivered as an embankment structure and cuts through an area defined in the 2014 Permission as Nature Park NP5 as defined on Parameter Plan 003. In order for the proposed section of road to be accommodated it is necessary to reduce the area of NP5 from 0.2ha to 0.13ha. This is addressed in the Central Brent Riverside Park RMA report (reference 15/03315/RMA) also before the Members at this committee.

In order to compensate for the loss of 0.07ha from NP5 it is proposed to increase the area of Nature Park NP4 within the western section of the River Brent from 0.2ha to 0.27ha. In addition to this minor amendment, as a result of the widening of Prince Charles Drive, the river corridor has been slightly reduced in size by 0.1ha from 3.1ha to 3.07ha. This reduction is compensated via a financial contribution of £200,000 which has been agreed with the Environment Agency and is discussed in more detail in the Central Brent Riverside Park RMA report (15/03315/RMA) also before the Members at this committee. In light of the above changes it is proposed that Table 5, within page 43 of the RDSF, as well as Table 4 in Appendix 2 will be amended to reflect these changes.

The nature of the changes proposed under conditions 2.4 and 2.5 are all considered acceptable by officers. These changes are formalised through application 15/05040/CON which is also before Members at this Committee for approval. Approval of the application will ensure that the RMA application is consistent with the development's supporting documents.

5. PLANNING AND TRANSPORT ASSESSMENT

5.1 Assessment Against Parameters of the 2014 Section 73 Consent

The 2014 S73 Consent for Brent Cross Cricklewood is a 'hybrid' permission, in that planning permission has been granted in outline for the majority of the proposed development, whilst detailed permission has been granted in relation to the key gateway access junctions, namely:-

1. M1/A406 and A5/A406 (Staples Corner)
2. A41/A406
3. A5/A407 Cricklewood Lane and Chichele Road
4. A407 Cricklewood Lane/Claremont Road/Lichfield Road
5. A406 Brent Cross Ingress/Egress Junction
6. A41/Whitefield Avenue
7. A5/Humber Road/Waste Handling Facility
8. A5/Rail Freight Facility
9. A5/Dollis Hill Lane/Oxgate Gardens/Midland Mainline Bridge.

The first 5 of the above list of junctions fall within Phase 1A (North) of the development, whilst the remainder are associated with later phases of the (southern) development.

A series of Parameter Plans were approved under the Section 73 Consent which in conjunction with the conditions, Section 106 legal agreement and approved application documents, in particular the Revised Development Specification and Framework (RDSF), revised Design Guidelines (RDG), revised Public Realm and Open Stage Strategy (PROSS) and a revised Design and Access Statement (RDAS), provide the framework to control and assess reserved matters. They also control the nature and timing of reserved matters applications to accord with the assessments undertaken within the EIA and the TA of the likely significant environmental and transport impacts of the Scheme.

The relevant Parameter Plans approved in the RDSF, in relation to Infrastructure are:

Parameter Plan 002: Transport Infrastructure;
Parameter Plan 003: Public Realm and Urban Structure; and
Parameter Plan 011: River Brent.

Parameter Plan 002 identifies various infrastructure elements proposed as part of the comprehensive site development at BXC including defining the location of existing and proposed junctions and highways, defining primary routes and the approximate location of secondary and tertiary routes including building and development zone access points, vehicle and pedestrian bridges, transport interchange points and highways circulation.

Parameter Plan 003 identifies the network of new and existing public spaces

and routes between them for pedestrians and cyclists including primary circulation corridors for pedestrians and cyclists and secondary and tertiary routes.

Parameter Plan 011 defines the proposed corridor zone for the re-aligned River Brent including connections into the existing river. The plan identifies the new riverside park and access points including crossing points for highways infrastructure as well as for pedestrians and cyclists. The plan also defines three distinct reaches within the realigned River Brent corridor.

The 2014 S73 Consent is tied to those key parameters and principles in order to ensure that that proposed development is carried out, used and occupied in accordance with the assumptions which underpin the EIA Process. The current RMAs have been considered under the requirements of the EIA Regulations and it has been agreed that the assessment of the proposals under the Regulations can be dealt with by way of an Environmental Statement Further Information Report (ESFIR). This is covered in more detail in section 6 of this report.

The RDSF sets out the updated physical and other parameters and principles to guide and govern the subsequent design and approval of details in accordance with conditions attached to the 2014 S73 Consent. The RDSF identifies aspects of the proposed scheme that fall within the parameters and principles approved under the 2014 S73 Consent, and those that do not (the Reserved Matters) which are therefore subject to application to obtain Reserved Matters approval.

As with other large-scale redevelopment schemes, the need for flexibility was anticipated in framing the 2010 and 2014 permissions in a way which was specifically designed so as to allow the BXC Development to evolve and respond to market forces and opportunities, as well as to enable improvements to be made to the design and delivery of the development in accordance with relevant development plan policies and other guidance. Conditions 2.4 and 2.5 of the 2014 S73 Consent therefore allow applications to be submitted to vary the content and development parameters set down in the DSF, DAS and DG documents.

An assessment of conformity with the RDS F including the relevant parameter plans is provided in Appendix 7 of this report.

It is considered that the infrastructure proposals for new roads and bridges and the diversion of the River Brent conform to the Parameter Plans and 2014 S73 Consent documents, as modified by the parallel application under conditions 2.4 and 2.5 (reference 15/05040/CON – see Section 4.3 above). It should be noted that there are a range of other conditions attached to the Section 73 Consent that require the submission and approval of further detailed information prior to the commencement of any work starting on site. These include, but are not limited to, delivery programme, drainage, construction environmental management plan, construction transport management, site waste management plan, noise and vibration monitoring,

dust monitoring and control, air quality monitoring, archaeological investigation, detailed design of bridges etc.

5.2 Pre-Reserved Matters Conditions

The planning conditions require a number of transport strategies, reports and feasibility studies are submitted to LBB prior to submission of the first RMAs for the Development. These conditions are known as Pre-RMA conditions, and relate to overall transport strategies affecting the whole development, as well as information required that relates to the whole of Phase 1 and information required for just Phase 1A (North). The relevant transport Pre-RMA conditions comprise the following:-

Condition 1.9	Construction Consolidation Centre Feasibility Study
Condition 1.20	Area Wide Walking and Cycling Study (AWWCS)
Condition 1.21	Framework Servicing and Delivery Strategy
Condition 1.22	Phase 1A (North) Servicing and Delivery Strategy
Condition 2.7	A5 Corridor Study
Condition 2.8	Pedestrian and Cycle Strategy for Phase 1A (North)
Condition 7.1	Estate Management Framework
Condition 11.1	Car Parking Management Strategy
Condition 11.2	Phase 1 Parking Standards and Strategy
Condition 37.3	Phase 1 Transport Report
Condition 1.17	Illustrative Reconciliation Plan

With the exception of the A5 Corridor Study which is the subject of a separate report before this committee, each of these conditions are only briefly discussed below, but further detail is set out in Appendix 4.

Condition 1.9 Construction Consolidation Centre Feasibility Study

This condition relates to the review of the Construction Consolidation Centre provision and / or alternative logistics facilities to provide a management method for enabling the safe and efficient flow of construction materials and equipment from suppliers to relevant development sites within the Northern Development and / or Southern Development.

The key objective of the study is to reduce the number of construction vehicles on the highway network surrounding the development by identifying measures to provide a managed flow and the distribution of construction vehicles onto the existing main road network.

The review includes potential use of existing facilities and any new facilities which may be required to reduce the impact on the local infrastructure and the environment. The review also looks at the associated vehicle movements during Phase 1, and how these can be managed and reduced, especially in the peak periods.

The key findings from the study are:

- A Construction Consolidation Centre is unlikely to be required and certainly not for Phase 1 as it is envisaged that very few of the vehicles attending site prior to the final stages of fit-out arrive less than 90% full.

A potential rail based solution is problematic as there is minimal storage land adjacent to Hendon Rail Transfer Station, whilst the Euro Storage Site on the opposite side of the railway would require all vehicles to travel through the already congested Staples Corner and A5.

A number of locations for a new logistics centre and off site supporting facilities (warehousing / storage / existing commodities and batching) have been identified indicating a number of feasible options, which will be reviewed in more detail as the development progresses.

The full logistics plan for the construction of Phase 1 will form part of the Construction Transport Management Plan which will be produced by the developer and submitted for approval prior to the commencement of works on site.

Condition 1.20 Area Wide Walking and Cycling Study (AWWCS) and Condition 2.8 Pedestrian and Cycle Strategy for Phase 1A (North)

The Area Wide Walking and Cycling Study reviews the pedestrian and cycle connections between the development site, key destinations and local residential areas. The study forms the basis of a delivery programme of potential schemes for improvements to pedestrian and cycle facilities adjacent to or beyond the site boundary, improving access both to and from the Brent Cross site.

The key proposals of the AWWCS are a series of improvements to integrate the development into the existing network, secured via a developer contribution of £1,250,000 towards routes providing connections to Brent, Camden and other locations in Barnet including Hendon (Brent Street), Hendon Central tube station, Hendon railway station, West Hendon, Temple Fortune, Golders Green and Childs Hill.

The London Borough of Brent objected to the AWWCS, key concerns being that the measures proposed were too limited to provide a sufficient incentive for people to walk or cycle and that the measures did not mesh with LB Brent's own cycle route plans and proposals. However, officers consider that the agreed measures arising out of the AWWCS does provide sufficient proposals to comprehensively improve key local walk and cycle routes in the vicinity of the BXC development opportunity. The £1,250,000 mentioned above includes a £300,000 contribution towards a separate cycle route requested by LB Brent between BXC and Wembley.

The key elements of the Phase 1A (North) Pedestrian and Cycling strategy are provision of key connection points including via Sturgess Park, Claremont Park, Clitterhouse Playing Fields (to the proposed Mayoral Cycle Superhighway 11 along the A41 corridor), Staples Corner and across the A41

via existing improved subways at Haley Road and Ridge Hill, and via the A41 / A406 junction. There is also improved access across the A406 for pedestrians and cyclists with the Living Bridge, a new bridge at Staples Corner and the improved replacement of Tempelhof Bridge.

Condition 1.21 Framework Servicing and Delivery Strategy and Condition 1.22 Phase 1A (North) Servicing and Delivery Strategy

The Framework Servicing and Delivery Strategy provides a structure for the consideration of servicing and delivery issues at subsequent stages in the planning consents process and during construction and operation of the development.

Each phase or sub-phase of development requires the preparation of a Servicing and Delivery Strategy and will be in operation from first occupation until all elements of the phase or sub-phase are fully developed.

As regards the Phase 1A (North) Servicing and Delivery Strategy there are only very limited servicing and delivery requirements for the development within this phase which relate to the residential development on Plots 53 and 54 (Brent Terrace) and the open space proposals for Clitterhouse Playing Fields which include a small kiosk style café and the park maintenance depot which will require some deliveries / servicing.

Condition 2.7 A5 Corridor Study

The A5 Corridor Study is one of the Conditions (2.7) that under the Section 73 2014 Section 106 agreement must be considered before or at the same time as the RMA that is the subject of this report. The A5 Corridor Study is subject of a separate report before Members at this meeting and includes an assessment of any local impacts of the BXC scheme, including in the adjoining areas within LB Brent and LB Camden, and builds on the outline scope contained in the 2010 Section 106 Agreement for the 2010 consented scheme. The full scope for the study has been agreed with the relevant transport authorities and encompasses a detailed model of the A5 and an assessment of all transport facilities along the corridor. The assessment of local impacts uses a new BXCDDM traffic model. The Developers are required under the Revised S106 Agreement to fund any supplementary mitigation measures in Barnet, Brent and Camden that may be identified as part of the study, and the separate report provides full details of the agreed measures and funds arising out of the study, including several junction improvement schemes and if monitoring of traffic flows shows increase due to the development, an additional capped contribution of £300,000 towards future Supplementary Transport Measures has been agreed with the Brent Cross Development Partners (letter dated 2nd September 2015) and will be secured via the existing clauses within the section 106 agreement.

It should be noted that the LB Brent and LB Camden both objected to the A5 Corridor Study (although this was prior to the funding of the study proposals being agreed with the Developers). LB Brent expressed concerns about a lack

of mitigation measures along the A5 and in Brent itself, and parking pressures in the Dollis Hill area. LB Camden are also concerned about the identification of traffic and parking impacts in Camden. The full objections and detailed responses are contained in the separate report before Members, which explains how concerns about traffic and parking impacts, both predicted and potential, are proposed to be dealt with.

Officers are satisfied that the study has been carried out in accordance with the agreed and approved scope, and that the key impacts have been correctly identified and assessed. A package of supplementary mitigation measures and additional contributions has been agreed which is considered to adequately address expected impacts, as well as providing additional safeguards should additional supplementary mitigation be needed in future phases.

Condition 7.1 Estate Management Framework

The Estate Management Framework submitted in respect of Phase 1A (North) anticipates a structure for Estate Management Companies to be established for each phase of this development and sets out some general principles.

Adopted roads and structures (such as bridges) will remain the responsibility of the relevant highway authority. The EMF includes a plan which illustrates ownership assumptions at the time of preparing the report. It is anticipated that the final agreement and apportionment of responsibilities will form part of the detail S38 and S278 highways agreements and any such agreement is likely to include a commuted sum for future maintenance purposes.

An exception to this will be the management and maintenance of the surface of the Living Bridge which will be maintained by the Brent Cross Development Partners as it forms one of the principal entrances to the expanded shopping centre.

An acoustic barrier is required to ensure that the Brent Riverside Park is protected from the noise of the adjacent A406 (north circular) and can meet suitable standards expected for a publically accessible open space. It is anticipated that this noise barrier may be within the public highway and it is expected that the Highways Authority will either give a license to the Brent Cross Cricklewood development partners to allow them to maintain the structure or the structure will be adopted as part of the public highway by the relevant highway authority and a commuted sum will be paid by the Developer to cover maintenance costs.

In addition to the acoustic barrier, the proposed scheme includes for some areas of grass, landscape planting, trees and possibly other private apparatus within the public highway.

These will be either provided and maintained by the Developer under license granted by the Highways Authority or if appropriate, adopted by the relevant

Highway Authority on provision of relevant commuted sum to cover future maintenance.

Condition 11.1 Car Parking Management Strategy and Condition 11.2 Phase 1 Parking Standards and Strategy

The Car Parking Management Strategy provides an overarching framework to ensure the effective management of car parking across the scheme so as to assist in encouraging modal shift away from private transport to minimise environmental impacts. The strategy identifies:

- The parking tariffs to be introduced at the shopping centre;
- Provision of blue badge bays; parent/child parking; electric vehicle parking; motorcycle parking and customer collection points;
- Use of Variable Message Systems to assist drivers accessing and egressing the car parks;
- Use of car clubs;
- Provision of Controlled Parking Zones within and outside the regeneration area; and

For development within Phase 1A (North), the main parking demand will be generated from residential development on Plots 53 / 54 (Brent Terrace) as well as a small amount of parking associated with the open space improvements. Parking associated with the infrastructure works is temporary and is considered separately in the Construction Workers Travel Plan which is required to be submitted under condition 12.2.

Condition 37.2 Phase 1 Transport Report

The Phase Transport Report examines the end state of Phase 1 (2021) based on the preliminary design of the approved transport works for the phase. Further detail is to be provided within the reserved matters transport reports which will subsequently be produced for each sub-phase (1A North, 1A South, 1B North, 1B South and 1C).

This phase proposes to deliver numerous infrastructure improvements ahead of other aspects of the development.

The Phase Transport Report for Phase 1 has the following objectives:

- Safe operation of the TfL Road Network.
- Safe operation of the bus network that serves the site.
- Improved reliability of the buses that serve the site.
- Improved pedestrian and cycle links to site, including the Mayor's Cycle Super Highway along the A41.
- Mode shift from car use to public transport use, walking and cycling.

- Improved accessibility of the Phase 1 development for public transport users.
- Transport measures approved at Phase 1 enable subsequent phases of development to come forward, with a focus on Phases 1 to 4.

Based on a review of the existing site accessibility, the Phase 1 proposals are shown to provide improved pedestrian and cycle connectivity in the area. The Area Wide Walking and Cycling Study provides details of a number of proposed improvements which are designed to integrate the development with the existing pedestrian and cycle networks and to provide comprehensive connections to the surrounding areas. A cycle hub will also be provided to make cycling a more attractive mode of transport for the area.

Phase 1 will also improve public transport in the area by delivering a new bus station which will be situated to the north of Prince Charles Drive. A number of new bus stops and new bus services will also be provided as part of the Phase 1 development which will be utilised by existing services and will enable additional and more frequent services to be delivered during future phases. The provision of bus priority, such as on Tempelhof Bridge, and the delivery of new infrastructure, including a new junction on the A41 and improvements to the underpass under Tilling Road, will also benefit the existing bus services operating within the vicinity of the development during Phase 1.

The Phase 1 proposals are designed to encourage visitors to travel to and from the shopping centre on foot, by bicycle or by public transport, with no increase in associated parking provision.

Additional highway modelling has been undertaken to inform the Phase Transport Report for Phase 1 and to robustly identify the impacts of the Phase 1 proposals, the proposed benefits of the mitigation proposed for Phase 1 and to compare journey times and delays for the combined traffic impacts of phases 1 to 4. A number of tests have been undertaken for Phases 1A (North), 1B (North) and 2 (North), the Phase 1 highway network and for future phases to understand how Phase 1 fits in relation to the wider scheme. The results show that the Phase 1 highway network will perform as well as or better than the existing network in the majority of cases as a result of the new infrastructure which will be delivered.

The Phase 1 transport assessment work included checks that show that the overall development quanta and resulting trips do not exceed the boundaries presented in the 2014 S106 Agreement and that the transportation impact and mitigation proposed is as forecast in the S73 Consent.

Discharge of the Above Pre-RMA Conditions

At the time of writing this report, the necessary information needed to satisfy the above conditions, except for the A5 Corridor Study which is the subject of a separate report before Members, has been submitted and agreed with Officers. An update on the formal discharge of these conditions will be

provided in the Addendum.

5.3 Phase 1A (North) Reserved Matters Transport Report

The Section 106 (S106) legal agreement that is attached to the 2014 S73 Consent along with conditions 37.5 and 37.6, requires a Reserved Matters Transport Report (RMTR) to be provided for each phase or sub-phase of the development that contains plot development. This section of the report is based on officers' review of the submitted Phase 1A (North) RMTR, and so examines the detailed transport issues relating to this phase of the BXC Regeneration scheme.

The S106 agreement attached to the S73 Consent includes 29 schedules, several of which are directly transport related. Schedule 17 relates to the Matrix and Transport Reports schedule, Annex 5 of which includes the draft scope for Reserved Matter Transport Reports. The RMTR scope is also controlled through Condition 37.1 and a modified and expanded RMTR scope has been approved under this condition.

Since the Section 73 application was approved in 2014 there has been on-going dialogue with the development partners and their advisors in relation to the transport infrastructure. The Transport Advisory Group (TAG) has been set up and constituted, as per schedule 12 of the S106, and there has been liaison with the neighbouring boroughs of Brent and Camden. The Phase 1A (North) RMA proposals are described below, followed by section 5.4 that discusses the detailed assessment.

The BXC S73 Consolidated Transport Assessment Main Report (document BXC05) sets out the baseline traffic information upon which the development's impacts were assessed using the BXC Transport Model (BXCTM), which dates from around 2006.

To provide more up to date information to support the continued development of the design, a series of traffic surveys were undertaken in June and July 2013 with additional surveys undertaken in October and November 2013. The surveys provided additional information to help build an updated traffic model of the area which the development partners and the transport authorities agreed would be used as part of the detailed highway approval processes. The model, known as the BXC Detailed Design Model (BXCDDM) uses TfL's latest sub regional transport model as a basis, but has a greater level of detail in the BXC area. The transport authorities have approved the BXCDDM and its use is explained in more detail later under section 5.4 of this report.

RMA Infrastructure Proposals

Overview - Integrated Transport Strategy

The 2014 Section 73 Consent defines the multi-modal Integrated Transport Strategy (ITS) which was developed to satisfy the transport needs and

mitigate the impacts of the BXC site. At the core of the ITS is the provision of a fully integrated and, as far as is achievable, sustainable public transport network of appropriate travel modes. These modes will provide a good quality and attractive level of service provision for those wishing to access both the BXC site and the surrounding area whilst at the same time maintaining the same level of service on the highway network so that drivers are no worse off than had the scheme not been developed. Officers are satisfied that the RMA proposals are consistent with and will contribute positively to the overall ITS.

Proposed New Roads and Junctions

The majority of the infrastructure improvements associated with the scheme will be delivered during Phase 1A (North) in preparation for the proposed development due to come forwards during the subsequent phases.

The 2014 S73 Consent granted full permission for improvement works at the following junctions and thus no reserved matters application is necessary:

- (a) M1/A406 and A5/A406 (Staples Corner)
- (b) A41/A406 Junction
- (c) A5/A407 Cricklewood Lane
- (d) A407 Cricklewood Lane/Claremont Road
- (e) A406 Brent Cross Access/Egress Junction

Details of these approved junctions are included in Appendix 2.

The following areas of highway and junctions are also proposed to be improved and completed during Phase 1A (North), and therefore these are the schemes for which approval is being sought as part of this RMA:

(1) Tempelhof Avenue and Link Road

The new Tempelhof Avenue will provide a link with the southern end of the replacement A406 Tempelhof Bridge. Northbound vehicles will access the bridge via High Street South (East Works) and Tempelhof Avenue. Southbound vehicles exit the bridge onto Tempelhof Avenue and then either turn onto the Tempelhof Link Road to access Tilling Road or continue southwards towards Claremont Avenue. The Tempelhof Link Road will have a traffic signal controlled junction with both Claremont Avenue and Tilling Road.

A segregated cycle / footway will run along the western side of Tempelhof Avenue extending along Claremont Avenue and Tempelhof Bridge. A bus lane will be provided on the northbound carriageway, extending over Tempelhof Bridge. There is also a southbound bus lane over Tempelhof Bridge and footway on the east of the bridge.

(2) Diversion of Prince Charles Drive

The diverted Prince Charles Drive will lie between the western and eastern roundabouts for the shopping centre and between the A406 to the south and

the River Brent to the north. Prince Charles Drive will provide access to the basement service area, the new bus station and future plots which come forward as part of sub-phase 1B North. Prince Charles Drive is for vehicles only, with no pedestrian or cycle facilities proposed as these are accommodated on the adjacent river corridor.

(3) Claremont Avenue

The new Claremont Avenue will lie between Claremont Road to the south and Tilling Road to the north with junctions at Claremont Road / Claremont Park Road, Orchard Lane and Tilling Road / Tempelhof Link Road. The new Claremont Avenue will have a traffic signal controlled junction at High Street South (East Works) and School Lane. A right turn lane for vehicles travelling southbound along Claremont Avenue into Market Square will be provided, and a left turn lane for vehicles travelling northbound along Claremont Avenue into Market Square will be provided.

Off-road segregated pedestrian/cycle facilities alongside the northbound carriageway between the Claremont Road / Claremont Avenue / Orchard Lane / Claremont Park Road junction and the High Street South (East Works) and School Lane junction and alongside the southbound carriageway between the Tempelhof Link Road junction and the Claremont Road / Claremont Avenue / Orchard Lane / Claremont Park Road junction will be provided. A pedestrian only footway will be provided alongside the northbound carriageway between the High Street South (East Works) junction and Tilling Road.

(4) Claremont Avenue Junction with Tilling Road

A traffic signal controlled junction will be provided at the Tilling Road / Tempelhof Link Road / Claremont Avenue junction. Vehicles turn directly onto Claremont Avenue from Tilling Road to travel southbound towards Claremont Road. Vehicles travelling northbound to access Tilling Road will need to turn right onto Tempelhof Link Road before reaching the signalised junction.

Pedestrian crossings and advanced stop line markings provided on each arm (of the Tilling Road junction) will increase pedestrian and cyclist safety.

(5) Claremont Road North Junction

A traffic signal controlled junction will be provided at the Claremont Road / Claremont Avenue / Orchard Lane / Claremont Park Road junction. Toucan crossings and advanced stop line markings provided on each arm will increase pedestrian and cyclist safety. A right turn lane for vehicles travelling southbound along Claremont Avenue into Claremont Park Road will be provided. A dedicated left turn lane for vehicles travelling northbound along Claremont Road into Claremont Park Road without waiting at the signals is also proposed.

Clitterhouse Road will form the minor arm of a new priority junction with Claremont Road to the south of the Claremont Road north junction. Vehicles

travelling along Clitterhouse Road will need to give-way at the junction before turning onto Claremont Avenue to the north or Claremont Road to the south.

(6) Tilling Road West Realignment (Part 1)

The west section of Tilling Road is to be realigned to link with the newly configured M1 / A406 junction and provide a revised point of access to Brent Terrace North. A shared footway/cycleway at the western end from Brent Terrace North and a toucan crossing facility across Brent Terrace North is to be provided. A footway on the southern side (between Brent Terrace North and the roundabout) and the eastern end in the vicinity of the roundabout will continue to provide pedestrian access to two bus stops.

(7) High Street South (East Works)

High Street South (East Works) will provide a link between Claremont Avenue and Tempelhof Avenue forming a junction with Claremont Avenue at its eastern extent. A segregated cycle / footway and two new bus stops along the link (one on each side) will be provided on the southern side. High Street South will provide access to Market Square when this comes forward.

(8) Orchard Lane

Orchard Lane will be a new road linking with the new Claremont Avenue / Claremont Park Road / Claremont Road traffic signal controlled junction. Orchard Lane will form the eastern arm of this junction enabling a link with Prayle Grove and the associated residential areas served from Prayle Grove.

(9) Modifications to BXSC Perimeter Road

The western extent of the BXSC car park access road is to be realigned to join the new Prince Charles Drive western roundabout. The general alignment of the remainder of this section of the car park access road will remain the same as existing. A shared footway / cycleway facility will be provided alongside the eastern side of the carriageway linking with a Tiger crossing across the access road carriageway (close to the proposed emergency access through to Layfield Road). From the Tiger crossing a shared footway / cycleway will continue alongside the western side of the carriageway linking with Sturgess Park where a shared footway / cycleway will be provided with cycle parking. The two mini roundabouts will be retained and a taxi rank provided to the south of the east / west section of the access road.

The eastern extent of the BXSC car park access road will be realigned to join with the new Prince Charles Drive eastern roundabout. The general alignment of the remainder of this section of the car park access road, the mini roundabout and zebra crossing will remain the same as the existing arrangements with a pedestrian ramp provided from the car park access road at the zebra crossing to Spalding Road. An off road shared pedestrian / cycle facility alongside the access road and pedestrian crossing across the access road will allow access to the cycle parking at this location.

(11) A406 North Circular Road Coach Stops

The two coach stops located on the A406 on and off slip roads in the vicinity of the junction with the A41 will be displaced by the proposals for Phase 1A (North). An agreement in principle has been reached to relocate the stops to the following locations with final details to be submitted and approved as part of detailed design:

The northbound / westbound coach stop is to be located into an existing parking lay-by further along the slip road which joins the westbound carriageway of the A406. This location permits existing pedestrian facilities to be maintained to the coach stop and does not cause any service issues.

The southbound / eastbound coach stop is to be located onto Haley Road to the east of the A41. The location is on an area of land available alongside the slip road between the Shirehall Roundabout and the A41. This location requires the extension of double yellow lines to prohibit parking on both sides of the carriageway to maintain access to the A41 whilst a coach uses the stop. This location will also provide a safe walking route to the shopping centre and the surrounding residential areas. Coaches access this stop by using the A406 / A41 junction onto the A406 eastbound slip road and turning onto Cooper Road and Haley Road via the Shirehall Roundabout. Coaches access the A41 directly from the Haley Road / A41 slip road towards the A406 / A41 junction.

12) Acoustic Barrier

An acoustic barrier is proposed to be installed on the highway verge located between the A406 and the diverted Prince Charles Drive, to protect the riverside park from the traffic noise arising from the north circular. Although the A406 acoustic barrier will be delivered as part of the Phase 1A (North) the detailed design and specification of the barrier is subject to separate approval under condition 29.10 of the Section 73 Consent. The indicative location of the barrier is shown on the submitted RMA plans however the details are not considered by this application.

Bridges

(a) Bridge Structure B7 (Living Bridge)

A new pedestrian and cycle bridge over the A406 will be provided measuring between 17m and 25m in external width including the parapet. This bridge will form a key north/south link across the A406 between the Brent Cross shopping centre / new bus station and areas to the south including Claremont Avenue and Clitterhouse Playing Fields via the graded southern approach to the bridge.

Access to the Living Bridge from Claremont Avenue will be via a wide approach connecting with the segregated footway / cycleway provided alongside Claremont Avenue. A toucan crossing will be provided across Claremont Avenue to allow connections from High Street South (East Works) / New Tempelhof Avenue and other areas to the west. Access to the Living Bridge from the north (bus station) will be via steps / lifts / escalators. Access from the shopping centre will be at grade. The sloping southern approach to

the Living Bridge will provide access for pedestrians and cyclists. The bridge is proposed as a pedestrian and cycle bridge only although there will be controlled access available for maintenance and emergency vehicles, although fire tenders are not accommodated in the design.

The bridge will be an approximately 170 metres long elevated structure with an additional 70m ramp at the south and wide enough to accommodate landscaping forming a sequence of public gardens, as well as providing appropriate effective width for the flow of pedestrians and cyclists. Cycle parking and benches are to be provided along the bridge including 20 double sided cycle stands (40 spaces) within the north section of the bridge, four double sided cycle stands (8 spaces) within the south section of the bridge and eight double sided cycle stands (16 spaces) on the graded southern approach to the bridge.

A comfort level assessment for the pedestrian links within Phase 1A (North) identifies the two main crossings of the A406 will accommodate 7,590 pedestrian movements per hour. This adequately accommodates the pedestrian flows predicted, as contained within the original planning application. The Living Bridge alone will accommodate 87% of the forecast demand.

The bridge will be sheltered from noise and pollution associated with traffic on the North Circular Road through provision of a raised solid parapet. Lighting will be provided along the Living Bridge, complying with the lighting strategy. Various trees will be planted along the Living Bridge complying with the planting strategy.

The minimum effective width of the shared space path along the Living Bridge varies across its length, with passing places provided where necessary. The minimum effective width for pedestrians and cyclists will be seven metres. At the northern extent of the bridge a narrowing to six metres forms a gateway to signal the end of the cycle route. The gradient of the bridge will vary along its length. Various sections of the bridge comprise a flat gradient, with a nominal fall (1:40 slope and a maximum 1:30 slope). The cross fall across the bridge will be between 1% and 2.5% ensuring drainage provision is adequate.

The bridge is not designed to take vehicle loading other than planned maintenance vehicles and emergency vehicles (excluding fire tenders) and bollards will be installed at the south to prevent unauthorised access.

The Living Bridge rises above the road infrastructure beneath it to connect the southern developer area with Brent Cross Shopping Centre. The east and west elevations face the highway and are similar in design, constructed in 'Corten' and presenting a 'saw-tooth' face towards the highway that is solid and relatively flat facing towards the A406 but which increasingly gradates to permit angled views from the bridge through a lace pattern structure. Away from the highway infrastructure the bridge will be bound by development plots to the south, the detail of which will be defined in future RMAs and by the new shopping centre to the north.

The Bridge will be planted and landscaped whilst providing a clear minimum 6m wide pedestrian and cycle route between the southern and northern areas. The proposed landscape planting details have been the subject of lengthy discussion between the developers and officers to ensure that the planting mix, in terms of species, size, frequency of planting and maintenance regimes etc., are all agreed.

The graded southern approach will be planted with a double avenue of deciduous trees and hedging with a range of different seating options provided throughout. A row of 1100mm high stainless steel bollards will be set at 1200mm centres to control access to the southern approach and prevent vehicular access. Eight double sided cycle stands will be provided at this location. The surface material of the approach will be a combination of different types of granite stone paving setts including feature paving strips.

In order to build in access to the adjoining future development plot 93 to the west of the bridge a level area is formed using a stepped access. Moving towards the bridge structure a number of planters are proposed; these will be planted with conifer/deciduous tree planting and be provided with bench seating.

Moving onto the bridge structure the pedestrian/cycle route is more sinuous in nature with ornamental planting areas to the bridge edges; these will be planted with flowering bulbs. The planted areas will comprise a mix of conifer and deciduous tree planting, ornamental grass planting and areas of vertical wall planting interspersed with the inward facing 'corten' elevation. The area will be provided with an extensive mix of seating options, including bench seating around planters, bench seating to the grassed areas and bench seating to parapet areas. A number of double sided cycle stands are provided towards the southern and northern extent of the bridge, 8 double sided stands to the south and 19 double sided stands to the north.

The central area of the bridge structure opens out to a larger public space. The Landscaping Strategy ensures that a seasonally diverse planting regime will be implemented together with contrasting textural planting to provide all year round interest.

Overall the Living Bridge will be viewed externally as an enclosed green space with tree planting visible along the length of the bridge.

Details of an indicative lighting strategy have been submitted in the Design Development Report (section 6.5) that accompanies the application however the detail of the lighting is subject to the further consideration and written approval of the planning authority by way of a planning condition. The bridge will connect via stairs to the Bus Station level and riverside walkway levels below. The applicants have also agreed to provide a lift between the different levels. As the Shopping Centre layout design has still to be concluded the final details of the lift location require the further consideration and approval of

the planning authority. The applicants have however submitted indicative locational details of the lift.

Approximately 60 of the Whitefield Estate residential units are to be demolished to make space for construction of the Living Bridge. Reserved Matters consent has already been granted under application 15/00720/RMA for the residential development on Plots 53 and 54 which are intended to be used for the Whitefield Estate Replacement Units (Part 1). A Resident Relocation Strategy has also been prepared pursuant to condition 1.10.

(b) Bridge Structure B1 (Replacement A406 Tempelhof Bridge)

This bridge will form another key north / south link across the A406 between the Prince Charles Drive western roundabout and Claremont Road. The key dimensions are 28m wide and 171m in length (plus ramps) and a segregated footway / cycleway will be provided alongside the northbound carriageway of New Tempelhof Avenue linking 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 Tempelhof Link Road. It should be noted that some parking for the Holiday Inn hotel is proposed under the bridge on the southern side, whilst on the northern side north of Prince Charles Drive there is an enclosed void created below the bridge which the Developer would like to use in relation to the future development on the adjacent plot (101). To protect the bridge and highway above, the use of any space under the bridge will be controlled by, and subject to a lease from the relevant Highway Authority.

(c) River Brent Bridges

A total of eight vehicular bridges and two pedestrian bridges will be provided over the River Brent along the eastern, central and western stretches.

There are two bridges forming part of the western roundabout and two forming part of the eastern roundabout which are planned to be adopted by LBB as highway authority. These are approximately 20m to 30m long and of varying width.

There are an additional four river bridges between the two roundabouts with two providing access to the proposed bus station (in and out), and two more providing to the underground service access off Prince Charles Drive, and also access to the proposed residential plot located between Tempelhof Bridge and the western roundabout (plot 101). These vary but are typically 22m long by 12m wide.

These river bridges are all of the same style and design being concrete construction and the cross the diverted river, the proposed riverside park and footway/cycleway, in a single span.

Microclimate Assessment

The proposed development has been assessed in terms of its likely microclimate impact by an independent microclimate consultant. Following initial submissions and responses the development has been tweaked to address some potential microclimate issues. Overall however the development is now considered to be acceptable.

The most significant changes to the development to address initial concerns relate to the following:

- Living Bridge – further wind tunnel testing has been undertaken by the applicants to assess the potential impact on the basis of the indicative layout, particularly in relation to the southern approach to the Living Bridge and also taking account of the revised landscaping and bridge design and no significant impacts are anticipated; to some degree this has been achieved by re-defining the manner in which the applicants envisage the Living Bridge being used. The target conditions, in terms of proposed activities, have been amended to remove the potential requirements for long periods of outdoor sitting, such as for café outdoor seating. The ES justifies this by suggesting that the Living Bridge is primarily designed to be used as a thoroughfare for pedestrians and cyclists, with landscaping including benches and viewing areas to encourage visitors to linger and sit for short periods on the bridge.
- Further details have been provided regarding the potentially major adverse impact on the Tempelhof Bridge which is driven by the maximum height massing of the future plots alongside the A406. Whereas the developers suggest that the duration of impact is low and the safety threshold speed is exceeded for less than 5 hours in a year and that this represents a marginal exceedance, against a measurement criteria of 1 hour per annum officers consider this is not a marginal exceedance and there may be potential for high wind speeds only slightly below the threshold for considerably longer periods. Mitigation has not been recommended at this stage. As contingency, the applicants have stated that the addition of a 1.5m high solid barrier along the bridge sides would be effective at ensuring wind conditions on the bridge are suitable in terms of pedestrian safety. However, this does not appear to have been verified through wind tunnel testing. As there is some uncertainty at this time over how the development plots will be delivered it is problematic defining mitigation on the basis of an unknown scope. Rather than requiring mitigation at this stage it is recommended that this issue will need to be addressed through future RMA proposals relating to the adjoining development plots as the impact in terms of wind can only be fully assessed at that time.

- Concern had initially been raised regarding impacts on Central Brent Riverside Park, specifically in relation to some of the seating areas. Minor design changes however have now addressed this issue.

Other Structures

(a) Brent Cross Pedestrian Underpass Works

This refers to the existing pedestrian underpass just north of the A406/A41. Improvements include general maintenance such as painting, and an upgrade to the lighting where required. Further details will be provided at the detailed design stage.

Public Transport – Bus stops

The public transport improvements comprising Phase 1A (North) consist of improved bus stopping facilities. Waiting conditions at a number of existing bus stops are to be improved and new bus stops are also being provided in Phase 1A (North) in preparation to accompany new and altered services. Although the bus stop locations are illustrative, and their precise locations along the highways will be agreed with TfL during the S278 agreement process, their location on specific roads have been based on a review of likely need and these are set out in detail in a list in Appendix 2.

Temporary Bus Station

The new fully integrated high quality permanent bus station will come forward as part of Phase 1B (North) of the Brent Cross regeneration. In the interim, the existing bus station is planned to be moved to a temporary location during Phase 1A (North) to allow other proposed infrastructure to be delivered. Subject to the proposed Phase 1 construction programme a temporary bus station may be required for up to 4 years.

The temporary bus station will support the provision of the existing bus station (including all existing routes) and will operate until the new bus station is complete. Additional bus stops associated with pick-ups and drop-offs will be provided in the vicinity of the shopping centre, maintaining good bus passenger accessibility during the period when the temporary bus station is in place.

The temporary bus station facility is proposed to be located on the south west car park site (plot 114) comprising 8 bus drop-off and pick-up stops (4 each), 18 bus layover stands, driver facilities, an information kiosk and staff toilets. This bus station will operate 24 hours a day as the existing Brent Cross bus station does. The temporary bus station is located over 70m from the nearest residential properties in Brent Park Road to the north. The temporary bus station and bus stops have been designed with input from TfL to ensure that they meet their operational requirements.

Further temporary bus stops will also be located on part of the existing shopping centre car park to the rear of properties in Layfield Close, known as plot 113. This will comprise 8 stops for drop off and 8 stops for pick up with associated bus shelters along with an information kiosk and portable toilets. During daytime operating hours buses would set down and pick up passengers from the temporary stops on plot 113 which is closer to the BXSC, with the main bus station on the southwest car park being utilised to park up buses between shifts and provide bus services overnight.

The bus stops will be located approximately 38m from the rear elevation of the nearest residential properties in Layfield Close which are single storey bungalows. There is an existing substantial band of trees and hedge along this boundary in addition to an existing earth bund. Taking into consideration the proposed location of the bus stops, distance from neighbouring residential properties, the existing tree screen and earth bund, it is considered that the proposed bus stops will not be visually intrusive to the neighbouring residents.

A noise assessment report has been submitted with the application to consider the potential impacts of noise from the buses and their operation at Plot 113 on the neighbouring residential properties. The proposals include the provision of an acoustic screen along the edge of the bus stops to mitigate noise from the buses and associated operation. The Council's Environmental Health Officers have reviewed the submitted assessments and taking into account the site conditions and location of an acoustic screen. They consider that the daytime operating hours for the bus stops on Plot 113 should be limited to between 7:30am and 9:30pm on weekdays and Saturdays and between 9am and 9:30pm on Sundays and Bank holidays. A suitable worded condition is recommended to limit the hours of operation of the temporary bus stops on Plot 113 to these hours with the ability for them to be extended should noise monitoring over a 3 month period demonstrate to the satisfaction of the Local Planning Authority that the noise levels are within acceptable range and do not impact on the amenity of the occupiers of the neighbouring residential properties. A separate condition is also proposed to secure details and specification of the acoustic screen.

Coach Stops

Coach Stop J1: In the vicinity of the A406 / A41 junction

This 24 hour coach stop is to be relocated into an existing parking lay-by further along the slip road which joins the westbound carriageway of the A406. This location allows existing pedestrian facilities to be maintained and would not present any level of service issues.

Coach Stop J2: In the vicinity of the A406 / A41 junction

This 24 hour coach stop is to be relocated onto Haley Road to the east of the A41. This location would provide a safe walking route to the shopping centre and the surrounding residential areas.

The coach stop proposals are indicative and details will be submitted and approved as part of detailed design but they have both been discussed and agreed with TfL who oversee the coach operations, a shelter is proposed for waiting passengers and a new dedicated layby. There is expected to be associated drop off and collection of passengers at the coach stop by relatives/taxis in the vicinity.

Pedestrians

An assessment of the proposed footway widths relating to pedestrian comfort levels for pedestrian links within Phase 1A (North) has been provided. The assessment indicates the proposed widths are likely to comfortably accommodate predicted pedestrian flows.

Of the 32 pedestrian links assessed, widths vary between 1.7 metres (link from A41/A406 underpass to Cooper Road which is an existing footpath) to 7m (minimum width on the Living Bridge). In total, only 8 of the 32 links are less than 2.2m, with an average of 2.98 metres.

Existing pedestrian provision across the A406 due to the development is improved. In total six crossings will be provided:

- The Living Bridge: From Claremont Avenue via a 16 metre wide approach, the bridge will connect with the segregated footway/cycleway alongside Claremont Avenue. Access to the living Bridge from the bus station will be via steps / lifts / escalators. The bridge provides a friendly and relaxing environment for pedestrians to access and egress the shopping centre, with seating provision in a car free, environmentally friendly design.
- Tempelhof Bridge: A segregated footway/ cycleway adjacent to the northbound carriageway (2-2.5metres wide for pedestrians), with a pedestrian only footway (2.5-4metres wide) alongside the southbound carriageway.
- Pedestrian / Cycle Bridge (B6): At the eastern side of the Staples Corner / M1 / A406 junction providing a 4metre wide link in the pedestrian/cycle network.
- Replacement Pedestrian-only Footbridge at Staples Corner: the west of Bridge B6, the existing bridge will be replaced and a wider new ramp, to benefit mobility impaired users, provided on the northern side.
- Existing Pedestrian-only Footbridges: General refurbishment of the retained footbridges at Staples Corner
- A406/A41 Footbridges and Underpasses: General refurbishment of the retained underpasses and bridge (lighting / painting etc).

As part of the Phase 1 Strategy, the requirement for a 24 hour route through/adjacent to the Shopping Centre has been confirmed. The detailed arrangements are to be confirmed in sub-phase 1B North proposals.

A six metre minimum width shared footway / cycleway is proposed adjacent to the realigned River Brent.

With the 24 hour route through/adjacent to the Brent Cross Shopping Centre and the Brent Riverside Park link, no cycle / pedestrian provision is proposed along Prince Charles Drive.

For the area outside of the development site, the Area Wide Walking and Cycling Study assesses pedestrian routes to key destinations using the Pedestrian Environment Review System (PERS) methodology and identifies measures to improve the rating of those routes to integrate the development, and new facilities, with the existing pedestrian and cycle networks during Phase 1A (North). Funding of £1,250,000 has been secured towards pedestrian and cycle routes providing connections to Brent, Camden and other locations in Barnet under Condition 1.20.

Accessibility

The detailed design and landscaping of the central section of the Brent Riverside Park (reference 15/03315/RMA) is one of the suite of RMAs for Phase 1A (North) and is covered by a separate report also before Members at this committee. Please refer to this report for full detail of the design of the riverside park. Information is also provided under section 5.5 of this report in relation to the proposed river diversion works.

The proposed design of the infrastructure including the new Brent Riverside Park created as a result of the diversion of the River Brent has been developed in consultation with the Brent Cross Cricklewood Consultative Access Forum, to ensure accessibility for mobility impaired people has been properly considered.

In the Central Brent Riverside Park, on the northern side, there will be four locations where steps with a vehicle channel from the upper level path allow access to drop down to meet the lower level pedestrian and cycle path along the riverside walkway. The proposed steps from the bus station to the river corridor conform to the criteria for an Ambulant Disabled Stair.

In discussions with Officers and the CAF, concerns were raised in relation to the accessibility of the central reach of the new Brent Riverside Park for all users. At the London Borough of Barnet's request, a ramp for cyclists leading down to the riverside walkway to provide a safe connection for cyclists travelling between the Tempelhof Bridge and the residential areas to the East of the A41, has been included. This increases inclusive access to the river path to the west, via a graded slope of 1:21 with a dog leg and generous landings. The inclusion of a single lift to the west of the new Living Bridge from the proposed bus station level down to the lower riverside walkway level has also been agreed and is subject to condition requiring details to be provided.

The inclusive access point in the eastern reach of the Park is at the existing A41 underpass. Within the western reach of the Park a ramp is proposed. Both are defined on the Phase 1A (North) Infrastructure RMA highway drawings.

Cyclists

The proposed cycle networks for sub-phase 1A (North) will provide comprehensive connections to the development and the surrounding areas.

The development improves access across the A406 for cyclists with the Living Bridge close to the shopping centre (current proposals assume that cyclists will dismount at the northern end of the Living Bridge with cycle parking at both the northern and southern approaches to the bridge) and a new bridge at Staples Corner. Access over the A406 will be further enhanced by the improved replacement Tempelhof Bridge and the improvement of facilities at the A406/A41 junction. For cyclists, routes across the A406 provide a link to the proposed Cycle Superhighway CS11 along the A41 corridor via a mostly segregated cycle route (apart from the short length between Clitterhouse playing fields and the A41 at Ridge Road).

East - West cycling routes will be improved by the addition of a cycling link via the new 6 metre riverside shared footway/cycleway on the north bank of the newly created Brent Riverside Park. This will provide a pleasant, safe and high quality cycle and pedestrian connection and as a result no dedicated pedestrian and cycle provision will be made along the reconfigured Prince Charles Drive.

Further detail on the routes and cycle parking provision, including specific site and improvement details, is provided within the Pedestrian and Cycling Strategy for Phase 1A (North) (47065005-TP-RPT-010) submitted and approved under Condition 2.8. Details of the type and nature of pedestrian and cycle provision (i.e. segregated/shared use), footway and cycle path widths and type of crossing facilities are set out within the strategy.

In the area surrounding the outside of the development site the Area Wide Walking and Cycling Study assesses cycling routes to key destinations using the Cycling Environment Review System (CERS) methodology. This identifies measures to improve the rating of the routes, integration of the development, and the new facilities, with the existing pedestrian and cycle networks during Phase 1A (North). Funding of £1,250,000 has been secured towards routes providing connections to Brent, Camden and other locations in Barnet under Condition 1.20.

TfL policies on cycle and pedestrian provision have changed and evolved since the S73 S106 agreement was signed. During the detailed design, wherever possible within the constraints of the scheme, the implementation of the new guidance and standards is being incorporated.

Car Parking

The parking demand associated with Phase 1a North relates to the occupancy of Plots 53/54, the open space area at Clitterhouse Playing Fields and the temporary demand generated by construction workers.

For the 48 dwellings in Plots 53/54, a total of 48 parking spaces, of which 5 spaces will be for blue badge holders, will be provided. At Clitterhouse Playing Fields, 22 parking spaces and four for blue badge holders are proposed within a car park accessed via Claremont Road.

The parking associated with these two sub phases has already been approved as part of previous Reserved Matter Applications considered by this committee.

To date, the location and size of the car park for construction workers has yet to be identified. This is to be confirmed within the Construction Workers Travel Plan which will be submitted to the Council for approval prior to the commencement of the Phase 1A works. Initial indications are that at its peak, the car park will provide approximately 500 car parking spaces for construction workers during the development of Phase 1A (North). This is subject to consideration under Conditions 12.2.

Schedule 3 of the Section 106 requires the Development Partners to fund, prior to the commencement of development in any phase or sub-phase, the cost of developing and implementing CPZs in Barnet should the council reasonably determine that existing zones need to be extended or new ones introduced in relation to both construction activity as well as final occupation of development.

The decision to introduce new Controlled Parking Zones or extensions to existing ones needs careful consideration and will be subject to comprehensive monitoring. Under schedule 3 of the Section 106 (paragraph 11.3) the Developers are obliged to fund the reasonable costs incurred by the council in assessing the need for new or modified CPZs in the vicinity of the site.

In addition to the measures set out in the Car Parking Management Strategy submitted to discharge this condition, there are additional planning conditions to deal with phase specific car parking standards and strategy (Condition 11.2) and to deal with construction worker parking through the phase specific Construction Worker Travel Plans required under Condition 12.2.

Taxi Rank Provision

The existing 9 space taxi rank provision will be retained as per Condition 1 in Appendix 1. As part of phase 1B (North) a new 15 space taxi rank located at the northwest corner of the development to the north of the new western roundabout on Prince Charles Drive and a further taxi drop off provision accommodating up to seven taxis within the layby to the north of the new eastern roundabout on Prince Charles Drive, will be provided.

Signage

In addition to highway direction, regulatory and warning signs, signing throughout the development will be provided in accordance with the guidelines set out in Legible London, and contained in the Wayfinding and Inclusive Access Strategy (Ref: 031758).

Overall, officers are satisfied that the proposals comprehensively cover all the necessary transport aspects of the development that are relevant to Phase 1A (North). The next section discusses the assessment of the proposals.

5.4 Transport Assessment of Detailed Application

Introduction

The highways feasibility design of the new roads and junctions for sub-Phase 1A (North), including the gateway junctions, has been progressing in conjunction with the Developers, LBB, HE and TfL. To support the highway design and approval processes the authorities agreed that a new transport model (BXC detailed design model - DDM) should be built based on TfL's latest sub-regional model. It was further agreed that this model would be used in the A5 Corridor Study as the sub-regional model network was more detailed than the model used at outline application stage. The BXCDDM has been used to sense check the Phase 1A (North) highways scheme and junction layouts. The results of the junction feasibility design and modelling work (excluding the already approved gateway junctions) are set out in the Reserved Matters Transport Report (RMTR) and discussed below.

The 2014 Permission provides full planning consent in respect of the five Gateway Junction included within Phase 1A (North) (three on the A406 and two on the A407) for which reserved matters approval does not need to be sought, although it is worth noting that the junction assessment and modelling with the new BXCDDM has not resulted in any changes in the approved Gateway Junctions that require a further planning application.

Traffic Modelling

The strategic transport model used for all planning related work to date is termed the Brent Cross Cricklewood Transport Model (BXC TM) which is considered to be a robust tool to estimate future transport impacts of the development on the highway and public transport networks and to ensure the impacts of the Development remain within the overall envelope identified in the S73 Transport Assessment.

The Brent Cross Cricklewood Detailed Design Model (BXC DDM) has been developed for detailed design purposes and includes an increased level of detail of both existing and forecast traffic movements on the local roads within

the BXC study area. The model has been developed in line with TfL guidelines and meets the requirements of both TfL and LBB.

Junction models

Based on the BXCDDM traffic flows, detailed junction models have been utilised to rigorously test the proposed Phase 1A (North) junction layouts. Future year models for phase 1 (2021) and end state (2031) have been developed for weekday AM (08:00-09:00 hours), PM (17:00-18:00 hours) and Saturday (13:00-14:00 hours).

All junction designs, including traffic signal timings have been developed in collaboration with TfL, LBB and HE. The designs and associated traffic signal timings will be refined to improve performance through the detailed design process.

As part of the RMA the following junctions have been re-assessed using the BXC DDM and appropriate junction modelling tool to ensure that the designs originally developed at outline stage using the BXC TM remain appropriate:-

- Eastern Roundabout

This roundabout is now proposed to be partially signalised and the signal control will be linked to the signals controlling the exit of the adjacent bus station to help ensure efficient egress for buses onto the highway network.

The detailed junction capacity analysis for Phase 1 (2021) indicates the junction will operate within capacity in the AM and PM weekday peak periods and in the Saturday peak period it indicates queuing on the northern arm of the junction (from the BXC shopping centre perimeter road). Should such queues occur in reality, traffic is likely to re-assign or be re-routed via real-time signage to the western roundabout, where there is sufficient spare capacity.

- Western Roundabout

This roundabout is now proposed to be fully signalised with a 'cut-through' to facilitate traffic heading towards the shopping centre from Tempelhof Avenue.

The junction is forecast to operate during all time periods with no excessive queues or congestion in 2021 or 2031.

- Claremont Avenue / High Street South (East Works) / School Lane

The junction design has been amended from a 4-arm priority junction to a 4-arm traffic signal controlled junction with road space provided on both arms of Claremont Avenue to cater for right turning movements.

In phase 1 (2021) there will be negligible traffic demand entering and exiting School Lane.

The modelled results for both future years indicate this junction is forecast to operate satisfactorily during all time periods with no excessive queues.

- Claremont Road/Orchard Lane/Claremont Park Road
The modelled results for both future years show that this junction is forecast to operate satisfactorily during all time periods with no excessive queues.
- Claremont Avenue /Tilling Road/Tempelhof Link Road
The traffic signals at the Tilling Road / Claremont Avenue and Tempelhof Link Road / Claremont Avenue junctions will be linked to enable co-ordination between the two nearby locations.

The central island on Claremont Avenue allows for pedestrians to cross in parallel with traffic phases, resulting in only small impacts on highway capacity. The junction model assumes that the pedestrian phase occurs at all times.

The capacity analysis identifies significant queues only in the 2021 Saturday period and a reduction in the frequency with which the pedestrian phase is activated causes the overall modelled performance to be improved.

- Tilling Road / Brent Terrace North
This junction has been included in the traffic signal group which operates the re-modelled A5/A406/M1 Junction. The modelled results for both future years show this junction is forecast to operate satisfactorily during all time periods with no excessive queues.

VISSIM

In addition to the above conventional area-wide and individual junction models a microsimulation (“VISSIM”) model has been developed. Microsimulation models are capable of modelling individual vehicles and detailed vehicular interactions between junctions (whereas traffic models such as the BXC TM and BXC DDM normally model aggregate traffic movements across areas). The BXC VISSIM model encompasses the A5, Prince Charles Drive, Tempelhof Avenue, Claremont Avenue and the A406 and is being developed for 2021 in parallel to provide additional rigour in testing the detailed design of the planned transport infrastructure for Phase 1A (North). The VISSIM model has been utilised and reviewed as part of the A5 Corridor Study. Development of the model is on-going and transport authority audits to date have generally concluded that the model is acceptable.

Feasibility Design

Since the S73 submission the design has been progressed by the Developer as part of the technical approval process and in preparation of the RMA submission in consultation with the Technical Approval Authorities (LBB, TfL

and HE) and based on the output from the Detailed Design Model (BXC DDM).

The proposed highways have been designed to nationally recognised and approved design standards; however the nature of designing roads in an already constrained urban environment means that every requirement of all the design standards cannot be achieved.

Whilst the principles of the planned layout for Phase 1A (North) remain the same as those in the consented S73 scheme, the Developer has liaised with the relevant highway authorities and requested a number of relaxations and departures from standards. A number of these have been rejected following safety audits and after detailed consideration by the authorities. However, some have been agreed and this has resulted in minor changes to the S73 layout. Overall, the changes improve visibility, safety of the network and ensure that adequate traffic capacity is provided.

As part of the normal design process, further assessment and safety audits will be carried out on the design prior to construction and it can be expected that minor changes to the overall design may be required including items like, signage, lighting, drainage, utilities arrangements. This is normal for this stage of design of the scheme which can be recommended by officers for planning approval. The other highway authorities, TfL and HE, also support the approval of this RMA.

Road Safety Audit and Designers Response

A road safety audit and the associated designers response is produced at various stages of development of highway schemes in Barnet. For Planning Approval an acceptable stage 1 road safety audit is normally required, as was produced for the full highway layout in the S73 scheme in August 2013.

Subsequently a new Stage 1 Road Safety Audit was undertaken for the revised highway layout in November 2014 and a Designers Response followed in December.

The principles of the highway layout for the majority of Phase 1A (North) remain the same as those for the consented S73 scheme. However, following changes to the junction layouts due to the emerging DDM and following changes to alleviate safety concerns associated with non-supported departures from standards, a number of changes to the scheme have been introduced in agreement between the developers and the relevant highway authorities. A further series of stage 1 Road Safety Audits were carried out in July 2015 by TfL based on the most recent designs and departure reports. Four separate audits were carried out to cover the eastern and western roundabouts, London Borough of Barnet local roads and the A41 interchange.

As a result of some findings of the Road Safety Audit, and on-going discussions between the developers, their designers and LBB officers the layout of the eastern roundabout and some aspects of the local roads have

changed further since the plans were audited, and since the RMA consultation took place. However, having reviewed the latest submitted plans officers consider that the latest agreed changes are acceptable as they will improve both highway safety and performance, and will be subject to further Road Safety Audit at the appropriate stage in the detailed design.

A designer's response to the July 2015 Road Safety Audit has been submitted to the highway authorities and found to be generally acceptable.

It should be noted that the road safety audit process supports the RMA scheme development through helping to indicate what further work and changes should be considered as part of detailed design. Officers consider that the findings of audits to date are quite minor and normal for an application of this complexity. A further (Stage 2) Road Safety Audit will form part of the detailed design process and will probably be undertaken by the relevant Highway Authorities.

Public Transport Assessment

Phase 1A (North) sees the construction of infrastructure to enable the development of the new Brent Cross Bus Station, implementation of the temporary bus station and a series of bus lane measures at key locations, including gateway junctions, as part of the highway mitigation measures. In addition it allows a number of bus services to be re-routed, extended and altered.

One of the key aims of the BXC scheme is to establish and grow a pattern of increasing use of public transport for everyday activity in and around the local area that will be led by better interchange facilities and enhanced bus service provision. This will start to create capacity that will be continued during later phases of the scheme including a step-change in public transport provision associated with the new railway station. A crucial issue is the ability to maintain the capacity of the public transport networks such that they remain attractive modes of travel for new and existing travellers in the area.

As with the highway models the BXC DDM also includes public transport models for 2021 and 2031 AM, PM and Saturday peaks that has been similarly used to sense check the phased public transport proposals to ensure that the mitigation is sufficient and is introduced in the appropriate phase. The public transport forecasts continue to support the measures approved at outline stage and hence those proposed or enabled as part of this RMA, and officers have reviewed the public transport model and its forecasts and found all to be acceptable.

Construction Impact Assessment

The impact of construction of Phase 1 on the highway network is being managed through the following:

Construction Transport Management Plan

The Construction Transport Management Plan (CTMP) will set out traffic management procedures and processes to mitigate impacts of the development in terms of construction transport.

Condition 12.1 attached to the 2014 Permission requires a site-wide CTMP be submitted to and approved by LBB prior to development commencing. The CMTP is a detailed site wide plan setting out traffic management procedures and processes to mitigate any impacts which arise from the construction traffic travelling to and from and within the Site, including the appointment by the developers of a Traffic Management Officer.

Condition 12.1 also requires the CTMP to be revised at least every 3 years to reflect any changes in relevant best practice guidance or other relevant policy guidance, and so satisfactorily address any issues of concern or causes of complaints which might arise in relation to the operation of any approved version of the CTMP.

Construction Workers Travel Plan

Parking demand for construction workers will be managed via the Construction Workers Travel Plan (CWTP), within which sustainable transport options will be promoted. This will be coupled with the introduction of controlled parking zones to protect local residents from construction worker commuter parking on local streets. Their introduction is controlled through the section 106 for roads in Barnet and the developers have reached a separate agreement with LB Brent for the Dollis Hill area.

An initial outline of the Construction Workers Travel Plan Framework is contained in Paragraph 20 of Schedule 3 to the S106 agreement. An example of best practice, being the Olympics Construction Workers Travel Plan Framework, has been submitted. A Construction Workers Travel Plan will be issued to the Council for approval prior to the commencement of the Phase 1A (North) works.

On-street Car Parking Assessment

The process of introducing new controlled parking zones (CPZs) or extending existing ones will begin once it is established there is an increase in parking demand as a result of the Brent Cross Cricklewood development. It is proposed that the first survey will be undertaken prior to the start of construction and then periodically at a frequency to be agreed with TfL and all boroughs involved. The ultimate decision on CPZs would be taken by the relevant authority taking into account other factors such as feedback from residents.

Should significant concern arise regarding parking on certain residential streets, all local London Boroughs have the opportunity to be represented at the Transport Advisory Group, where the issue can be raised and addressed. The funding of new or extended CPZs in Brent is available through the Consolidated Transport Fund (CTF) and would need to be applied for either through the Transport Advisory Group (TAG) or by the London Borough of

Brent directly to the Transport Strategy Group (London Borough of Barnet and TfL). The Transport Strategy Group is required to take account of TAG's recommendations.

The requirement for Controlled Parking Zones within Brent has been raised and discussed at the Transport Advisory Group and the need for provision within the Dollis Hill area outside the scheme boundary in relation to any parking overspill related to construction activity has been agreed between Brent and the developer (as this is outwith the Section 106).

5.5 River Brent Alteration and Diversion Works

Included in the Infrastructure RMA is the diversion of the River Brent and the associated formation of a new river channel corridor running east to west. In granting planning permission for the BXC development in October 2010 and subsequently through the approval of the 2014 S73 Consent, reference F/04687/13, the existing River Brent was viewed as an obstacle to achieving full regeneration due to the spatial fragmentation that retaining the course of the river would result in. It was therefore established that river would be diverted, thereby opening up a greater regeneration opportunity. The diversion of the River Brent has therefore been established since 2010.

The River Brent diversion works are part of a host of infrastructure works designed to remove barriers and constraints to development and open up the wider area to ensure that the regeneration proposals capitalise on the excellent transport links and new open space areas that will be created.

The River Brent in its current form is a canalised concrete channel running east to west through the car parks to the south of the existing Shopping Centre. Diverting the river to the south, to reflect the line of the A406 North Circular Road, will enable a more deliverable regeneration development to be undertaken within Brent Cross. Diverting the River also affords an opportunity to create a more naturalised river course. The proposals, in broad outline, create a meandering river course that will re-connect at the eastern and western ends of BXC into the existing river course. The opportunity arises to create a naturalised parkland riverside environment with marginal and wetland landscaping throughout the river channel, improved biodiversity throughout and ultimately improved water quality. In the latter case, improved water quality will benefit the River Brent and the Welsh Harp Reservoir Site of Significant Scientific Interest (SSSI) that it leads into. Outwith the river channel, land is provided to form a parkland setting and public access. Overall the intention is to improve access and enrich biodiversity.

The River Brent diversion runs east to west from the A41 Hendon Way, following the route of the A406, North Circular to its junction with the M1. The riverside park elements are provided in three separate reaches. The reaches reflect the different character of the adjoining development areas. Reaches 1 and 2 are situated adjacent to the Shopping Centre and this is reflected in their narrower width and desire to create a landscaped setting for the diverted

river as well as the Shopping Centre. Reach 3 on the other hand is in an area that is closer to residential property and the opportunity here is to create a more expansive ecological habitat area where the public has greater access to both banks of the river.

The detailed access, landscaping, surface water management and biodiversity proposals for the Central Brent Riverside Park (Reach 2) elements are provided in the separate RMA reference (15/03313/RMA) for that development, the report for which is also before Members for consideration at this Committee. Whilst details have been provided for Reaches 1 and 3 to either side of the central reach these details are indicative only and have not been submitted for approval.

The existing Prince Charles Drive has similarly been realigned to follow the diverted river course and will sit between the Riverside Park and the A406 North Circular road. The provision of the diverted River Brent is dealt with under Parameter Plan 011 contained within the Design Framework Strategy approved under the 2014 S73 Consent. Due to the relationship with highways infrastructure and the realigned Prince Charles Drive there are a number of road bridges that will cross the diverted river; in addition two pedestrian bridges cross Reach 3 to the west. The Living Bridge pedestrian and cycle access linking the southern development area into the Shopping Centre crosses the river at an elevated level.

Within Reach 1 the river diverts from the existing channel into its more naturalised diverted course. Within the corridor and built into the new highways infrastructure is an Environment Agency maintenance route access which provides access for the EA to the river channel. The maintenance route will also serve as a pedestrian and cycle route through Riverside Park connecting west to east. For the majority of the route the course is shared by pedestrians, cyclists and the EA. Within Reach 1 however the EA maintenance route diverges from the through pedestrian/cycle route to provide access to the river channel whilst the through access route continues towards the A41. The whole river corridor passes beneath river bridges 7 and 8 which make up the eastern roundabout which will connect Prince Charles Drive back into the road network and access to the BX Shopping Centre. River bridge 6 provides an exit from the future Bus Station to be provided as part of the future Shopping Centre extension. Within the corridor, a stepped access point is provided from the walkway to the Bus Station.

Within Reach 2 the diverted river runs in meandering fashion to follow the route of the A406 North Circular with the new Prince Charles Drive sitting between the Riverside Park and the A406. The river is crossed by River Bridge 5, the Bus Station access as well as the Living Bridge at an elevated position above bridge 5. River Bridges 3 and 4 provide access off Prince Charles Drive across the river to development plots 101 and 102. The bridges associated with the western roundabout and Tempelhof Avenue mark the western boundary of Reach 2.

The EA maintenance route through this section is a combined route incorporating pedestrian and cycle access. Access is provided from the riverside park to upper levels, including a future phase upper walkway route, by way of stepped access adjacent to the proposed Bust Station and further west beneath Tempelhof Avenue. A graded ramp access and additional stair access down to the lower level riverside walkway are provided to the west of Reach 2. In discussion with the Development Partners it has been agreed that a lift access will also be provided to connect the riverside park level with the bus station level. This will be located to the west of the Living Bridge. The exact location has not been fixed at this stage on the grounds that the detailed design of the buildings on the adjacent plots is not known at this stage. A plan has therefore been provided to show the zone within which the lift will be installed and a condition is recommended to require details and specification of the lift prior to commencement of the River Brent Alteration and Diversion Works.

There is no public access to the southern bank of the diverted river within Reach 1 or 2. Underneath the western roundabout, the river course will form Nature Park 5 to its western flank.

Moving into Reach 3 the river continues in its meandering form before reconnecting with the channelled river on the western boundary. Further access is provided off the proposed road network for the EA maintenance vehicles to access the riverside park environment. Within this reach pedestrian access is also provided to the southern bank of the river with two pedestrian bridges proposed, connecting the north and south banks. These also connect into the proposed Nature Park 4 which is to be provided at the western extent of the altered river channel.

The approved Parameter Plan 011 within the Development Strategy Framework identifies the three different reaches for the proposed river diversion and recognises the different context of different Reaches. The requirements for a 6m wide EA maintenance route/pedestrian and cycle access has been met throughout the design as presented. The Parameter Plan requires both the north and south banks to be planted and for the formation of wetland habitat areas. It is only in Reach 2, through the Central Brent Riverside Park RMA (reference 15/03315/RM), where the details of planting and landscaping have been provided and submitted for approval. The detailed planting and landscaping for Reaches 1 and 3 will be provided in future RMAs to be approved by the Council.

The different nature and context of each Reach is reflected in the design of the river corridor. In the narrower Reaches 1 and 2 the southern bank is steep and retains the elevated Prince Charles Drive. The steeply sloping and planted southern bank leads down into the river channel which is made up of the river bed and its associated flood plain. The channel is designed to meet a 1 in 5 year flood event scenario. The northern bank rises to the pedestrian/cycle walkway which provides a corridor through the riverside park. To the north of the walkway additional landscaping and seating will be provided where feasible. In the eastern section the EA maintenance route

leads down from an access off the A41 entrance. To the west in Reach 3, the corridor is more level, with no need for the steep slope to retain Prince Charles Drive. The park environment is more open and spacious with access to both sides of the river.

The current RMA consequently seeks permission for the alignment of the diverted River Brent and the associated pedestrian/cycle and EA maintenance routes although Members are asked to note that the full details of these works are provided under 15/03315/RMA in respect of Reach 2. Future RMA will be submitted in respect of Reaches 1 and 3 which fall in later phases of the development.

There are some minor variations to Parameter Plan 011 which are addressed via a separate application (reference 15/05040/CON) under Condition 2.4 and 2.5 which enables the applicants to vary the agreed parameters approved in the Section 73 Consent, subject to certain criteria. The details within application 15/05040/CON are discussed separately under Section 4.3 within this report and are also the subject of a separate report also before Members at this Committee.

5.6 Landscaping and Drainage Works

The landscaping and drainage requirements for the Central Brent Riverside Park (Reach 2) proposals are dealt with under the separate RMA report, 15/03312/RMA also reported to Members at this Committee. Members will note that the RMA relates solely to Reach 2 and that the proposals relating To Reaches 1 and 3 are listed as indicative only.

The landscaping and drainage proposals relating to this Infrastructure application however accompany the current Infrastructure RMA, with the exception of the diverted River Brent corridor.

A series of plans covering the site wide development detail the removal and protection of trees, shrubs and other vegetation including identifying where these are removed due to the proposed development works or where they are recommended for removal or maintenance due to their arboricultural condition. Tree root protection areas are also defined. In addition the application is supported by extensive planting plans, including the provision of new tree and shrub planting as well as providing details of the general landscaping proposals such as grassed areas and grass sowing mix details. The application is supported by a Tree Survey, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

The landscaping details submitted for approval cover the areas within the highways' infrastructure; these vary in nature and scale to small areas of grass planting between highways to larger areas of tree and shrub planting and grass seeding where the infrastructure allows.

In addition, within the larger areas of landscaping the applicants have defined areas that will address drainage through the provision of retention ponds and detention basins. For example the larger areas of land available between the highways infrastructure at the A406/M1 junction will be landscaped to include grass planting, tree and shrub planting and the inclusion of naturally formed retention ponds.

Full design details of proposed surface water management, drainage and the construction of SuDS ponds have not been submitted with the current application and will be assessed through pre-commencement planning conditions attached to the 2014 S73 Consent. The drainage strategy however will include a range of measures throughout the site including retention ponds, detention basins, cellular storage tanks with the use of proprietary filtration and separation measures to control potential contaminants.

At the Section 73 application stage the applicants had identified a potential flood issue on the eastern section of the A406 where it is close to the River Brent and the Flood Risk Assessment Addendum identified a potential raising in the left bank level of the River Brent to address this issue. The current proposals introduce additional road gullies to allow flood water to drain into the River Brent and have been developed in discussion with the Environment Agency. Whilst they will not address flood risk completely they will facilitate flood water drainage.

The applicants' surface water management strategy has been developed in consultation with the EA who have undertaken their own independent assessment of the available information including modelling the realigned River Brent. The EA offers no objection to the proposal although planning conditions are recommended in relation to elements of detail. The proposals have also been assessed by officers and any queries raised regarding the strategy have been adequately addressed by the applicants and/or the EA. Overall, officers are content that the surface water management strategy is acceptable. Where detail is still required to be submitted for officer approval it is recommended that this is dealt with by way of appropriate planning conditions.

6. ENVIRONMENTAL IMPACT ASSESSMENT

The EIA procedure in the UK is directed by the Town & Country Planning (Environmental Impact Assessment) Regulations 2011 (the 'Regulations'), EU Directive 85/337/EEC (as amended), as well as the National Planning Practice Guidance (2014).

Regulation 8 of the Regulations requires local planning authorities to consider whether or not the environmental information already before them (i.e. the ES submitted with the 2013 hybrid application F/04687/13 and any additional environmental information) is adequate to assess the environmental effects of the development:

To demonstrate the continued acceptability of the ES associated with application F/04687/13 in the context of the detailed reserved matters applications for Phase 1A (North) an Environmental Statement Further Information Report (the 'ES FIR') has been submitted.

Within the ES FIR it is necessary to consider the impact of all relevant aspects of Phase 1A (North). The report therefore considers all of the Reserved Matters submissions to date and their individual and cumulative effects.

The ES FIR was first submitted and based upon the proposals within the original Reserved Matters submissions made to the Council in January 2015 including the RMAs for Infrastructure and the Central Brent Riverside Park which were withdrawn prior to registration. Since that time, further changes to detail in relation to the Infrastructure and Riverside Park RMAs have resulted in a revised Further Information Report being submitted with the current RMAs in order to further assess these more recent changes to the development proposals.

The technical assessments within the ES FIR and Revised ES FIR include the whole BXC Scheme in outline (as per the 2014 Section 73 permission), whilst adding in the detailed design of Phase 1A (North) RMAs. The Further Information Reports therefore assess the development as a whole.

In relation to the Infrastructure and Central Brent Riverside Park RMAs submitted in June 2015, all minor changes to the BXC Scheme and therefore the assessment from that reported in the ES FIR were captured in the Revised ES FIR which reflects further design evolution and responses to consultee comments. Although some reported significant impacts did change from the ES FIR as assessed in the Revised ES FIR they did not result in an overall change to the outcomes of the environmental impact assessment for the Phase 1A (North) and/or the BXC scheme as a whole. The supporting statement therefore concludes that there are no new or different significant effects so as to warrant changes to the relevant parts of the ES FIR.

The ES FIR has assessed the potential cumulative impact arising from a number of committed development schemes in the wider area and has consequently identified where mitigation will be required to address any significant impacts arising from the proposed Phase 1AN development. In general, where mitigation has been identified as required the impacts have been designed out. The most critical area is that relating to noise impact from the A406 affecting the amenity of users of the Riverside Park. The incorporation of an acoustic barrier has been tested through different options within the ES FIR and a preferred solution identified that will address this matter.

The existing Environmental Statement associated with the 2014 Section 73 permission supplemented by the ES FIR and the other additional environmental information previously submitted satisfactorily assess and address the impacts of the development for the purposes of determining the

7. EQUALITY AND DIVERSITY ISSUES

Section 149 of the Equality Act 2010, which came into force on 5th April 2011, imposes important duties on public authorities in the exercise of their functions, including a duty to have regard to the need to:

- “(a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;*
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;*
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.”*

For the purposes of this obligation the term “protected characteristic” includes:

- age;
- disability;
- gender reassignment;
- pregnancy and maternity;
- race;
- religion or belief;
- sex; and
- sexual orientation.

Officers have in considering this application and preparing this report had regard to the requirements of this section and have concluded that a decision to grant planning permission for this proposed development will comply with the Council’s statutory duty under this important legislation.

The site will generally be accessible by various modes of transport, including by foot, bicycle, public transport and private car, thus providing a range of transport choices for all users of the site. Access to the Riverside Park is restricted to no motor based traffic, with the exclusion of Environment Agency maintenance vehicles.

This RMA has been prepared in consultation with the Consultative Access Forum (CAF) which has been set up specifically to advise on inclusive access requirements of the Brent Cross Cricklewood regeneration. Design aspects that incorporate inclusive design have been reviewed by the CAF to insure that the development proposal for the Central Brent Riverside Park is designed, delivered and managed in accordance with the Inclusive Access Strategy and the Way finding Strategy.

To provide inclusive, step free access to the Brent Riverside Park three facilities have been incorporated comprising two graded ramps and the provision of lifts from Living Bridge level to the bus station level and from the

bus station level down to the lower Riverside Park walkway. The first graded ramp option is the provision of a ramped access within reach 3 to the west and is essentially the EA maintenance access route but is designed to also be suitable for use by pedestrians. The other graded ramped access is located within reach 2 and is located between the point where Tempelhof Bridge crosses the river and crosses over Nature Park 5.

With regards to the lift from the bus station/Living Bridge level to the Riverside Park, the submitted plan alongside this RMA application is indicative. The exact location of the lift within the identified zone of the Riverside Park, along with the specification and design, will be controlled via condition and will be submitted to and approved by the Local Planning Authority in consultation with the Consultative Access Forum. The submitted scheme is considered to provide for inclusive access for all users.

It is considered that the road network has been designed to accommodate disabled users and sufficient width footways, dropped crossing points, and suitable gradients and crossfalls will be incorporated in the design, however the design organisation will need to complete a Non Motorised User Audit as part of the next stages of detail design, which will confirm the designs acceptability for non motorised users in detail.

It should be noted that the proposed Tempelhof Bridge has a maximum longitudinal gradient of 1:20 which is generally recognised by most standards as acceptable for most users, although many wheelchair users would be unable to proceed at gradients of more than 1 in 40. It is accepted that the proposals are a significant improvement on the existing situation where a stepped ramp is the only off carriageway connection between the north and the south of the A406 in this location. Whilst this is accepted as a significant improvement on the existing situation, some design guidance suggests flatter gradients to accommodate all manual wheelchair users would be more appropriate. Due to the constraints of the site including the need for adequate headroom over the A406 provision of gradients below 1 in 20 would be unviable. Recognising the constraints of the site and the provision of the Living Bridge close by with flatter gradients, it is considered an appropriate provision has been made.

8. CONCLUSION

BXC is a large and complex regeneration scheme and Phase 1A (North) provides the majority of the key enabling highway infrastructure to allow development to commence both north and south of the A406.

This application seeks reserved matters approval for the detailed road layout and network within Phase 1A (North); the diversion works for the River Brent to enable the future extension of the shopping centre; and the provision of bridges across the A406 and diverted River Brent, including the replacement Tempelhof bridge and new pedestrian/cycle Living Bridge. The proposals

complete the networks for the Northern development and provide sufficient connections across and to the south of the A406 to facilitate the start of the Southern development.

The works tie in with the parallel RMA (reference 15/03315/RMA) for the hard and soft landscaping, ecology and bio-diversity enhancements and pedestrian and cycle path access for the central reach of the Riverside Park to be developed along the route of the diverted River Brent, which is also before Members at this committee.

Officers have worked closely with the Developers and their advisors and have liaised appropriately with other key stakeholders to ensure that the impacts of the development on the network continue to be robustly assessed and the mitigation package remains appropriate. The detailed design of the highways will continue through the separate technical approval process under section 278 and 38 agreements with the relevant highway authorities. At this stage the feasibility design and junction analysis work completed to date is considered acceptable in planning terms to allow the RMA to be approved.

The application has been subject to statutory consultation and a small number of third party representations have been made. No significant issues have been raised that have not been addressed or which would move officers to recommend refusal.

The application is in accordance with Development Plan policies and accords with the conditions and parameters approved in the Section 73 planning permission for the wider Brent Cross Cricklewood regeneration scheme.

Overall, officers find the proposals acceptable and recommend that the application is approved subject to conditions as outlined in Appendix 1.

LIST OF APPENDICES

APPENDIX 1 – CONDITIONS

APPENDIX 2 – DEVELOPMENT PROPOSALS INCLUDING S73 APPROVALS

APPENDIX 3 – EXISTING ROAD AND TRANSPORT CONDITIONS

APPENDIX 4 – PRE RESERVED MATTERS CONDITIONS

APPENDIX 5 – POLICY COMPLIANCE

APPENDIX 6 – OBJECTIONS AND OFFICER RESPONSES

APPENDIX 7 – CONFORMITY WITH REVISED DEVELOPMENT SPECIFICATION AND FRAMEWORK

APPENDIX 8 – JUNCTIONS APPROVED UNDER THE SECTION 73 PLANNING APPROVAL

APPENDIX 9 – SITE LOCATION PLAN