Brent Flood Risk Sequential and Exceptions Test

March 2020

Contents

1 Introduction

1.0 The London Borough of Brent to support the Brent Local Plan has undertaken sequential testing of the site allocations and intensification corridors that the Plan identifies. The National Planning Policy Framework (NPPF) (Feb 19) identifies that a Local Plan should apply a sequential approach to potential flood risk taking account of current and future impacts of climate change.

1.1 The draft Brent Local Plan seeks to be consistent with the Intend to Publish London Plan. This identifies a significant amount of new development for the borough. This includes:

a) increase in the number of new homes in the borough of a minimum of 23,250 dwellings in the period 2109/20-2028/29;
b) be a 'provide capacity' borough for industrial land
c) accommodate additional waste capacity
d) accommodate additional student accommodation and
e) provide for additional hotel bedrooms

1.2 The document identifies the flood risk categorisation for the site allocations and applies the sequential and exceptions test (where necessary) to support the draft Brent Local Plan submission version.

1.3 The draft Brent Local Plan proposes to allocate 105 sites for housing, industrial, education or a mix of uses. It also identifies 'intensification corridors'. These are priority locations for development, where taller buildings are likely to be acceptable. Consistent with the West London Strategic Flood Risk Assessment Level 1 the sequential test has been applied to both fluvial and pluvial (surface water) flood risk. Of the allocations, 40 are wholly within either Flood Zone 1 Fluvial and outside Surface Water Zone 3. The remainder have at least some in either Zone 2 Fluvial or Zone 3 Fluvial/ Pluvial. This document identifies that the allocation of identified sites is consistent with the NPPF and sequential/ exceptions testing requirements. The same assessment of intensification corridors has also been undertaken.

Policy Context

1.4 The NPPF requires Local Planning Authorities to direct development towards areas at lowest risk of flooding through the sequential approach. Sites should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The strategic flood risk assessment will provide the basis for applying this test. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding. If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance. The application of the exception test should be informed by a strategic or site-specific flood risk assessment, depending on whether it is being applied during plan production or at the application stage. For the exception test to be passed it should be demonstrated that:

a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and

b) the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

1.5 Both elements of the exception test should be satisfied for development to be allocated or permitted.

1.6 Where planning applications come forward on sites allocated in the development plan through the sequential test, applicants need not apply the sequential test again. However, the exception test may need to be re-applied if relevant aspects of the proposal had not been considered when the test was applied at the plan-making stage, or if more recent information about existing or potential flood risk should be taken into account.

Sites Considered

1.7 The London Borough of Brent has identified potential site allocations. The sites were assessed against a site assessment matrix in the Integrated Impact Assessment to consider their suitability for development. Sites considered acceptable were identified as site specific allocations. In order to meet the need for emerging London Plan small sites housing targets in particular, a number of ‘intensification corridors’ were identified as priority locations for development, rather than as specific allocations. These sites offer the opportunity to be treated as a single site, or more likely to be delivered in an incremental manner. All the potential site allocations are identified in Appendices 1 through to 5. The Intensification corridors are identified in Appendix 6.

Classification of Proposed Site Use

1.8 The proposed uses within the allocations/ intensification corridors have been classified consistent with National Planning Practice Guidance (PPG) Flood Risk and Coastal Change Table 2: Flood Risk Vulnerability Classification. For the range of uses identified on a site within the allocation/ consistent with existing use of the intensification corridor, the most vulnerable of the uses classification has been used in the assessment, e.g. on an industrial (less vulnerable) and residential (more vulnerable) allocation, the more vulnerable classification has been used.

2 The Sequential and Exception Test

2.1 This section sets out the methodology used to apply the Sequential Test and Exception Test. When allocating land in a Local Plan, local planning authorities should seek to steer new development to the lowest areas of flooding. They should apply the Sequential Test to show that there are no reasonably available sites at a lower risk of flooding that are appropriate for the proposed development. The PPG identifies the methodology for Local Plans preparation related to the sequential test. This is set out in Figure 1.

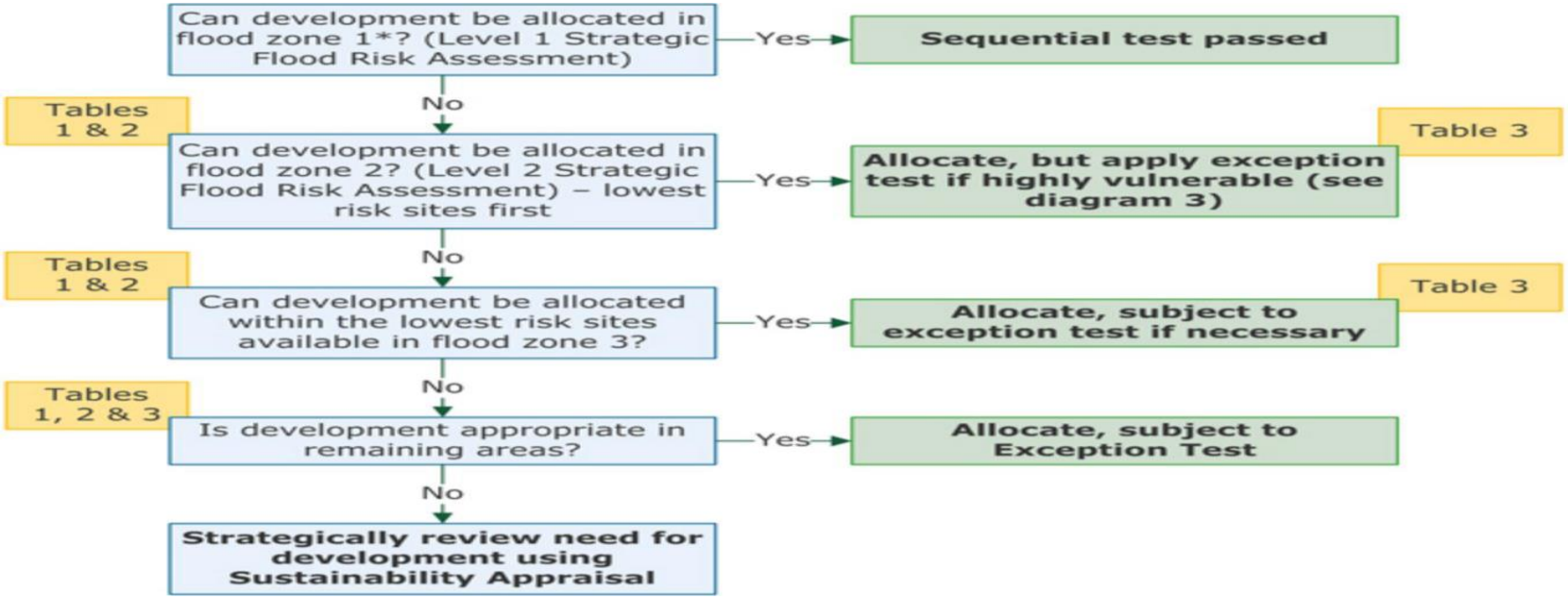

Figure 1: Application of the Sequential Test for Local Plan preparation (Flood Risk and Coastal Change PPG, Diagram 2)

2.2 After applying the Sequential Test, if there are no other options to allocate that development on a site at a lower risk of flooding, then the Exception Test might need to be applied, depending on the vulnerability of the proposals and the flood zone location (as set out in Figure 2 and Figure 3). To pass the test it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, and the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall. Both elements of the Exception Test should be satisfied for development to be allocated/ permitted.

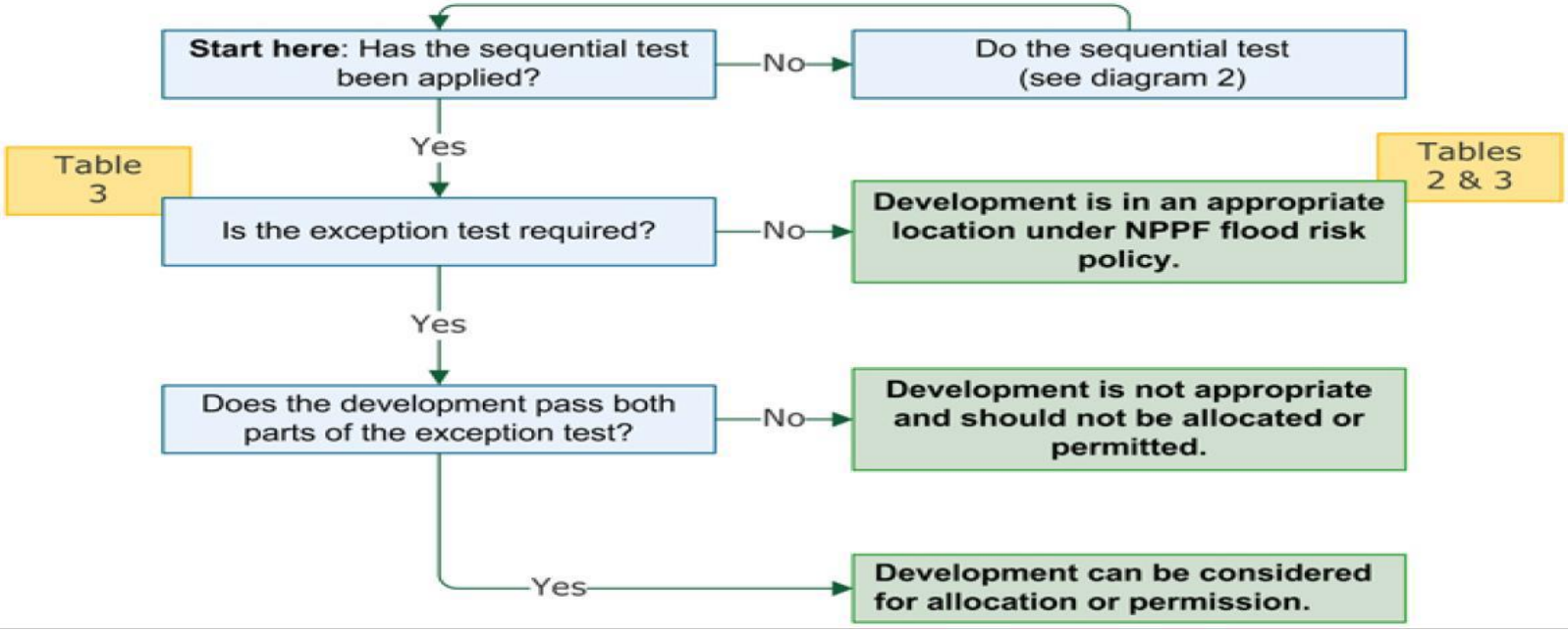

Figure 2 Application of the Exception Test to Local Plan preparation (Flood Risk and Coastal Change PPG, Diagram 3)

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	✗	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	✗	✗	✗	✓*

Key:

✓ Development is appropriate

✗ Development should not be permitted.

Figure 3: Flood Risk Vulnerability and flood zone 'compatibility' ((Flood Risk and Coastal Change PPG, Table 3)

Sequential Test Methodology

2.3 The Council has identified the site allocations. For the intensification corridors, it has sought to identify parts of the corridor that have similar characteristics from a flooding perspective and parcel them together. The Council has then taken account of the West London SFRA Level 1 information contained within a Geographical Information System containing flood risk sources (fluvial including climate change scenarios +25%, 35% and 70%, surface water, sewer, ground water, elevated ground water, critical drainage areas, reservoir breach and historic flood events to identify the flooding risks of that site. This has been supplemented with information from the West London SFRA Level 1 website, which provides greater detail on some matters, such as surface water depths. In addition, use has been made of the Environment Agency's site specific 'Flood Map for Planning' information where available. This includes Flood Map Flood Zones Detailed FRA setting out flood heights for the whole range of non-climate and climate change scenarios, extents and volumes of flow for the areas and at locations along the river corridor, Historic Flood Maps, Structures and Defences protection and quality information. Additional information has also been taken from the previous Brent Level 2 SFRA for individual sites and site specific FRAs supporting planning applications. In addition the Environment Agency's webpages 'Learn More About This Area's Flood Risk provides more detailed information on surface water and reservoir flood depths, speeds and directions of flow. For those sites with greater than 20% fluvial (taking account of climate change +70%) or surface water flood zone 3 coverage a more detailed assessment was undertaken through a Level 2 assessment. Appendix 7 includes a summary position of the site allocations and intensification corridors identifying:

a) the site allocation reference/ intensification policy reference
b) site name
c) proposed use
d) proposed use vulnerability classification
e) site area
f) anticipated delivery of dwellings 19/20-28/29
g) anticipated delivery of dwellings 19/30-40/41
h) indicative site capacity
i) Integrated Impact Assessment rating: EN12A: Flood Risk from Rivers
j) Integrated Impact Assessment rating: EN12B: Flood Risk from Ground Water
k) Integrated Impact Assessment rating: EN12C: Flood Risk from Surface Water
l) percentage of the site within each of : Fluvial Flood Zones 1, 2, 3a and 3b, Surface Water Flood Zone 3
m) whether it would be impacted by a reservoir breach
n) whether Sequential Test is required
o) whether Exception Test is required
p) whether a SFRA Level 2 is required

2.4 The draft Brent Local Plan proposes to allocate 105 sites for housing, industrial, education or a mix of uses. It also identifies 'intensification corridors'. These are priority locations for development, where taller buildings are likely to be acceptable. Of the allocations 20 are wholly within either Flood Zone 1 Fluvial and Surface Water. The remainder have at least some in either Zone 2 Fluvial or Zone 3 Fluvial/ Pluvial. This document identifies that the allocation of identified sites is consistent with the NPPF and sequential/ exceptions testing requirements.

Development Needs

2.5 The housing target that the Brent Local Plan is required to achieve has varied throughout the draft Local Plan production process. The Council had evidence at the start of the process in its 2016 Strategic Housing Needs Assessment (SHMA) that for the period 2011-2037 that an additional 47,500 homes were required, or 1,826 dwellings per annum. This would equate to around 40,172 over the proposed Brent Local Plan period. The Government's new standard methodology in 2017 was under development, but the draft was indicating that over 3,300 dwellings were required per annum. The current methodology using data available now (March 2020) indicates a need of 3,408 dwellings per annum. The draft London Plan December 2017, which took account of objectively assessed needs and the borough's ability to accommodate development on the basis of the London Strategic Housing Land Availability Assessment May 2017 indicated 29,130 dwellings were required for the period 2019/20-2028/29. The Council sought to maximise its housing delivery to meet the draft London Plan target for the first 10 years of the draft Plan taking account of all potential deliverable capacity. For the years beyond it prioritised delivery to achieve the updated Brent SHMA October 2018 target, but was also mindful of the Government's objectively assessed need target which in years to come could increase the need above the SHMA level. The SHMA identified a need of 48,000 dwellings in the period 2016-41, or 1,920 dwellings per annum. For the draft Brent Local Plan period this equates to around 42,240.

2.6 The draft Brent Local Plan seeks to be in general conformity with the Intend to Publish London Plan. This new London Plan identifies a significant amount of new development for the borough. This includes:

a) increase in the number of new homes in the borough of a minimum of 23,250 dwellings in the period 2109/20-2028/29;
b) be a 'provide capacity' borough for industrial land (GLA representations indicated 43 hectares equivalent to 60 Wembley Stadium football pitches plus making up for any losses since the GLA undertook its land assessment).
c) accommodate additional waste capacity
d) accommodate additional student accommodation and
e) provide for additional hotel bedrooms.

2.7 Over the period to 2041 the population of the borough is expected to grow by approximately 65,000 in the period to 2041. In addition to the above development, the social and physical infrastructure needs of its population will also need to be accommodated. This creates a lot of potentially competing needs for existing brownfield land, which realistically is the only source available to the Council to

accommodate these wide range of uses. The Council in association with the London Plan team through the SHLAA process and the call for sites and other representations on the Local Plan considers that it has identified the most realistic deliverable sites with appropriate levels of capacity. There have not been reasonable alternatives in terms of specific sites or a strategy proposed. As such the sites it has put forward are the best available to deliver for the range of uses required to be in general conformity with the London Plan.

2.8 Although the Intend to Publish London Plan identifies a 10-year period minimum housing target, national policy seeks for Local Plans to identify deliverable sites for up to 15 years of housing provision post adoption. To help better meet long term housing needs, the Council has sought to plan further ahead to 2041 as sites can take some time to come forward between initially being identified in a Plan and delivered. It also allows for better planning by ensuring the potential of an area is considered as a whole, rather than an incremental, piecemeal approach, which might reduce the potential capacity of an area, or not allow for social infrastructure required in future years to be considered and planned for.

2.9 To be consistent with national policy, the Council has to identify a larger 'pool' of sites than its minimum housing target, so that if for whatever reason sites assumed to be deliverable do not come forward, there are others to ensure the minimum targets are delivered. This is necessary to support the housing delivery test and the need to identify on an on-going basis the availability of at least 5 years' supply of deliverable housing sites. Brent has a good track record of delivery against targets. Nevertheless, the targets now being sought are substantially higher than has been delivered over a consistent period of many years. As such, a 10% buffer is considered prudent in giving greater certainty of identified capacity translating into actual delivery. For the Intend to Adopt London Plan, this would equate to a minimum of 25,575 dwellings. For Brent's objectively assessed needs as set out in the SHMAA for the period to 2041, a 10% buffer would create a target of 46,464 dwellings. In relation to industrial sites, the Council has not been able to identify new sites not currently in industrial use to provide additional industrial floorspace capacity consistent with its 'provide capacity' status. It is reliant on existing sites replacing existing floorspace, or providing a 0.65 plot ratio whichever is greater.

Housing capacity identified from wholly Zone 1 sites/ sites with planning permission.

2.10 Within the housing trajectory that supports the Local Plan, sites that have a planning permission that are not within a proposed site allocation boundary will deliver 7,676 dwellings in the first 10 years and 8025 over the whole plan period. Bringing vacant residential properties back into use will deliver 224 dwellings. Allocated sites wholly within Fluvial Flood Zone 1 and outside Surface Water Flood Zone 3 are set out in Appendix 1 and deliver 929 dwellings in the first 10 years of the Plan and for the Plan period 1278 dwellings. Over the first 10 years of the Plan the two sources (permissions and Zone 1 sites) deliver 8,605 dwellings and over the whole plan 9,303 dwellings. This together with small sites windfalls (sites which cannot be specifically identified but have a historically been a source of dwellings, or have a reasonable prospect of contributing dwellings), which would include development within intensification corridors (2,889 dwellings) produce 10,565 dwellings in the first 10 years. Over the lifetime of the Plan they are projected to deliver 9,303 dwellings. This together with 7,761 windfalls for that period produces 17,064 dwellings. Therefore, in terms of the sequential test, these

sites cannot meet the needs of the Intend to Publish London Plan target with 10% buffer (by 14,081 dwellings) and are well below (29,400 dwellings) the SHMA minimum objectively assessed needs plus a 10% buffer for the period to the end of the Plan. As such, sites outside Flood Zone 1 need to be considered.

2.11 Sites within Flood Zone 1 but with a small element of surface water (under 20%) within Flood Zone 3 are identified in Appendix 2. Taking account of all the sites passing the sequential and exception tests as addressed in Appendix 2, these provide 7,790 dwellings over the first 10 years of the Plan, and 13,583 dwellings over the Plan period. Together with all sites in paragraph 2.10, this provides 19,284 dwellings in the first 10 years and 30,647 dwellings over the whole Plan period. This is 6,291 dwellings below the London Plan target +10% buffer for the first 10 years. For the whole Plan period, it is 15,817 dwellings below the minimum objectively assessed need identified in the 2018 SHMA +10% buffer.

2.12 Next Zone 2 and small areas of Zone 3 fluvial flooding identified in Appendix 3 have next been considered. Taking account of all the sites passing the sequential and exception tests, these provide 4,248 dwellings over the first 10 years of the Plan, and 8,493 dwellings over the Plan period. Together with all sites within paragraphs 2.10 and 2.11 this provides 23,532 dwellings for the first 10 years of the Plan and 39,140 dwellings over the whole Plan period. This is 2,043 dwellings below the London Plan target +10% buffer for the first 10 years. For the whole Plan period it is 7,324 dwellings below the minimum objectively assessed need identified in the 2018 SHMA needs plus a 10% buffer.

2.13 As these sites cannot accommodate all the housing needs of the borough, the sites in Appendix 4 have been considered. These sites were subject to more extensive surface water flooding risk and have been considered as part of the SFRA Level 2. Taking account of all the sites passing the sequential and exception tests, these provide 1,110 dwellings over the first 10 years of the Plan, and 2,210 dwellings over the Plan period. Together with all sites within paragraphs 2.10, 2.11 and 2.12, this provides 24,642 dwellings for the first 10 years of the Plan and 41,350 dwellings over the whole Plan period. This is 933 dwellings below the London Plan target +10% buffer for the first 10 years. For the whole Plan period it is 5,114 dwellings below the minimum objectively assessed need identified in the 2018 SHMA needs plus a 10% buffer.

2.14 As these sites cannot accommodate all the housing needs of the borough, the sites in Appendix 5 have been considered. These sites were subject to more extensive fluvial flooding risk and have been considered as part of the SFRA Level 2. Taking account of all the sites passing the sequential and exception tests, these provide 2,494 dwellings over the first 10 years of the Plan, and 3,671 dwellings over the Plan period. Together with all sites within paragraphs 2.10, 2.11, 2.12 and 2.13 this provides 27,136 dwellings for the first 10 years of the Plan and 45,021 dwellings over the whole Plan period. This is 1,561 dwellings above the London Plan target +10% buffer for the first 10 years. For the whole Plan period it is 1,433 dwellings below the minimum objectively assessed need identified in the 2018 SHMA needs plus a 10% buffer.

2.15 The Intensification Corridors as sources of windfall housing do not have specific capacity of development identified for the Plan period. In terms of the sequential and exceptions test, these sites have been assessed and categorised in the same way as the site allocations. The results of this are set out in Appendix 6. Notwithstanding this assessment, as these sites technically are not site allocations with identified indicative housing targets, it is assumed that to be consistent with the NPPF, the sequential and exceptions test will need to be justified through the planning applications process. A key consideration will be the borough's performance against the housing delivery test and 5-year supply of deliverable sites, where site-specific flood risk assessments indicate that the development can be safe within its lifetime and not increase the risk of flooding elsewhere.

3 Conclusions

3.1 The sequential approach ideally would provide for all new development to be delivered in the areas least at risk of flooding. This would be sites wholly within Fluvial Flood Zone 1. The Council has sought to positively plan to meet needs by identifying as many sites as it can to deliver. Unfortunately, as can be seen from the sequential test it has not been able to identify sites wholly within Flood Zone 1 to meet objectively assessed housing needs and London Plan policy requirements for other uses. It has therefore undertaken sequential testing and where necessary exceptions testing, in considering the appropriateness of site allocations and other priority areas for development identified as intensification corridors. Appendix 7 sets out the characteristics of all allocations and intensification corridors with regards to the key flood risks.

3.2 Taking account of the information contained within this sequential and exceptions testing assessment, the Council regards the sites proposed for allocation for development and the intensification corridors in the Brent Local Plan as appropriate. Whilst sites are potentially at greater risk from flooding in an unmitigated scenario, a mixture of mitigation/ attenuation measures can ensure that developments do not increase the risk to property or people on site and in some cases will lower risks compared to existing circumstances. A range of suitable measures include an on-site sequential approach to the location of buildings/uses, incorporation of surface water management measures, design of buildings, flood warnings and emergency planning measures. Surface water management on sites in particular has the potential to reduce flood risk off-site, reducing currently largely unrestricted off-site flows from hard surfaces. Notwithstanding the information contained within the sequential and exceptions testing and site specific Level 2 Flood Risk Assessment, further information including a site-specific flood risk assessment will be required at planning application stage to justify any specific proposals potentially at risk.

3.3 For the intensification corridors, as technically these are not site allocations with identified indicative housing targets, the sequential and exceptions test will need to be justified through the planning applications process. A key consideration will be the borough's performance against the housing delivery test and 5-year supply of deliverable sites, where site-specific flood risk assessments indicate that the development can be safe within its lifetime and not increase the risk of flooding elsewhere.

Figure 4 Sequential and Exception Test Summary Result for Areas Locations Not Wholly within Fluvial Flood Zone 1 and with no identified Surface Water Zone 3.

Site Allocations

Site allocation	Site Name	Sequential Test Passed	Exception Test Passed
BCSA1	ASDA Wembley	Yes	Yes
BCSA2	Stadium Retail Park (Fulton Quarter)	Yes	Yes
BCSA3	Brook Avenue (south)	Yes	Yes
BCSA4	Fifth Way/ Euro Car Parts	Yes	Yes
BCSA5	Olympic Office Centre	Yes	Yes
BCSA6	Watkin Road	Yes	Yes
BCSA7	Wembley Park Station (North & South)	Yes	Yes
BCSA8	Wembley Retail Park	Yes	Yes
BCSA9	First Way	Yes	Yes
BCSA11	College of North West London Wembley	Yes	Yes
BCSA12	Land to South of South Way	Yes	Yes
BCSA16	Site NW04 Wembley Masterplan	Yes	Yes
BEGA1	Neasden Stations Growth Area.	Yes	Yes
BEGA2	Staples Corner Growth Area	Yes	Yes
BESA1	Coombe Road	Yes	Yes
BESA2	Cricklewood Bus Garage	Yes	Yes
BNSA1	Capitol Way Valley	Yes	Yes
BNSA2	Colindale Retail Park, Multi-Storey Car Park, Car Showroom and Southon House	Yes	Yes
BNSA3	Queensbury LSIS and Morrisons	Yes	Yes
BNSA8	Queensbury Station Car Park	Yes	Yes
BNWGA1	Northwick Park Growth Area	Yes	Yes
BNWSA1	Kenton Road Sainsbury's and adjoining land	Yes	Yes

Site allocation	Site Name	Sequential Test Passed	Exception Test Passed
BSESA1	Austen	Yes	Yes
BSESA2	Blake	Yes	Yes
BSESA4	Carlton Infant School	Yes	Yes
BSESA6	Crone & Zangwill	Yes	Yes
BSESA7	Dickens	Yes	Yes
BSESA8	Hereford House & Exeter	Yes	Yes
BSESA11	Old Granville Open Space	Yes	Yes
BSESA17	Cricklewood Broadway Retail Park	Yes	Yes
BSESA21	Willesden Green Sainsbury's and garages	Yes	Yes
BSESA25	Park Avenue Garage	Yes	Yes
BSESA26	Park Avenue North Substation	Yes	Yes
BSESA29	Willesden Telephone Exchange	Yes	Yes
BSESA31	Turpin's Yard	Yes	Yes
BSESA34	Kilburn Park Underground Station	Yes	Yes
BSSA1	Asiatic Carpets	Yes	Yes
BSSA2	B&M Home Store & Cobbold Industrial Estate	Yes	Yes
BSSA3	Church End Local Centre	Yes	Yes
BSSA4	Chapman's and Sapcote Industrial Estate	Yes	Yes
BSSA6	Argenta House & Wembley Point	Yes	Yes
BSSA7	Bridge Park & Unisys	Yes	Yes
BSSA9	Barry's Garage	Yes	Yes
BSSA10	Dudden Hill Community Centre	Yes	Yes
BSSA11	Euro car rental	Yes	Yes
BSSA15	Harlesden Station junction	Yes	Yes
BSSA17	Harlesden Railway Generating Station	Yes	NA
BSSA18	Harlesden Telephone Exchange	Yes	Yes
BSSA19	Chancel House	Yes	Yes

Site allocation	Site Name	Sequential Test Passed	Exception Test Passed
BSWSA1	Alperton Industrial Sites	Yes	Yes
BSWSA2	Sainsbury's Alperton	Yes	Yes
BSWSA3	Atlip Road	Yes	Yes
BSWSA4	Sunleigh Road	Yes	Yes
BSWSA5	Abbey Industrial Estate	Yes	Yes
BSWSA6	Beresford Avenue	Yes	Yes
BSWSA7	Northfields	Yes	Yes
BSWSA8	Wembley High Road	Yes	Yes
BSWSA9	Former Copland School	Yes	Yes
BSWSA10	Elm Road	Yes	Yes
BSWSA12	Keelers Service Centre, Harrow Road, Wembley	Yes	Yes
BSWSA13	Wembley Police & Fire Stations and Wembley Community Hospital	Yes	Yes
BSWSA15	Employment Land on Heather Park Drive	Yes	Yes
BSWSA16	Carphone Warehouse 416 Ealing Road	Yes	Yes
BSWSA17	Former Wembley Youth Centre/ Dennis Jackson Centre London Road	Yes	Yes

Intensification Corridors

Policy	Site Name	Sequential Test Passed	Exception Test Passed
BD2	327-383 Kenton Road Corridor	Yes	Yes
BD2	82-140 The Mall Corridor	Yes	Yes
BD2	Fryent Way Corridor	Yes	Yes
BD2	Honeypot Lane corridor	Yes	Yes
BD2	Kingsbury Road corridor	Yes	Yes
BD2	Colindale Edgware Road corridor	Yes	Yes
BD2	Harrow Road Sudbury corridor	Yes	Yes

Policy	Site Name	Sequential Test Passed	Exception Test Passed
BD2	Wembley Park Drive corridor	Yes	Yes
BD2	84-98 Wembley Park Drive corridor	Yes	Yes
BD2	Empire Way corridor	Yes	Yes
BD2	Forty Lane, Blackbird Hill and Neasden Lane North Corridor excluding area near River Brent and Brent Feeder	Yes	Yes
BD2	460-492 Neasden Lane	Yes	Yes
BD2	438-444 Neasden Lane and Pitt House	Yes	Yes
BD2	494-502 Neasden Lane	Yes	Yes
BD2	Blackbird Court, Blackbird Hill	Yes	Yes
BD2	Talbot Court to English Martyrs RC Church Blackbird Hill	Yes	Yes
BD2	Site at The Mall & Kenton Road Corridor	Yes	Yes
BD2	56 Watford Road Corridor	Yes	Yes
BD2	Willesden Lane (South)	Yes	Yes
BD2	Dudden Hill Lane, Willesden High Road corridor	Yes	Yes
BD2	Brunel Court High Street Harlesden	Yes	Yes
BD2	231-255 and 248-298 Harrow Road corridor	Yes	Yes
BD2	Ealing Road (north) corridor	Yes	Yes
BD2	Bridgewater Road corridor	Yes	Yes
BD1	Harrow Road (east) corridor	Yes	Yes
BD2	Bridgewater Court, Fernwood Avenue, Barnham Close, Harrow Road corridor	Yes	Yes
BD2	Dudden Hill Lane corridor	Yes	Yes
BD2	Craven Park corridor	Yes	Yes
BD2	32 Brentfield	Yes	Yes
BD2	14 Brentfield	Yes	Yes
BD2	Esso Filling Station Ealing Road	Yes	NA

Policy	Site Name	Sequential Test Passed	Exception Test Passed
BD2	Ainslie Court Ealing Road Corridor	Yes	Yes
BD2	26 Harrow Road	Yes	Yes
BD2	Sylvia Court Harrow Road	Yes	Yes
BD2	76 Harrow Road	Yes	Yes
BD2	57 Harrow Road	Yes	Yes
BD2	Pargraves Court Forty Avenue	Yes	Yes
BD2	Century House Forty Avenue	Yes	Yes
BD2	Richmond Court Forty Avenue	Yes	Yes
BD2	1 Forty Close & meeting room	Yes	Yes
BD2	53-63 Forty Avenue, Perrin Grange, the City Learning Centre and Brook House and 58-64 Forty Avenue	Yes	Yes
BD2	Sattavis Gam Patidar Centre, Forty Avenue	Yes	Yes
BD2	Kenbrook Forty Avenue	Yes	Yes
BD2	Springhill House, Willesden Lane	Yes	Yes
BD2	Willesden Lane (North)	Yes	Yes

Appendix 1 Sites within Flood Zone 1 and outside Surface Water Flood Zone 3

Site Allocation Reference	Site Allocation Name	Anticipated Delivery (no. of dwellings) 19/20-28/29	Anticipated Delivery (no. of dwellings) 29/30-40/41
BCSA10	York House	0	0
BCSA13	Former Malcolm House, Empire Way	100	0
BCSA14	St Josephs Social Club	0	60
BCSA15	Site W10 Wembley Masterplan	0	0
BCSA19	Wembley Park Station, Police Station and Adjacent Land Bridge Road	60	0
BESA3	Gower House Blackbird Hill	30	0
BNSA4	Former Mecca Bingo Site	0	0
BNSA5	Kingsbury Library and Community Centre	0	27
BNSA6	Ex-volkswagen Garage	28	0
BNSA7	Kingsbury Trade Centre - Enterprise, Hand Car Wash, Printers	0	0
BSESA10	Neville & Winterleys	76	0
BSESA12	Wordsworth & Masefield	-40	0
BSESA13	John Ratcliffe House	-29	0
BSESA14	William Dunbar & William Saville House	66	0
BSESA15	UK Albanian Muslim Community and Cultural Centre	0	0

BSESA16	OK Club	0	0
BSESA18	245 - 289 Cricklewood Broadway	40	40
BSESA19	Gaumont State Cinema	0	0
BSESA20	Kilburn Square	50	50
BSESA22	Queen's Parade	42	0
BSESA23	Former Willesden Green police station	20	0
BSESA24	Kilburn Station arches	0	0
BSESA27	Car wash Strode Road	4	0
BSESA28	80 Strode Road	10	0
BSESA3	Carlton House	100	0
BSESA30	61-65 Shoot up Hill	0	20
BSESA32	45 - 54 Cricklewood Broadway	10	0
BSESA33	123 - 129 Cricklewood Broadway	0	12
BSESA35	303 - 309 Cricklewood Broadway	0	12
BSESA5	Craik	-50	0
BSESA9	Kilburn Park Junior School	0	0
BSSA12	296-300 High Road	8	0
BSSA13	Learie Contantine Centre	26	0
BSSA14	Morland Gardens	60	0
BSSA16	Mordaunt Road	8	0
BSSA5	Willesden Bus Depot	30	30

BSSA8	McGovern's Yard	50	0
BSWSA11	Wembley Cutting North, Mostyn Avenue	15	0
BSWSA14	Sudbury Town Station car park	30	0
Harlesden NP	Car sales at junction of High Street and Furness Road	5	0
Harlesden NP	Land at Challenge Close	0	10
Harlesden NP	Harley Road	7	0
Harlesden NP	Former Willesden Ambulance Station	8	0
Harlesden NP	Harlesden Plaza	120	88
Harlesden NP	Salvation Army & Manor Park Works	45	0
		Total: 929	**Total: 349**

Appendix 2 Fluvial Flood Zone 1 but with a small element of surface water (under 20%) within Flood Zone 3

<table>
<tr><td colspan="2">Site Allocation Ref:
BCSA18</td><td colspan="2">Site Allocation Name: Site W12 Wembley Park Boulevard</td></tr>
<tr><td>Delivery 19/20-28/29:
0</td><td>Delivery 29/30-40/41
0</td><td colspan="2">Highest vulnerability of proposed use:
More Vulnerable</td></tr>
<tr><td colspan="2">Flood zone and other sources of flooding:
1% in FZ3 (surface water) within the 15-30cm range
No sewer flooding incidents
<25% susceptibility to groundwater flooding
No increased potential for elevated groundwater
Not in a source protection zone
In a critical drainage area
Not at risk of reservoir breach</td><td colspan="2">Sequential Test:
Pass: It is necessary to identify the site to address longer term town centre uses / community use needs as there are insufficient alternative sites in Zone 1.</td></tr>
<tr><td colspan="4">Exception Test:
Sustainability benefits outweigh flood risk?
The site is within an area of high crime levels, and is in Wembley Town Centre, therefore having access to wide range of essential infrastructure including healthcare and sporting facilities. The site benefits from a high PTAL rating of 5, which should facilitate car free development, reducing car dependence and its associated traffic and air pollution. Positive impacts are anticipated due to the delivery of employment space and social impacts associated with this. The majority of the borough is within an Air Quality Management Area, and development can help improve air quality by being designed to modern sustainability standards which reduce energy use ad emissions.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and benefits from outline permission. A very small proportion of the site is at risk of surface water flooding, and appears to be related to run off from the highway (South Way), which is likely due to ponding due to impermeable surfacing. The predicted depth of the area at risk of flooding is 15-30cm. Based on the small area at risk of flooding and the predicted depths, it is considered that development can be safe for its lifetime and reduce risk of flooding elsewhere through development being directed towards areas of lower risk of flooding, and flood risk being managed and reduced through SUDS (e.g. through improving permeability) and / or</td></tr>
</table>

appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Overall the development is likely to reduce flood risk off-site due to better on site surface water management that will reduce surface water run-off.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA5	**Site Allocation Name:** Abbey Industrial Estate	
Delivery 19/20-28/29: 450	**Delivery 29/30-40/41** 40	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% flood zone 3 surface water predominantly within the 15-30cm range, with some in the 30-60 range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within an area of high crime rates and should benefit greatly from redevelopment. It is in close proximity to Alperton town centre and has access to a wide range of infrastructure. Although within reasonable proximity to Alperton tube, it only has a PTAL of 2, however, given the level of development in the Alperton Growth Area, this should increase along with local investments. The site's southern boundary is adjacent to the Grand Union Canal and represents an opportunity to enhance a watercourse. Positive impacts are anticipated due to the delivery of housing in an area with good accessibility to a range of essential infrastructure. Development can improve air quality by being designed to modern sustainability standards, which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing and industrial targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is located within FZ3a (surface water). The parts of the site subject to surface water flood risk is subject to a planning application for residential development and commercial floor space (18/4919). A site specific FRA submitted as part of this application notes that areas of flood risk are within existing road alignments, suggesting that poor surface drainage is occurring, resulting in areas of flood risk. As part of the proposed development, the existing buildings and road formations will be		

removed and the new drainage infrastructure will ensure that no flooding from surface water will occur. This will be achieved through the provision of storage consisting of green roofs, permeable highway surface with underlying granular storage and buried cellular storage attenuation crates. Existing outfalls to the canal at the south of the site will be used to discharge unrestricted surface water for the adjacent area. In an extreme case of overflow of the drainage system, overland flow paths will be provide to direct surface water away from buildings towards the Grand Union Canal to the south. The FRA notes that the level of flood risk would reduce from medium (pre-development) to low (post-development). Sewer flood risk and groundwater flooding are assessed as being low. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA13	**Site Allocation Name:** Wembley Police & Fire Stations and Wembley Community Hospital	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: Highly Vulnerable
Flood zone and other sources of flooding: 1% flood zone 3 surface water equally within 15-30cm and 30-60cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site has good access to a range of amenities within Sudbury Town Centre which is close by, with healthcare and sporting facilities within walking distance. It has a good PTAL rating of 4, and positive impacts are anticipated due to the delivery of new housing in an area with good accessibility to a range of essential infrastructure, helping direct investment toward an area associated with high levels of crime. New development can help to improve air quality by being designed to modern sustainability standards which reduce energy use and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.		

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes The site is already developed. A very small proportion of the site is located within FZ3a (surface water). This is on hardstanding associated with car parking/ access and is likely to be caused by ponding of water from adjacent hard surfaces, it is of low water depth. Based on the small areas being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA16	**Site Allocation Name:** Carphone Warehouse 416 Ealing Road	
Delivery 19/20-28/29: 80	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% flood zone 3 surface water within 15-30cm and some 30-60cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding Potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site has a good PTAL rating and positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting and being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is at risk of surface water flooding, located on hardsurfacing on the		

junction from the highway of Alperton Lane to the rear of the unit (for servicing / deliveries). This is likely due to ponding due to impermeable surfacing and lower ground levels on the highway. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at a moderate risk of groundwater flooding and relatively high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSSA1	**Site Allocation Name:** Asiatic Carpets	
Delivery 19/20-28/29: 154	**Delivery 29/30-40/41** 260	**Highest vulnerability of proposed use**:
Flood zone and other sources of flooding: 1% flood zone 3 surface water with all in the 15-30 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is located within a London Strategic Area for Regeneration and will achieve an uplift of approximately 220 dwellings to the local area. This provides an opportunity to introduce affordable housing and investment within a deprived area. The site has a PTAL of both 3 and 4 and is well serviced by local goods and services as well as key infrastructure. Positive impacts are anticipated due to the delivery of housing in an area with good accessibility to a range of essential infrastructure. Development can improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.		

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes A very small proportion of the site falls within FZ3a (surface water). A small element of the site benefits from permission for residential development via the prior approval process (18/2278), but this area is not subject to surface water flood risk. The site is previously developed. The areas at risk of surface water flooding are hardsurfaced areas around the footprint of the existing buildings and within a car parking area to the south. This is likely due to ponding due to impermeable surfacing and lower ground levels. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is not subject to groundwater flooding but is at a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA1	**Site Allocation Name:** Alperton Industrial Sites	
Delivery 19/20-28/29: 900	**Delivery 29/30-40/41** 300	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% flood zone 3 surface water mostly within 15-30cm range, with some in the 30-60cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is within an area which is subject to high crime rates and should benefit greatly from redevelopment. It is in close proximity to Ealing Road town centre and therefore has access to a wide range of essential facilities, in addition to having a PTAL rating of 4, due to immediate proximity to Alperton Tube station. The site's southern boundary is adjacent to the Grand Union Canal and therefore represents an opportunity to enhance a watercourse, improving its integration with nature and the wider public realm. The railway tracks which border the site to the east area wildlife corridor, and efforts should be made to integrate this into development proposals. Positive impacts are anticipated due to the delivery of housing. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing and industrial targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed. The area identified as being at risk of surface water flooding is located immediately at a number of places near buildings' elevations, where the hardsurfacing appears to slope down. This is therefore likely due to ponding due to impermeable surfaces and changes in ground levels. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at relatively high risk sewer flooding and a moderate risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BNWSA1	**Site Allocation Name:** Kenton Road Sainsbury's and Adjoining Land	
Delivery 19/20-28/29: 150	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable

Flood zone and other sources of flooding: 1% flood zone 3 surface water in the 15-30cm range. Area affected by sewer flooding incidents. Part has small <25% susceptibility to ground water flooding A small part has potential for elevated ground water Not in a source protection zone In a critical drainage zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial and housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within Kenton town centre and therefore has access to a wide range of facilities, in addition to having a high PTAL rating of 4 / 5. As the site is adjacent to a designated wildlife corridor, redevelopment represents an opportunity to enhance green infrastructure on site, with attempts to integrate this existing nature reserve. Positive impacts are anticipated due to the delivery of housing in an area with good accessibility, and new development can help improve air quality by increasing tree planting and being built to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is at risk of surface water flooding. The area at risk flooding appears to be a hardsurfaced area used for either delivery or servicing for the existing supermarket, located close to the railway line. This is likely due to ponding due to impermeable surfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at high risk of sewer flooding and a low risk of groundwater flooding. Sufficient sewerage capacity can be provided either on or off-site as agreed with Thames Water. It should be demonstrated through a site specific flood risk assessment that development can be safe for its lifetime. Overall the development is likely to reduce flood risk off-site due to better on site surface water management that will reduce surface water run-off.	
Recommendation: Allocate for development	

Site Allocation Ref: BSSA3	**Site Allocation Name:** Church End Local Centre

Delivery 19/20-28/29: 99	**Delivery 29/30-40/41** 96	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% flood zone 3 surface water equally within the 0-15cm and 15-30cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is located within a London Strategic Area for Regeneration and experiences high levels of crime and will therefore benefit greatly from redevelopment. The site is well positioned in terms of goods and services, access to essential infrastructure such as healthcare and schooling. The site has a PTAL rating of 2/3 but this could increase on the implementation of the West London Orbital. Development can improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site previously developed but includes some soft landscaping to the north. Parts of the site already benefit from planning permission (references 13/1098 and 13/2213). A very small proportion of the site is located with FZ3a (surface water). The areas at risk of surface water flooding are located on highways. This is likely due to ponding due to impermeable surfaces and lower ground levels. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at relatively high risk sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.		
Recommendation: Allocate for development		

Site Allocation Ref: BCSA9	**Site Allocation Name:** First Way

Delivery 19/20-28/29: 826	**Delivery 29/30-40/41** 436	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water 15-30cm and with a small part 30-60cm. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within 800m of Wembley Town Centre within the Wembley Growth Area, and therefore has good access to essential infrastructure. The site has potential for significant residential development. Although it has a low PTAL rating, it stands to benefit from better connections to the high levels of surrounding development, is within close walking distance to two railway stations and is likely to be a car free development. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a very small proportion of the site is located within FZ3a (surface water). Two permissions have been submitted on the site (18/4767 and17/3797) but neither of these are located within any of the areas at risk of surface water flooding. The areas at risk of surface water flooding relate to areas of hardstanding outside of the footprint of the existing buildings and are likely to be caused by ponding due to run off from buildings and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at high risk sewer flooding. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall the development is likely to reduce flood risk off-site due to better on site surface water management that will reduce surface water run-off.		
Recommendation: Allocate for development		

Site Allocation Ref: BSWSA9	**Site Allocation Name:** Former Copland School	
Delivery 19/20-28/29: 250	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water within the 0-15cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is well served by essential facilities and has the potential to link up the public domain of the new redeveloped Wembley Park area with the retail units along Wembley High Road through an improved commercial frontage and public realm. The site has an exceptional PTAL rating of 6a, being within close proximity of numerous train stations and bus stops. Positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is located within FZ3a (surface water). A planning application has been submitted which covers the whole of the site allocation (reference 19/2981) for residential uses, flexible workspace and community uses. A drainage strategy submitted with the planning application notes that the small pockets of flooding can be mitigated by on site drainage and levels designs to control overland flow paths, and ensure overland flow is routed through the network of roads and public open space on site, directed away from buildings. The strategy notes that the flood maps identify low lying areas of topography to determine surface water flood risk and provide a starting point to understand areas susceptible to surface water flooding, and that there is not a history of surface water flooding. The site is not at risk of groundwater flooding. Overall, flood risk can be managed and reduced through locating buildings away from areas at risk, incorporation of SUDS (e.g. through improving permeability), features such as green roofs and storage tanks, and / or appropriate finished floor levels above the predicted maximum surface water flood levels. Other flooding risks are small. A site specific flood		

risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA8	**Site Allocation Name:** Wembley High Road	
Delivery 19/20-28/29: 423	**Delivery 29/30-40/41** 227	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water within the 0-15cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is well served by essential facilities and has the potential to link up the public domain of the new redeveloped Wembley Park area with the retail units along Wembley High Road through an improved commercial frontage and public realm. The site has an exceptional PTAL rating of 6a, being within close proximity of numerous train stations and bus stops. Positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is located with FZ3a (surface water). The small area at risk of surface		

water flooding on the site is located to the east on hard standing adjacent to the highway. This is likely due to ponding due to impermeable surfaces and lower ground levels. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at relatively high risk sewer flooding and a moderate risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA4	**Site Allocation Name:** Sunleigh Road	
Delivery 19/20-28/29: 237	**Delivery 29/30-40/41** 158	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water within the 15-30cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within an area of high crime rates and should benefit greatly from redevelopment. It is in close proximity to Alperton town centre and has access to a wide range of infrastructure. Although within reasonable proximity to Alperton tube, it only has a PTAL of 2, however, given the level of development in the Alperton Growth Area, this should increase along with local investments. The site's southern boundary is adjacent to the Grand Union Canal and represents an opportunity to enhance a watercourse. Positive impacts are anticipated due to the delivery of housing in an area with good accessibility to a range of essential infrastructure. Development can improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan industrial and housing targets.		

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed. A very small proportion of the site is located within FZ3a (surface water). The areas of flood risk are within existing internal road alignments/hardstanding, suggesting that poor surface drainage is occurring, resulting in areas of flood risk. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding and low risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BSSA10	**Site Allocation Name:** Dudden Hill Community Centre	
Delivery 19/20-28/29: 25	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water within 0-15cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and community needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is well provisioned in terms of facilities, and has a high PTAL rating, meaning development would be car free. The existing site includes a games court and a playground which have fallen into disrepair creating a poor environment. The development would result in environmental enhancements. Positive impacts are anticipated due to the delivery of significant levels of housing and the reprovision of a larger purpose built community facility. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative		

benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed. A planning application has been received (reference 19/2688) for residential dwellings and replacement community use. A site specific flood risk assessment was submitted as part of the application process. A very small proportion of the site is located within FZ3a (surface water), located on the south west of the site where the site meets the highway. The FRA notes that there are no historic records of surface water flooding in the immediate area have been identified, and that flood maps relate to topography and show areas where water would tend to pond, which is why the lower part of the site is shown as being at risk of surface water flooding. To reduce surface water flood risk, the proposal includes green roofs and roof areas occupied by plants or terraces. The green roofs will provide source control by reducing the rate of surface water run-off from the roof areas. The proposal will therefore not result in any increase in flood risk. An outline surface water drainage strategy was also produced as part of the FRA and takes into account the potential impacts of climate change. The strategy demonstrates that the proposed drainage network at the site has been designed to accommodate runoff during all events up to and including the 100 year return period plus 40% to allow for increases in rainfall intensity due to climate change for the lifespan of the development. The ground floor level of the development is between 100mm and 500mm higher than the adjacent carriageway levels which reduces the risk of surface water and sewer flooding from entering the building. Over land flow routes and drains will also be designed to carry rainwater away from the buildings towards Dudden Hill Lane. The FRA notes that the site is at very low risk of flooding from groundwater. The FRA demonstrates that the development can be safe for the duration of its lifespan.

Recommendation: Allocate for development

Site Allocation Ref: BWSA2	**Site Allocation Name:** Sainsbury's Alperton	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 200	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water, most within 15-30cm range, some in 0-15cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Not in a source protection zone In a critical drainage area	
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is located within an area of high crime. The site is well served by facilities such as open space, healthcare and service facilities. The site has a fairly high PTAL of 4 and is located within the Alperton Growth Area, with a reasonable level of public transport accessibility. Positive impacts are anticipated due to the delivery of housing in an area with flood accessibility to a range of essential infrastructure. Development can improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is located with FZ3a (surface water). The small area at risk of surface water flooding on the site is located to the east, on the highway, and road towards the supermarket carpark. This is likely due to ponding due to impermeable surfaces and lower ground levels. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at relatively high risk sewer flooding and a moderate risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.	
Recommendation: Allocate for development	

Site Allocation Ref: BSWSA17	**Site Allocation Name:** Former Wembley Youth Centre/ Dennis Jackson Centre London Road

Delivery 19/20-28/29: 170	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water within 15-30cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Not in a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and community needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The area is subject to high crime rates and is in close proximity to Wembley Central Town Centre, with good access to a range of floods and services. Overall, the site scores positively against social criteria, due to the anticipated delivery of new housing. Redevelopment should ensure the provision of community floor space. New development can help to improve air quality by increasing tree planting and being reduced to modern sustainability standards to reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets, and the existing permission demonstrates that development can be safe for its lifetime. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The majority of the site allocation is currently subject to planning application reference 18/4273 for residential use, in addition to a community centre and associated gardens and landscaping. A very small proportion of the site is located within FZ3a (surface water), and this appears to relate to a hardsurfaced car parking area which is ancillary to the existing community centre. A drainage design report was submitted as part of the application above, and proposals permeable hardsurfacing and a number of storage tanks to regulate surface water discharge from the site. Proposed surface water discharge will be restricted to 5 l/s, reducing the flow into the existing surface water sewage network and drastically reducing the existing flood risk of the site.		
Recommendation: Allocate for development		

Site Allocation Ref: BSWSA15	**Site Allocation Name:** Employment Land on Heather Park Drive

Delivery 19/20-28/29: 36	**Delivery 29/30-40/41** 14	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water within 15-30cm and some 0-15cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and employment needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is subject to high crime rates and is within immediate proximity to other strategic employment sites. The site may benefit from the redevelopment of the Northfields site to the south, which is set to improve links to Stonebridge Station, potentially increasing the PTAL rating of this site (currently rated 2 and 3). Positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is in FZ3a (surface water). This is on hardstanding associated with car parking/ access and is likely to be caused by ponding of water from adjacent hard surfaces. This part of the site allocation has already been subject to a planning application (reference 18/0284) for residential development, with no development proposed in the area at risk of surface water flooding. Measures are proposed such as green roofs, rainwater harvesting and sustainable drainage measures including permeable hard surfaces, which should reduce flood risk. Based on the small areas being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.		
Recommendation: Allocate for development		

Site Allocation Ref: BCSA12	**Site Allocation Name:** Land to South of South Way	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 500	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water 15-30cm and with a small part 30-60cm. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

The site is within 800m of Wembley Town Centre and within the Wembley Growth Area, meaning good levels of access to essential infrastructure including schools and sporting facilities. The site has a low PTAL rating but stands to benefit from better connections to the high levels of surrounding development, and is within close walking distance to two railway stations. The site is well provisioned in terms of facilities. Development would be car free. The current building is poor quality and would result in environmental enhancements. Positive impacts are anticipated due to the delivery of significant levels of housing, together with industrial. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed. A very small proportion of the site is located within FZ3a (surface water). The areas at risk of surface water flooding relate to a small area of hardsurfacing to the rear of the building, presumably used for access or storage, and a small paved footpath to the front of the units, created by their front elevation. This is likely due to ponding due to impermeable surfaces and run off from the existing buildings. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Allocate for development

Site Allocation Ref: BSESA21	**Site Allocation Name:** Willesden Green Sainsbury's and Garages	
Delivery 19/20-28/29: 25	**Delivery 29/30-40/41** 25	**Highest vulnerability of proposed use**:
Flood zone and other sources of flooding: 2% flood zone 3 surface water with most in the 0-15 cm range with some in the 15-30 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass**: It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is located within Willesden Green and has good access to essential goods and services such as healthcare and schooling. The site is fairly large and should help uplift the area with a number of residential units, increasing town centre viability. The site has a good PTAL rating of 4. Positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting and being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Sustainability benefits outweigh flood risk? Yes** The site is previously developed. A very small proportion of the site is located with FZ3a (surface water). The small areas at risk of surface water flooding are on an area of hardstanding to the southern edge of the superstore, and a passageway between the superstore and garage. This is likely due to ponding due to impermeable surfaces and run off from the existing buildings. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at relatively high risk sewer flooding. Suitable infrastructure to		

reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSESA26	**Site Allocation Name:** Park Avenue North Substation	
Delivery 19/20-28/29: 2	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 2% flood zone 3 surface water with most in the 0-15 cm range with some in the 15-30 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is well positioned in terms of essential infrastructure, being within walking distances of Willesden Green town centre and employment opportunities. Positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** A very small proportion of the site is located in FZ3a (surface water). The risk of surface water flooding appears to relate to run off from the highway and ponding due to changes in topography. The existing substation is located on higher ground. Based on the small area being at		

risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at high risk sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSSA9	**Site Allocation Name:** Barry's Garage	
Delivery 19/20-28/29: 40	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**:
Flood zone and other sources of flooding: 3% flood zone 3 surface water. Mostly within 30-60cm range, with some in the 15-30cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial and housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is well provisioned in terms of facilities and has a high PTAL rating. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets, plus support industrial intensification. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a very small proportion of the site is located with FZ3a (surface water). The area at risk of surface water		

flooding relates to a lowered area of ground to the front elevation of the garage, which slopes down from the highway. It is therefore likely that the surface water flood risk relates to ponding caused by run off from existing buildings, the topography of the site, and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA12	**Site Allocation Name:** Keeler's Service Centre, Harrow Road, Wembley	
Delivery 19/20-28/29: 22	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 3% flood zone 3 surface water mostly within 0-15cm range with a very small part in the 15-30cm. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Part in a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and employment needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site has good access to a range of amenities within Sudbury Town Centre, with healthcare and sporting facilities within walking distance. It has a good PTAL rating of 4, and positives impacts are anticipated due to the delivery of new housing in an area with good accessibility to a range of essential infrastructure, helping direct investment toward an area associated with high levels of crime. New development can help to improve air quality by being designed to modern sustainability standards which reduce energy use and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.		

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes The site is already developed. A very small proportion of the site is located within FZ3a (surface water). A planning application has been recently submitted. SUDS strategy submitted with it notes that the site is 100% impermeable, and that in a 1 in 100 storm return period the existing site will have a 24.90 l/s surface run off rate, and a 1 in 1 year surface run off rate of 7.80 l/s. It location on London Clay, will result in proposals to install green roofs and control surface water discharge from the site into the existing surface water sewer (via a new connection) at a restricted rate. Tanked systems are also proposed for attenuation via geocellular storage crates. Using these methods, it is anticipated to reduce surface water run off rates of 2.5 l/s. Although the proposal includes a basement plant room, the basement would be pumped to the gravity drainage network by a private packaged foul pumping station, to include non-return valves as standard thus protecting the basement in the event of sewer surcharge. Suitable infrastructure to reduce this risk can be agreed with Thames Water. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BNWGA1	**Site Allocation Name:** Northwick Park Growth Area	
Delivery 19/20-28/29: 1300	**Delivery 29/30-40/41** 1300	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 3% flood zone 3 surface water with roughly an equal split of 15-30 cm range and 30-60cm ranges. Part of area affected by sewer flooding incidents. No susceptibility to ground water flooding low No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is well provisioned in terms of essential infrastructure with an on-site hospital and neighbouring Northwick Park for open space and sports. The site will be of mixed use development and should help provide a significant residential uplift, providing employment space with the potential for specialised fields of work to be included. Due to the size of the site, it experiences a range of PTALs with the majority of land designated 3, 4 and 5. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and a very small proportion of it is located in FZ3a (surface water). The pockets of surface water flood risk appears to relate to areas of hardsurfacing around the existing building footprints or on access roads within the site. This is likely due to run off from buildings and impermeable surfaces. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding in part. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref:	**Site Allocation Name:** Olympic Office Centre	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable

Flood zone and other sources of flooding: 3% flood zone 3 surface water 15-30cm and with a small part 30-60cm. Part of the area (north of railway) affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone The site is within an area that could be impacted by failure of the Brent reservoir.	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is located within the Wembley Growth Area, adjacent to Wembley Town Centre, has good access to facilities and a good PTAL rating of 5. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to improve surface water management and incorporate other mitigation measures such as SUDS. **Safe for its lifetime without increasing floodrisk elsewhere and where possible reducing floodrisk overall? Yes** A very small proportion of the site is located within FZ3a (surface water), located on an area of hardsurfacing to the west of the existing office building, comprising a locally lowered landscaped feature. A drainage strategy can address this to reduce surface water discharge rates of the site through providing rainwater storage tanks and SUDS measures, removing the flooding risk, or potentially if still for capacity reasons moving it to elsewhere in the site. The scheme will result in a reduction in the existing rate of discharge to the surface water network. In addition elevated ground floor levels will provide additional flood protection during a surface water flood event if required. Depending on the height of the potential reservoir flood breach, it might be appropriate to either raise ground floor levels above flood heights, or consider locating more vulnerable uses from the first floor upwards. The site should have an emergency plan agreed with the Council's emergency planning officer related to reservoir breach. Overall flood risk off-site as a result of surface water run-off is likely to be reduced.	
Recommendation: Allocate for development	

Site Allocation Ref: BSSA2	**Site Allocation Name:** B&M Home Store & Cobbold Industrial Estate	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 160	**Highest vulnerability of proposed use**: More Vulnerable

Flood zone and other sources of flooding: 3% flood zone 3 surface water with most in the 0-15 and 15-30cm range and the remainder in the 30-60cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and employment needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is in a London Strategic Area for regeneration and the area is associated with high crime rates. As such it will benefit greatly from investment. The site is well serviced by local goods and services including key infrastructure. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a very small proportion of it is located in FZ3a (surface water). The surface water flood risk relates to the hardsurfaced carpark of Brent New Enterprise Centre, the access road to Cobbold Industrial Estate, an area of the carpark to the superstore adjacent to the building's eastern elevation, a hardsurfaced area within the curtilage of the shop. The risk of surface water flooding appears to relate to an extension of ponding from the highway and ponding due to run-off from the existing buildings and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at high risk sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment	
Recommendation: Allocate for development	

Site Allocation Ref: BCSA7	**Site Allocation Name:** Wembley Park Station (North and South)	
Delivery 19/20-28/29: 375	**Delivery 29/30-40/41** 100	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 3% flood zone 3 surface water 15-30cm and with a small part 30-60cm. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within the Wembley Opportunity Area and is adjacent to Wembley town centre, having access to a wide range of essential facilities. The site has a very good PTAL rating which is set to increase. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to improve surface water drainage and incorporate other mitigation measures such as SUDS. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a very small proportion of the site is located with FZ3a (surface water). The area at risk of surface water flooding relates to a hardsurfaced area of the carpark adjacent to part of the station building, and a passage leading on from this between the rear of this building and the railway line. It is likely that the risk of flooding is due to ponding caused by run off from existing buildings and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding in the north and a low risk of groundwater flooding. The sewer flooding can be addressed through on, or off-site infrastructure agreed in conjunction with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall, due to reductions in surface water run-off, the site is anticipated to reduce flood-risk elsewhere.		
Recommendation: Allocate for development		

Site Allocation Ref: BSESA6	**Site Allocation Name:** Crone & Zangwill	
Delivery 19/20-28/29: 50	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 4% flood zone 3 surface water with the majority in the 15-30 cm range and some in the 30-60cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is part of the South Kilburn masterplan and is within a London Strategic Area for regeneration. It has high levels of accessibility to essential infrastructure and a good PTAL rating of both 4 and 5. The site will benefit from a change in layout. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a very small proportion is located with FZ3a (surface water). The area at risk of surface water flooding relates to hardsurfaced access to on-site car parking, and as such the flood risk is probably due ponding cause by run off from existing buildings and impermeable surfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific		

flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA10	**Site Allocation Name:** Elm Road	
Delivery 19/20-28/29: 400	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 3% flood zone 3 surface water mostly within 15-30cm range, with some in the 0-15cm and 30-60cm range and a very small part in the 60-90cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Part in a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a very small proportion of the site is located within FZ3 (surface water). The pockets include a passageway to the left of Natwest which slopes down, a carpark off of Ecclestone Court, the highway on St John's Road, the highway on		

Acacia Avenue and the hardsurfaced front gardens of the properties on Acacia Avenue, and the rear of the rear gardens of the houses on the north side of Acacia Avenue, towards the railway line. It is likely that the flood risk is due to ponding which could be caused by run off from existing buildings, changes in ground levels and lack of permeable hard surfacing. Based on the small areas being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BSESA29	**Site Allocation Name:** Willesden Telephone Exchange	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 20	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 5% flood zone 3 surface water with most in the 0-15 cm range with some in the 15-30 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

The site has good access to a range of facilities. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and a small proportion lies within FZ3a (surface water). The area at risk of flooding relates to an area on the

south of the site which appears to extend from the highway. The hardsurfacing serves as car parking and access to the rear of the building. It is likely that this is due to ponding caused by impermeable hardsurfacing. Based on the small areas being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BESA2	**Site Allocation Name:** Cricklewood Bus Garage	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 202	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 5% flood zone 3 surface water 15-30cm and with a small part 30-60cm. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is close to a London Strategic Area for Regeneration and is well provided for in terms of infrastructure, healthcare, schools and open space. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a small proportion is located within FZ3a (surface water).The pockets at risk of surface water flooding		

relate to the southern part of the site which is hardsurfaced. It is likely that the flood risk relates to ponding as a result of impermeable hard surfacing. Based on the small areas being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSESA34	**Site Allocation Name:** Kilburn Park Underground Station	
Delivery 19/20-28/29: 20	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 5% flood zone 3 surface water with most in the 0-15 cm range with some in the 15-30 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** Pass: It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and is well served by facilities, and has a high PTAL rating. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.		

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes The site is previously developed and a very small proportion is located within FZ3a (surface water). The areas at risk of surface water flooding are located to the west (an area of hardsurfacing at the rear of the station and adjacent to Alpha Place to the rear) and an area to the north of the building which is at a lower ground level than the footpath to the north and east. It is likely that the pockets of flood risk are due to ponding caused by run off from existing buildings, changes in ground levels and impermeable hardsurfacing. Based on the small areas being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Residential uses (more vulnerable) would be located on upper floors due to the existence of the station. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSSA17	**Site Allocation Name:** Harlesden Railway Generating Station	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: Less Vulnerable
Flood zone and other sources of flooding: 6% flood zone 3 surface water with most in the 0-15cm range and a bit in the 15-30cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term employment needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: N/A		

Recommendation: Allocate for development

Site Allocation Ref: BCSA1	**Site Allocation Name:** ASDA Wembley	
Delivery 19/20-28/29: 78	**Delivery 29/30-40/41** 407	**Highest vulnerability of proposed use**: More vulnerable
Flood zone and other sources of flooding: 6% flood zone 3 surface water (6%), predominant depth 0-15 cm, with a small part 15-30cm. Area affected by number sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for increased ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Opportunity Area and should contribute a significant uplift in dwellings. The site is well provisioned with infrastructure, healthcare, schools and parks and sporting facilities. The site has a high PTAL rating and therefore benefits from good public transport links. The existing development is not in keeping with local character, has large parking facilities that promote use of the private car and is used at a low intensity given the area's high accessibility to public transport. It is creating a poor environment. Redevelopment can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions, particularly from private transport. The redevelopment of the site also provides the opportunity to increase housing provision, including affordable housing, whilst improving environmental performance in terms provision of green infrastructure on site, plus improving water management through incorporating other mitigation measures such as SUDS on a site which has very high levels of hard-surfacing and limited run-off attenuation currently. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet Brent population's required housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a small proportion is located within FZ3a (surface water). The area at risk of surface water flooding relate to parts of the car park and extends south from the highway. This could be due to run off from the highway or the existing extensive		

area of hard surfacing and associated ponding due to changes in ground levels. Due to the small flood area future development on this site could be directed towards areas with no risk of flooding. In addition the potential to remove the current flooding extent can be explored, as it is likely to be contributed to by the amount of hardstanding on site/ limited underground storage capacity. The site has been subject to extensive ground levelling, the existing surface water flood zone and the volume could be moved to another part of the site, if such space is still required once the potential for on-site surface water management that could reduce run-off, e.g. through SUDS has been considered. Building floor levels can also be raised above potential flood heights. The site has a high risk of sewer flooding and a low risk of groundwater flooding. The sewer flooding can be suitably attenuated with Thames water through additional capacity being created elsewhere, or on site mitigation. Overall the development is likely to reduce surface water run-off and therefore flood risk through attenuating on site to a much higher level than currently. In terms of flooding as a result of the failure of the Brent reservoir, there will need to be a greater assessment of likely height, velocity of water and duration. It might be that raising floor heights is sufficient. If not more vulnerable uses could be located on the upper floors, with no sleeping accommodation on the ground floors. The potential for dry access and egress to higher adjacent ground needs to be considered, together with an emergency plan agreed with the Council's emergency planning team. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime.
Recommendation: Allocate for development

Site Allocation Ref: BSESA4	**Site Allocation Name:** Carlton Infant School	
Delivery 19/20-28/29: 62	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 6% flood zone 3 surface water with a mixture between the 15-30 cm and 60-90 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site forms part of the South Kilburn Masterplan and is within a London Strategic Area for Regeneration. The existing school will be re-provided elsewhere. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and a small proportion is located within FZ3a (surface water). The area at risk of surface water flooding appears to comprise an area around one of the existing school buildings, and part of that building itself. This may be caused by ponding due to the ground levels being slightly lower than surrounding ground levels, and impermeable hard surfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BNSA1	**Site Allocation Name:** Capitol Way Valley	
Delivery 19/20-28/29: 414	**Delivery 29/30-40/41** 686	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 6% flood zone 3 surface water 15-30cm and with a small part 30-60cm. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is proposed to be an extension to an existing Growth Area which has been previously identified as being a sustainable location to accommodate significant growth. The area is well catered for in terms of essential infrastructure. Redevelopment should significantly enhance the site, enhancing the public domain and increasing the value and connectedness of existing non-designated green space and Grove Park. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and a small proportion is located within FZ3a (surface water). Part of the site has been subject to a planning application for residential development and commercial uses (reference 17/0837). However, only a small part of the application site has areas at risk of surface water flooding. The majority of the pockets of flood risk are located in the south and south east of the site and relate to areas of hardsurfaced car parking and highway. Surface water flood risk is likely due to ponding caused by run off from buildings, changes in ground levels and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding and low risk of groundwater flooding. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BSWSA3	**Site Allocation Name:** Atlip Road	
Delivery 19/20-28/29: 294	**Delivery 29/30-40/41** 41	**Highest vulnerability of proposed use**: More Vulnerable

Flood zone and other sources of flooding: 7% flood zone 3 surface water, equally within the 0-15cm and 30-60cm range and a small part in the 0-30cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within close proximity to Alperton town centre and therefore has access to a wide range of essential facilities. The site benefits from immediate proximity to Alperton Tube Station and therefore has a relatively high PTAL of 4. The site borders railway tracks to the west which are a designated Wildlife Corridor. Efforts should be made to integrate this into development proposals, increasing green infrastructure along this edge in particular. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a small proportion is located in flood zone 3a (surface water). Part of the site at risk of surface water flooding mainly consists of the highway which cuts through the site (Atlip Road) and hardsurfacing adjacent to buildings and is likely caused by ponding caused by run off from buildings and impermeable surfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding and low risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.	
Recommendation: Allocate for development	

Site Allocation Ref: BSESA11	**Site Allocation Name:** Old Granville Open Space	
Delivery 19/20-28/29: 20	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 8% flood zone 3 surface water with most in the 15-30 cm range and a small part in 30-60cm ranges. Part of area affected by sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and currently suffers from high levels of crime due to inactive frontage and poor site layout, which redevelopment would address. The site is well positioned in terms of good access to essential infrastructure. The site forms part of the South Kilburn Masterplan and is set to be replaced and incorporated within the Hereford and Exeter site so there will not be an overall reduction in open space serving the community. The site has a high PTAL rating. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is partly at risk of surface water flooding (FZ3a). However, this appears to relate to an area comprising of play equipment and is likely due to ponding caused by impermeability. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.		
Recommendation: Allocate for development		

Site Allocation Ref: BSWSA6	**Site Allocation Name:** Beresford Avenue	
Delivery 19/20-28/29: 137	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 8% flood zone 3 surface water predominantly within the 15-30cm range, with some in the 30-60 range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is well provisioned with regards to essential facilities. It backs onto the Grand Union canal and therefore represents an opportunity to enhance a watercourse. Development should focus on its integration with the canal, increasing levels of green infrastructure and accessibility from the public. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a proportion of it is within FZ3a (surface water). There are a number of pockets of surface water flood risk on the site and the site has been subject to a number of planning applications. There is a pocket of flood risk to the north of the site, which has been subject to planning application reference (18/0752) for residential development. The associated Flood Risk report notes that surface water presently discharges to the public sewer, and that the development would result in approximately a 50% reduction in surface water discharge. The proposal also includes a storage tank and surface water discharge being restricted to reduce flooding risks. Towards the west, the hardsurfaced car parking area is at risk of surface water flooding. A number of prior approvals have been approved at the Liberty Centre. There is a pocket of flood risk towards the north east of the site which is likely caused from ponding extending from the highway (Beresford Avenue). Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and		

/ or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding and low risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSSA18	**Site Allocation Name:** Harlesden Telephone Exchange	
Delivery 19/20-28/29: 26	**Delivery 29/30-40/41** 26	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 10% flood zone 3 surface water with most in the 0-60cm ranges. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Not in a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and is associated with high crime rates. It is well positioned in terms of essential infrastructure being within close proximity to Church End town centre, however, it is more than 1km away from a secondary school. This therefore makes it an excellent location for redevelopment into a school. The site has a relatively low PTAL, but is close to an underground station and bus routes. It will serve the local community as a secondary school, taking pressure off of other local facilities for which local pupils may have needed to be driven. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a proportion of it is within FZ3a (surface water). The area at risk of surface water flooding comprises hardsurfacing and soft landscaping at the front of the existing building and part of the hardsurfacing forming access to the rear of the		

building. The flood risk area appears to extend from the highway. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSSA19	**Site Allocation Name:** Chancel House	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 11% flood zone 3 surface water with most in the 30-60cm range and the remainder in the 15-30cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term education needs as extensive searches over a number of years indicate there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and is associated with high crime rates. It is well positioned in terms of essential infrastructure being within close proximity to Church End town centre, however, it is more than 1km away from a secondary school. This therefore makes it an excellent location for redevelopment into a school. The site has a relatively low PTAL, but is close to an underground station and bus routes. It will serve the local community as a secondary school, taking pressure off of other local facilities for which local pupils may have needed to be driven. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a proportion of it is within FZ3a (surface water). The area at risk of surface water flooding comprises		

hardsurfacing and soft landscaping at the front of the existing building and part of the hardsurfacing forming access to the rear of the building. The flood risk area appears to extend from the highway. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSESA7	**Site Allocation Name:** Dickens	
Delivery 19/20-28/29: -38	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 12% flood zone 3 surface water with the majority in the 15-30 cm range and some in the 30-60cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and is part of the South Kilburn Masterplan. The area currently has high crime levels which may be exacerbated by the buildings poor design, with inactive ground floor frontages. The dwellings are poorly constructed and need to be demolished. Redevelopment will help to reduce crime within the area through increased passive surveillance. The site has high levels of accessibility to essential infrastructure such as healthcare and schooling. The site has a PTAL rating of 3, but is located within close proximity to Queen's Park station. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to		

provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and a small proportion of the site is in flood zone 3a (surface water). The part of the site at risk of surface water flooding is located around the existing building footprint, on hardsurfaced roads / access around the buildings. Flooding is likely a result of run off from buildings and ponding caused by impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSESA2	**Site Allocation Name:** Blake	
Delivery 19/20-28/29: 51	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 12% flood zone 3 surface water with most in the 0-15 cm range with some in the 15-30 cm range. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is within a London Strategic Area for Regeneration and is part of the South Kilburn Masterplan. The area currently has high crime levels which may be exacerbated by the buildings poor design, with inactive ground floor frontages. The homes need to be demolished due to their poor construction. Redevelopment will help to reduce crime within the area through increased passive surveillance. The site has high levels of accessibility to essential infrastructure such as healthcare and schooling. The site has a go PTAL rating and is located within close proximity to Queen's Park station. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing floodrisk elsewhere and where possible reducing floodrisk overall? Yes
The site is previously developed and a small proportion of the site is in flood zone 3a (surface water). The part of the site at risk of surface water flooding is located around the existing building footprint, on hardsurfaced roads / access around the buildings and some soft landscaping around the buildings. Flooding is likely a result of run off from buildings and ponding caused by impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce floodrisk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BNSA2	**Site Allocation Name:** Colindale Retail Park, Multi-Storey Park, Car Showroom and Southon House	
Delivery 19/20-28/29: 200	**Delivery 29/30-40/41** 300	**Highest vulnerability of proposed use**: More Vulnerable

Flood zone and other sources of flooding: 12% flood zone 3 surface water Most in the 0-15 cm range with small parts in 15-30cm and 30-60cm ranges. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The area is well catered for in terms of essential infrastructure. PTAL is good and it is likely the development will be car free, thus removing the extensive traffic movements associated with this out of town type development. Redevelopment should significantly enhance the site, which is out of context with its surrounding finer grain townscape. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed with a relatively small proportion located within FZ3a (surface water), the majority is in the 0-15 cm depth range. The majority of the pockets of flood risk are located in the centre of the site and relate to areas of hardsurfaced car parking and highway. Surface water flood risk is likely due to ponding caused by run off from buildings, changes in ground levels and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a low risk of sewer flooding and low risk of groundwater flooding. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.	
Recommendation: Allocate for development	

Site Allocation Ref: BSESA17	**Site Allocation Name:** Cricklewood Broadway Retail Park

Delivery 19/20-28/29: 200	**Delivery 29/30-40/41** 180	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 13% flood zone 3 surface water with most in the 0-15 cm range with some in the 15-30 cm and 30-60cm ranges. No sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site has good access to facilities including sports, health and schooling and is in close proximity to Cricklewood town centre. The site has a good PTAL rating and the existing buildings create a poor environment and would benefit from redevelopment. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and partly located within FZ3a (surface water). The site includes a number of pockets of surface water flood risk, located in the carparks of the two existing buildings, along the highway to the buildings and adjacent to the north elevation of the northern building. This flooding is likely to be a result of run off from the existing buildings and ponding from this due to impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.		
Recommendation: Allocate for development		

Site Allocation Ref: BSSA15	**Site Allocation Name:** Harlesden Station Junction	
Delivery 19/20-28/29: 3	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 13% flood zone 3 surface water with most in the 15-30cm range and a bit in the 30-60 cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

The site is within a London Strategic Area for Regeneration and is associated with high levels. The site is well provisioned in terms of goods and services, including essential infrastructure such as healthcare and schooling. The site has a strong PTAL of 6. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and a portion of the site is located within FZ3a (surface water). The part of the site which is at risk of flooding extends from the highway (Acton Lane) to the hardsurfacing to the front of the existing garage, and appears to be at risk of flooding due to ponding as a result of impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding and a low risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Site Allocation Ref: BSSA11	**Site Allocation Name:** Euro Car Rental	
Delivery 19/20-28/29: 10	**Delivery 29/30-40/41** 15	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 16% flood zone 3 surface water with most in the 0-15cm range and a bit in the 15-30 cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and is well connected to a range of essential services such as town centres, employment opportunities and schools. The site is adjacent to the Canal Feeder which is a wildlife corridor and an opportunity for redevelopment to better enhance a watercourse which should in turn improve the general environment. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and is partly located within FZ3a (surface water). The site is hardsurfaced and the pockets of flood risk are likely due to ponding due to impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding and a low risk of groundwater flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its		

lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSSA4	**Site Allocation Name:** Chapman's and Sapcote Industrial Estate	
Delivery 19/20-28/29: 200	**Delivery 29/30-40/41** 100	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 16% flood zone 3 surface water. Mostly within 15-30cm range, with some in the 0-15cm and 30-60cm ranges. Sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial and housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within close proximity to a London Strategic Area for Regeneration and will benefit greatly from investment and the addition of affordable housing. The site has a PTAL of both 4 and 5 and is well serviced by local goods and services. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed, and part of it is located within FZ3a (surface water). The areas at risk of surface water flooding are the access routes to the industrial estate and a yard on the eastern side of the site. The flooding on the access roads is likely due to run off from		

the buildings on the estate and ponding due to impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSESA1	**Site Allocation Name:** Austen	
Delivery 19/20-28/29: 99	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 19% flood zone 3 surface water with most in the 15-30 cm range and a small part in 30-60cm ranges. Area affected by sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within a London Strategic Area for Regeneration and is part of the South Kilburn Masterplan. The area currently has high crime levels which may be exacerbated by the buildings poor design, with inactive ground floor frontages. Redevelopment will help to reduce crime within the area through increased passive surveillance. The dwellings are poor quality and need to be demolished. The site has high levels of accessibility to essential infrastructure such as healthcare and schooling. The site has a high PTAL rating and is located within close proximity to Queen's Park station. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.		

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and a small proportion is in flood zone 3a (surface water). The part of the site at risk of surface water flooding is located around the existing building footprint, on hardsurfaced roads / access around the buildings and some soft landscaping around the buildings. Flooding is likely a result of run off from buildings and ponding caused by impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a moderate risk of sewer flooding. Suitable infrastructure to reduce this risk can be agreed with Thames Water. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.

Recommendation: Allocate for development

Appendix 3 Sites with Small Proportions (under 20%) of Fluvial Zone 3

Site Allocation Ref: BCSA3	**Site Allocation Name:** Fifth Way / Euro Car Parts	
Delivery 19/20-28/29: 500	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% of site in Fluvial Zone 2. 2% in Zone 3 surface water, within the 0-60cm range. Affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone In a critical drainage area The site is within an area that could be impacted by failure of the Brent reservoir.		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing, hotel and industrial needs as there are insufficient alternative sites in Zone 1.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within close proximity to Wembley town centre and has access to a wide range of facilities, including healthcare schooling and sporting facilities. The site has a good PTAL of 3 to 4. Redevelopment of the site represents an opportunity to enhance the watercourse of the Wealdstone Brook which runs at the northern edge of the site. Positive impacts are anticipated due to the delivery of housing, industrial and hotel in an area with a good PTAL and good accessibility to essential infrastructure. Development can improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, the site is at very low risk of flooding being almost wholly Zone 1 fluvial and is likely to be safe for its lifetime without increasing flood risk overall. There is an opportunity to reduce flood risk elsewhere through better surface water management than currently through on site attenuation to greenfield run-off rates and potentially providing more space for water adjacent to the Wealdstone Brook. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. A very small proportion of the site is at risk of surface water flooding. The area at risk of surface water flooding relates to an area of ground which is at a lower level to the highway, and is sited between the highway and the existing building. This is likely due to ponding due to impermeable surfacing and lower ground levels. Based on the small area being at risk of flooding, it is		

considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site is also at relatively high risk sewer flooding and a low risk of groundwater flooding. The sewer risk can be addressed in association with Thames Water through adequate capacity being created on or off site. The site is potentially at risk of a failure of Brent reservoir with approximately 80% being shown to be subject to inundation. The height, depth and speed of inundation is not yet known. The site has a small change in levels and as such it might be possible to raise floor levels above potential inundation heights. Alternatively less vulnerable uses, consistent with the allocation can be used at ground floor level, with access to upper floors for safe refuge. An emergency plan should be agreed with the Council's emergency planning team to address the potential threat of the reservoir breach. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall the development is likely to reduce flood risk off-site due to better on site surface water management that will reduce surface water run-off.
Recommendation: Allocate for development

Site Allocation Ref: BCSA8	**Site Allocation Name:** Wembley Retail Park	
Delivery 19/20-28/29: 2180	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% in fluvial flood zone 2. 11% flood zone 3 surface water majority in the 15-30cm and small parts in the 0-15cm and 30-60cm ranges. Area not affected by sewer flooding incidents. Susceptibility to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone 80% site affected by potential reservoir breach. Less than 1% of the site falls within the 1:100 +70% climate change scenario Fluvial Flood Zone 3		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is within the Wembley Opportunity Area. It is adjacent to Wembley Park Town Centre which reflects its high levels of access to essential infrastructure. The site benefits from immediate proximity to Wembley Park Station and has a high PTAL rating of 6a. Being located close to Wealdstone Brook, the site also provides an opportunity to enhance the watercourse. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to improve surface water management, reducing run-off levels to greenfield rates and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and a proportion of the site is within FZ3a (surface water). The areas of flood risk are mainly located on hardsurfaced parking areas. he areas at risk of surface water flooding relate to areas of hardstanding outside of the footprint of the existing buildings and are likely to be caused by ponding due to run off from buildings and impermeable hardsurfacing. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. The site has a high risk of sewer flooding and low risk of groundwater flooding. The sewer issue can be sufficiently addressed either on or off-site with the agreement of Thames Water. A small proportion of the site is within Flood Zone 3 Fluvial taking account of climate change +70%. Buildings can be positioned away from this area which is adjacent to highway. The site potentially is at risk should there be a breach of the Brent reservoir, with approximately 80% of the site covered. The height of the water, speed of movement and duration is not known. The site has approximately a 1 metre height difference across the part that is within the area at risk. It might be possible to increase building floor heights so that they are above water levels, alternatively less-vulnerable uses could be accommodated on the ground floor with more vulnerable uses on the upper floors. An emergency action plan should be agreed with the Council's emergency planning team. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall the development is likely to reduce flood risk off-site due to better on site surface water management that will reduce surface water run-off.

Recommendation: Allocate for development

Site Allocation Ref: BEGA2	**Site Allocation Name:** Staples Corner Growth Area

Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 2400	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% is within Fluvial Zone 2 and 1% is within Fluvial Zone 3b 2% flood zone 3 surface water evenly split between 0-15cm, 15-30cm and 30-60cm. Area not affected by sewer flooding incidents. Part has small <25% susceptibility to ground water flooding A small part has potential for elevated ground water Not in a source protection zone Not in a critical drainage zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial and housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within 100m of a London Strategic Area for Regeneration. It is associated with high crime rates and would therefore benefit from redevelopment. Regeneration would be required to provide industrial floor space at a higher density, and residential development could help subsidise the creation of new employment floor space adapted for future needs. Although the site has a low PTAL, this has not taken into consideration the potential for a West London Orbital link in the area. Positive impacts are anticipated due to the delivery of significant levels of housing. New development can help to improve air quality by increasing tree planting, being designed to modern sustainability standards which reduce energy usage and emissions. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is already developed. The northern tip of the site is in Flood Zone 3b and Zone 2. Zone B is associated with the river channel and immediate surroundings. Compliant with policy, buildings should be set back from the channel and not encroach into this zone, with opportunities for naturalisation considered. Zone 2 contains industrial buildings. Part has the potential to become flood zone 3 when taking account of the +25% climate change. This is currently not occupied by buildings and as such buildings should be steered away from this area in the future. Taking account of climate change +70%, nearly all Zone 2 becomes Zone 3 and sequentially more vulnerable uses should be directed away from this area. Areas at risk of surface water flooding are located on areas of hardsurfacing around the existing buildings, and on the highway or access roads. This is likely due to ponding due to run off from existing buildings and impermeable surfaces. or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce flood risk on site and elsewhere in the catchment.		

Recommendation: Allocate for development

Site Allocation Ref: BNSA3	**Site Allocation Name:** Queensbury LSIS and Morrisons	
Delivery 19/20-28/29: 194	**Delivery 29/30-40/41** 189	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 15% in fluvial zone 2. EA letter on Morrisons site planning application however states discrepency in EA data and site is within Zone 1 15% flood zone 3 surface water equally split between 0-15cm, 15-30cm and 30-60cm ranges. Area not affected by sewer flooding incidents. Susceptibilty to ground water flooding low (<25%) No potential for elevated ground water Not in a source protection zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site has good access public transport, being in PTAL 3-4, close to Queensbury Station and with a number of bus services passing through it. It is close to local facilities including retail, health and schooling. Many of the existing buildings create a poor environment, are an inefficient use of land and would benefit from redevelopment. New development can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan industrial and housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is already developed. Fluvial flood zone 2 runs through the site centres along Westmoreland Road and includes current buildings. EA responses on a planning application Dec 17 for the Morrisons site indicates discrepencies in flooding data for the area north of Honeypot Lane and that the site should be categorised as Zone 1. The site is relatively flat, indicating that flood waters are likely to be low. From a sequential perspective, development should be prioritised in Zone 1, with less vulnerable uses in Zone 2 (if further advice indicates there is a Zone 2). Areas at risk of surface water flooding are located on areas of hardsurfacing around the existing buildings, and on the highway or access roads. This is likely due to ponding due to run off from existing buildings and impermeable surfaces. Flood risk can be managed and		

reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Better surface water management and the associated reduction in run-off rates to the surface water network is likely to reduce floodrisk on site and elsewhere in the catchment.
Recommendation: Allocate for development

Site Allocation Ref: BSWSA7	**Site Allocation Name:** Northfields	
Delivery 19/20-28/29: 1374	**Delivery 29/30-40/41** 1656	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 1% in fluvial 3b, 14% in fluvial 3a and 8% in fluvial zone 2 6% flood zone 3 surface water evenly split between 0-15cm, 15-30cm and 30-60cm range with a small bit in 60-90cm range Area affected by sewer flooding incidents. <25% susceptibility to ground water flooding A small part has potential for elevated ground water Not in a source protection zone In a critical drainage zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial and housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Since the Local Plan process was initiated the site has gained planning permission for the uses allocated in the Plan. In terms of wider sustainability benefits, the site is located within the Alperton Housing Zone as designated by the Mayor of London. The site scores positively against social criteria due to the positive impacts associated with delivery of housing in an area with good accessibility to a range of essential criteria. Due to the site's location, enhancement of green / blue infrastructure is encouraged, and new development can help to improve air quality in the area by increasing tree planting and being built to modern sustainability standards, reducing energy usage and emissions. The		

FRA associated with the permission for the site notes wider sustainability benefits from the regeneration of the site which comprises buildings that are unfit for safe use, in addition to increasing local job provision, contributing towards housing targets and provision of an improved cycleway / footway on Beresford Avenue. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is a previously developed brownfield site. The northern part of the site is primarily in FZ1, with low-lying north eastern tip falling into fluvial FZ2 and 3, with FZ2 extending part way along the water main trench which is lower than the surrounding site. The southern part of the site is entirely within FZ3 fluvial, with an area in functional floodplain (FZ3b). Development should respond to flood risk with the less vulnerable employment uses being accommodated on the southern part of the site and no built structures proposed within Flood Zone 3b. Minimum floor levels for "more vulnerable" development will be 1 in 100 +35% cc level plus a 30% freeboard allowance. The 1 in 100 + 35%cc levels for the FZ3 area of the northern site is between 24.700 to 24.775m AOD. The minimum FFL for "more vulnerable" development on the northern site will be 25.075m AOD, taking into account the 300mm freeboard. The lowest proposed FFL on the northern site is 25.550 AOD. All other FFLs are significantly higher than the 1 in 100 +35% cc flood level. The 1 in 100 +25% cc levels on the southern site are between 24.575 to 24.675m AOD. The ground floor of the commercial units will be below the 1 in 100 +25% cc flood level. It is therefore proposed to install automatic self-closing flood barriers at all entry points into the new building below this flood level to ensure these commercial unit are flood resistant. Safe refuge will be provided at upper floors for users of the commercial south site.

The existing northern site provides 12,522m3 of flood storage. It is proposed to provide 13,31m3 of flood storage, providing an additional 1,110m3 of flood storage within landscaped areas. This will benefit the wider catchment and reduce risk of potential flooding downstream. No structures on the southern site will be allowed to encroach into FZ3b. Surface water from the future development will be restricted to no greater than three times the pre-development greenfield flor rates and will discharge directly into the River Brent. The FRA notes that the proposal will not increase flood risk elsewhere and will reduce flood risk overall.

Recommendation: Allocate for development

Appendix 4 Sites with Over 20% Surface Water Zone 3 subject to SFRA Level 2

<table>
<tr><td>Site Allocation Ref:
BEGA1</td><td colspan="2">Site Allocation Name: Neasden Stations Growth Area</td></tr>
<tr><td>Delivery 19/20-28/29:
900</td><td>Delivery 29/30-40/41
1100</td><td>Highest vulnerability of proposed use:
More Vulnerable</td></tr>
<tr><td colspan="2">Flood zone and other sources of flooding:
15% flood zone 3 surface water potential for Flood depths are predominantly in the 30-60cm range on the sites adjacent to Neasden Lane, with other parts evenly spread in the 15-30cm and 60-90cm ranges. A very small part is within the 90-120cm.
No susceptibility to ground water flooding
No increased potential for elevated ground water
Not in a source protection zone
In a critical drainage area
6% area at risk of reservoir flooding with depths mostly under 0.3 metres with a bit 0.3-2 metres</td><td>Sequential Test:
Pass: It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.</td></tr>
<tr><td colspan="3">Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is located in an area with good public transport accessibility levels that will rise with the delivery of the West London Orbital. The NPPF supports residential development on underutilised sites in areas of good public transport accessibility, such as this one. It has good access to local shops and services. Positive impacts are anticipated due to the delivery of housing and industrial in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing and industrial targets

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
Surface water ponding is predicted on the site during the 1 in 30-year pluvial event or greater. This is for the most part concentrated on the sites to the south of the Metropolitan line, either side of Neasden Lane. Potential depths of 90-120cm are to the west of Neasden Lane. 15% of the whole Growth Area is subject to 1 in 100 year event surface water flooding. Flood depths are predominantly in the 30-60cm</td></tr>
</table>

range on the sites adjacent to Neasden Lane, with other parts evenly spread in the 15-30cm and 60-90cm ranges. A very small part is within the 90-120cm. These two sites are located on much lower ground than Neasden Lane highway. Elsewhere in the Growth Area, surface water drainage issues are essentially associated with ponding on sites of 15-30cm and 30-60cm, with similar levels also shown on adjacent highways. Flows on site are predominantly under 0.25 m/s, although parts are above 0.25m/s. Flow paths are along adjacent highways, but for the Growth Area sites themselves are relatively self-contained on individual sites. The areas with highest levels of surface water risk are almost wholly hardstanding, this can compound surface water flooding. Less water is able to drain away through infiltration, which increases the surface water flood risk in these areas. The drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime.

Neasden Lane highway due to its elevated nature in the areas most at risk of surface water flooding is likely to remain a dry area. The placing of accommodation on floors above flood height, or dry access to places above flood levels allows for safe refuge until the area is no longer flooded will be needed. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.

Recommendation: Allocate for development

Site Allocation Ref: BSESA31	**Site Allocation Name:** Turpin's Yard	
Delivery 19/20-28/29: 8	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 25% in flood zone 3a (surface water), the majority I the 15-30cm range with smaller elements in the 0-15cm and 30-60cm ranges Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

This site is partly within a location identified in the London Plan as an Area for Regeneration, being in the top 20% most deprived areas. This is a low density local employment site. The site benefits from good public transport access having a PTAL rating of 4. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and is partly located within FZ3a (surface water). Parts of the site allocation benefit from prior approval for conversion to dwelling houses (17/1977, 18/4228). Surface water ponding is predicted on hard standing in the centre of the site during the 1 in 30 year pluvial event or greater. This is likely as a result of the site being slightly lower than the adjacent highway network, resulting in rainfall ponding / flow over the site from Oaklands Road in times of surface water flooding. An overland flow path is observed along the surrounding road network. The majority of the ground coverage in the site is impermeable car parking or storage and the area is subject to ponding. EA maps identify potential depths of 0-600mm during the 1% annual chance, with the majority of the site being within the 15-30cm range. The speed of flow is less than 0.25m/s. The site is also at risk of sewer flooding. It is considered that development can be safe for its lifetime. Buildings should be located in areas out of risk, or through diverting and retaining water in planned locations on site, where it can be of no risk to people or property, either above or below ground. A drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of SUDS. SUDS should aim to achieve green field runoff rates. Permeable surfaces should be increased and open space maximised. Within flood zone 3a (surface water), flood plain compensation must account for predicted flood depths for the 1 in 30 year and 1 in 100year risk of flooding from surface water mapping or depth predicted for this site. In the unlikely event residential cannot be avoided within the flooded extent, finished floor levels should be set at least 300mm freeboard above the 1 in 100 flood level. Resilience and resistance measures should be incorporated, and safe dry access to and from the site. Any planning applications on site will be required to submit a site specific flood risk assessment.

Recommendation: Allocate for development

Site Allocation Ref: BSESA25	**Site Allocation Name:** Park Avenue Garage	
Delivery 19/20-28/29: 70	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 25% of the site is within flood zone 3a (surface water), evenly split between the 0-15cm, 15-30cm, 30-60cm and 60-90cm ranges Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone Not in a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** This is a low density local employment site. The site benefits from good public transport access having a PTAL rating of 3/4 and being in walking distance to Willesden Green Station. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site allocation benefits from planning permission (reference 17/5291) for residential development which covers the whole of the site allocation and the site forms part of South Kilburn masterplan. The site is currently 100% impermeable, and ponding is predicted on site due to the site being at a lower level than the surrounding highway and surface water flow from Park Avenue. It is considered that development can be safe for its lifetime. Buildings should be located in areas out of risk, or through diverting and retaining water in planned locations on site, where it can be of no risk to people or property, either above or below ground. A drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of SUDS. SUDS should aim to achieve green field runoff rates. Permeable surfaces should be increased and open space maximised and appropriate finished floor levels should be utilised. Within flood zone 3a (surface water), flood plain compensation must account for predicted flood depths for the 1 in 30 year and 1 in 100year risk of flooding from surface water mapping or depth predicted for this site. Resilience and resistance measures should be incorporated, and safe dry access to and from the site. Any planning applications on site will be required to submit a site specific flood risk assessment. Overall, with the appropriate solutions redevelopment of the site is likely to reduce flood risk to people and property on and off-site.		
Recommendation: Allocate for development		

Site Allocation Ref: BCSA16	**Site Allocation Name:** Site NW04 Wembley Masterplan	
Delivery 19/20-28/29: 0	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 27% flood zone 3 surface water depths -majority 0-15cm range, small part in 15-30cm range. Sewer flooding incidents. <25% susceptibility to ground water flooding No increased potential for elevated ground water Not in a source protection zone In a critical drainage area No risk of reservoir flooding		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within the Wembley Opportunity Area within the London Plan. It is also within the Wembley Growth Area, which is identified to meet a significant proportion of the borough's housing and employment need. The site is located in an area with excellent public transport accessibility levels. The NPPF and London Plan support intensified residential and commercial development on underutilised sites in areas of good public transport accessibility, such as this one. It has good access to local shops and services. The site's location on Olympic Way provides an opportunity to create a high quality development to act as a gateway to the stadium. Positive impacts are anticipated due to the delivery of a range of uses in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and some is located in FZ3a (surface water). Formerly a car park, the site is in meanwhile use as public realm. The ground coverage on the site is currently porous pavement. It is subject to controlled off-site surface water flows as part of the wider Wembley masterplan drainage strategy. Depths of water reach 0–30cm on the site during the 1% annual chance. Based on the relatively limited area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower		

risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Allocate for development

Site Allocation Ref: BSESA8	**Site Allocation Name:** Hereford House & Exeter	
Delivery 19/20-28/29: 96	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 36% in flood zone 3a (surface water), the majority of which is within the 30-60cm range, and equal amounts in the 15-30cm and 60-90cm ranges Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone Not in a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** In the London Plan this site is within an Area for Regeneration, being in the top 20% most deprived areas. It is a Growth Area and the Council is leading on a 15-year programme which is about half way through. The Council's objective is to improve living conditions in South Kilburn by providing new facilities and high quality homes including 1,200 affordable homes for social rent for existing South Kilburn secure tenants, supported by homes for market sale. The funding model of the programme means failure to deliver one phase could prejudice the wider masterplan for the growth area. The existing buildings are of poor design and construction creating poor housing conditions and potential for anti-social behaviour in communal spaces which cannot be remedied cost efficiently through refurbishment. The opportunity exists to provide better housing along sound urban design principles creating a human scale environment that integrates with the surrounding area and is more sympathetic in		

scale to the conservation area. It will be at a density that reflects the PTAL rating and reinforces the street hierarchy and setting of Carlton Vale in particular, subject to the Council being able to ensure Granville Road is reopened between this site and the Carlton and Granville Centres which subsequently will result in the existing Granville Open Space being developed for housing, this site will incorporate its replacement open space. This will provide a better quality open space with greater opportunity for sunlight penetration, overlooking/sense of security and due to its prominence more likely to be used by the surrounding population. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site forms part of the South Kilburn Masterplan. The site is previously developed and partly falls into FZ3a (surface water) and as such the principal risk of flooding on the site relates to surface water. This is likely due to the site's excavation below the surrounding ground levels and the highway network. Surface water ponding is predicted around the building footprint on impermeable surfaces such as car parking and the highway during the in 3 year pluvial event or greater. The majority of the ground cover is impermeable and heavily urbanised. This can compound surface water flooding as the runoff rate is greater on impermeable grounds. In addition less water is able to drain away through infiltration. The majority of predicted depths are within the 30-60cm range, with equal amounts in the 15-30m range and 60-90cm ranges. EA maps identify potential flood depths of up to 900mm on the site during the 1% annual chance. The site is also at high risk of sewer flooding. Suitable redesign of the site, together with a surface water drainage strategy can ensure that risk is removed from people and property. This will be achieved by providing suitable on site storage / attenuation above or below ground for surface water generated on site. If necessary it can also accommodate surface water which is currently predicated to enter the site, if not doing so would cause unacceptable flood risk elsewhere. A drainage strategy will reduce off-site flows and is likely to increase capacity in the network off-site, reducing risk elsewhere. Permeable surfaces should be increased, and open space should be maximised to ensure space for water to flow during times of flood. In the unlikely event residential cannot be avoided within the flooded extent, finished floor levels should be set at least 300mm freeboard above the 1 in 100 flood level plus an appropriate freeboard. Resilience and resistance measures should be incorporated, and safe dry access to and from the site. Any planning applications on site will be required to submit a site specific flood risk assessment.

Recommendation: Allocate for development

Site Allocation Ref:	**Site Allocation Name:** Queensbury Station Carpark	
Delivery 19/20-28/29: 36	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 71% flood zone 3 surface water with flood depths evenly split across the ranges from 15-30cm, 30-60cm, 60-90cm and 90-120cm Part of area affected by sewer flooding incidents. No susceptibility to ground water flooding No potential for elevated ground water Not in a source protection zone Within a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is located in an area with good public transport accessibility levels. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. It has good access to local shops and services. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. A reduction in the station car park could reduce car usage. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** Surface water ponding is predicted on the site during the 1 in 30-year pluvial event or greater moving closer towards the railway from the highway. For a 1 in 100 year event flood depths are evenly split across the ranges from 15-30cm, 30-60cm, 60-90cm and 90-120cm. An overland flow path appears to run across the site from adjacent rear gardens to the site's south east. Flows on site are at over 0.25 m/s on part and elsewhere below 0.25m/s. The area is almost wholly hardstanding, this can compound surface water flooding. Less water is able to drain away through infiltration, which increases the surface water flood risk in these areas. In terms of land uses, sequentially development should be prioritised in locations outside Zone 3. The ground floor should be prioritised for lower vulnerability uses. Basement for servicing/ vehicle parking will need consideration of how to avoid ingress of water in this location. A surface water management plan can address the on-site risks. Surface water flooding should be addressed through ground levels, building placement, and a drainage strategy to reduce ponding, reduce off-site flows and keep buildings away from flood risk. Solutions may be to divert water to storage areas underground to store water that runs into the site, reducing above ground ponding and/ or raise floor levels.		

More vulnerable uses can be located on the upper floors, or potentially with floor levels raised above predicted surface water flooding levels plus an element of freeboard. Flood resilience should be built into building structures that will potentially be exposed to flood waters. Safe egress and access should be provided in times of flood, with evacuation processes and points being for all but for events taking into account climate change along the adjacent highway network. These should be agreed with the Council's emergency planning team. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.
Recommendation: Allocate for development

Appendix 5 Sites with Over 20% Fluvial Zone 3 (including +70% climate change) subject to SFRA Level 2

<table>
<tr><td>Site Allocation Ref:
BCSA2</td><td colspan="2">Site Allocation Name: Stadium Retail Park (Fulton Quarter)</td></tr>
<tr><td>Delivery 19/20-28/29:
644</td><td>Delivery 29/30-40/41
322</td><td>Highest vulnerability of proposed use:
More Vulnerable</td></tr>
<tr><td colspan="2">Flood zone and other sources of flooding:
49% Flood Zone 2
Climate Change +70% 45% Zone 3
Depth 0.67metres - Danger to all
37% flood zone 3 surface water. Depths 0-90cm with the majority in the 30-60cm range.
Sewer flooding incidents.
<25% susceptibility to ground water flooding
Increased potential for elevated ground water
Not in a source protection zone
In a critical drainage area
90% area at risk of reservoir flooding depths between 0.3 and 2 metres.</td><td>Sequential Test:
Pass: It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.</td></tr>
<tr><td colspan="3">Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is within the Wembley Opportunity Area and should contribute a significant uplift in dwellings. The site is well provisioned with infrastructure, healthcare, schools and parks and sporting facilities. The site has a high PTAL rating and therefore benefits from good public transport links. The existing development is not in keeping with local character, has large parking facilities that promote use of the private car and is used at a low intensity given the area's high accessibility to public transport. It is creating a poor environment. Redevelopment can help improve air quality by being designed to modern sustainability standards to reduce energy usage and emissions, particularly from private transport. The redevelopment of the site also provides the opportunity to increase housing provision, including affordable housing, whilst improving environmental performance in terms provision of green infrastructure on site, plus improving water management through incorporating other mitigation measures such as SUDS on a site which has very high levels of hard-surfacing and limited run-off attenuation currently. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet Brent</td></tr>
</table>

population's required housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed, 71% is within fluvial Flood Zone 2 and 49% is located within FZ3a (surface water). Approximately 45% of the site will be subject to Flood Zone 3 taking account of climate change +70%. Sequentially, whilst the more vulnerable development should be preferably situated in Flood Zone 1, given its town centre location, the site is in any case likely to be less vulnerable commercial use at ground flood, with residential on uppers. Taking account of the climate change scenario, if development is necessary within Flood Zones 2 or 3a, then all residential accommodation should ideally be located in the first floor level or above. Zone 1 provides the opportunity for more ground floor buildings/volumes than currently. The location of the existing building within the likely extent of flood zone 3a +70% means that no overall increase in ground floor volume within the boundary of Zone 3+ climate change should occur, so as not to increase flood risk elsewhere. Basement for servicing/ vehicle parking will need careful consideration if located on this site in terms of its location and extent, to resist water ingress and also provide safe egress via internal stairway in times of flood from fluvial events and reservoir flooding.

Surface water ponding is predicted in the centre of the site during the 1 in 30-year pluvial event or greater. An overland flow path is observed along the surrounding road network. The majority of the ground coverage in the site is impermeable as it is heavily urbanised. This can compound surface water flooding as the runoff rate is greater on impermeable grounds compared to permeable areas. In addition, less water is able to drain away through infiltration, which increases the surface water flood risk in these areas. An overland flow runs from Wembley Park Road across the site to Olympic Way. In some parts the speed is over 0.25m/s, whilst in areas not part of the overland route, the flow is reduced to below 0.25m/s. The drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime.

In terms of safe access and egress the west of the site towards Wembley Park Drive and to the south Fulton Road provides the best potential for moving away from flood areas and risk. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.

Recommendation: Allocate for development

Site Allocation Ref: BCSA6	**Site Allocation Name:** Watkin Road	
Delivery 19/20-28/29: 692	**Delivery 29/30-40/41** 138	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 88% Flood Zone 2, 17% Flood Zone 3 and 2% Flood Zone 3b Climate Change +70%: 85% Zone 3 Depth 1.7metres - Danger to all 18% flood zone 3 surface water potential for depths of 0 – 90cm the majority in 30-60cm range. >25<50% susceptibility to ground water flooding Increased potential for elevated ground water Not in a source protection zone In a critical drainage area 100% area at risk of reservoir flooding with depths over 2 metres for most of the site		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing and industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is within the Wembley Opportunity Area within the London Plan. It is also within the Wembley Growth Area, which is identified to meet a significant proportion of the borough's housing and employment need. The site is located in an area with good public transport accessibility levels. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. It has good access to local shops and services. Positive impacts are anticipated due to the delivery of housing and industrial in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing and industrial land targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** A small proportion of the site currently lies within Fluvial Flood Zone 3, with the majority in flood zone 2. Taking account of the proposed residential use of the site, factoring in climate change of +70% a large part (85%) of the site would become flood zone 3. Whilst the more vulnerable development should be preferably situated in Flood Zone 1, the site's current use for industrial purposes will require a re-provision		

of at least the same amount of space and possibly more. This is likely to result in less vulnerable commercial use at ground level, with no space being available for residential accommodation at ground floor. Taking account of the climate change scenario, all residential accommodation outside Flood Zone 1 should ideally be located in the first floor level or above. The location of existing buildings within the likely extent of flood zone 3a +70% means that no overall increase in ground floor volume within the boundary of Zone 3+ climate change should occur (unless compensated for), so as not to increase flood risk elsewhere. Highly vulnerable development should be avoided within this site. Encroachment into Functional Floodplain will not be permitted. Industrial uses ground floors should be at 1 in 100 year event +35% +30cm freeboard. Basement for servicing/ vehicle parking is unlikely to be acceptable in most of this location. Where proposed it will need careful consideration to resist water ingress and also provide safe egress via internal stairway in times of flood from fluvial events and reservoir flooding. The development should be set back from the Wealdstone Brook (Environment Agency seeks a 8metre zone) and flow routes for fluvial water should not be obstructed.

Surface water ponding is predicted on Watkin Road during the 1 in 30-year pluvial event or greater. An overland flow path is observed along the surrounding road network. Potential depths of 0 – 90cm are on the site during the 1% annual chance, with the majority is in the 30-60cm range. The majority of the velocity of water at this event is below 0.25m/s, with a small amount over 0.25m/s on a flow path running from Fulton Road to the Wealdstone Brook via the entrance to Watkin Road. The majority of the ground coverage in the site is impermeable. This can compound surface water flooding as the runoff rate is greater on impermeable grounds compared to permeable areas. In addition, less water is able to drain away through infiltration, which increases the surface water flood risk in these areas. The drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime.

In terms of safe access and egress the west of the site and the south along Fulton Road provides the best potential for moving away from flood areas and risk. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.

Recommendation: Allocate for development

Site Allocation Ref: BSESA1	**Site Allocation Name:** Coombe Road

Delivery 19/20-28/29: 79	**Delivery 29/30-40/41** 117	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 100% is within Fluvial Zone 2, 26% in Zone 3a, 100% in Zone 3 +70% climate change 0% flood zone 3 surface water Area affected by sewer flooding incidents. >25%<50% susceptibility to ground water flooding Potential for elevated ground water Not in a source protection zone Not in a critical drainage zone		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial and housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site is located in an area with good public transport accessibility levels. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. It has good access to local shops and services. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The majority of the site lies within Fluvial Flood Zone 2. Nevertheless, it is effectively an island as it is surrounded by Zone 3. Taking account of the proposed residential use of the site, factoring in climate change of +70% all of the site would become flood zone 3. Indeed it all becomes Zone 3 when taking account of climate change +20%. On a sequential basis, development should be located away from the existing Zone 3. More vulnerable uses should be located in areas currently outside Zone 3. The site will need to re-provide the existing/ industrial/ commercial uses which will take up the majority of the ground floor and possibly some first floor. Taking account of this and climate change, the more vulnerable residential accommodation should be located in the first floor level or above. Ground floors should be above 1 in 100 year event + 35% climate change plus freeboard. The location of the existing buildings within the likely extent of flood zone 3a + climate change means that no overall increase in ground floor volume on site should occur unless compensated for elsewhere, so as not to increase flood risk elsewhere. The buildings are surrounded by hardstanding which can compound surface water flooding as the runoff rate is greater on impermeable		

grounds compared to permeable areas. In addition, less water is able to drain away through infiltration, which increases the surface water flood risk in these areas. The drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime. In terms of safe access and egress currently whilst Coombe Road highway land would not flood in a 1 in 100 year event, Blackbird Hill is identified as flooding. This in addition to potentially the whole site being subject to flooding in climate change scenarios, means safe refuge should be provided in upper floors for building occupants to remain in situ, unless flood waters recede or evacuation can be supported by emergency services. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.
Recommendation: Allocate for development

Site Allocation Ref: BSSA7	**Site Allocation Name:** Bridge Park & Unisys	
Delivery 19/20-28/29: 275	**Delivery 29/30-40/41** 230	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 100% in flood zone 2, 100% in flood zone 3a (fluvial) 31% in flood zone 3a (surface water) with about 50% in the 30-60cm range, a smaller amount in the 15-30cm range, and a smaller amount in the 0-15cm range. Sewer flooding incidents >=25% <50% susceptibility to groundwater flooding Increased potential for elevated groundwater Not in a source protection zone In a critical drainage area		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Whole site at risk of reservoir flooding with depths over 2m on the majority of the site, with the remainder 0.3-2m	

Exception Test:

Sustainability benefits outweigh flood risk? Yes

The site is within an Area for Regeneration within the new London Plan, being in the top 20% most deprived areas. The site is wholly brownfield. In its current state the site is of a poor environmental quality, with dated buildings and the long-term vacant Unisys buildings which on numerous occasions have been subject to anti-social behaviour such as extensive fly-tipping. It contrasts with the attractive environment created elsewhere in Stonebridge through modern development. Redevelopment would improve the environmental quality of the area and create an attractive gateway to the borough and Stonebridge. Comprehensive mixed-use development is needed to help facilitate a new leisure centre and to bring the Unisys buildings back in use. The development will meet an identified need for a new leisure centre and swimming pool in the south of the borough, as identified in the Council's Indoor Sports Facility Strategy. The Council does not own a site of sufficient size to provide such a facility in the south of the borough which is sequentially preferable and/or which is not designated open space. The site benefits from good public transport access with a PTAL rating of both 3 and 4. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

100% of the site is within flood zone 2 and flood zone 3, with the River Brent running in a culvert north of the site and being a source of flooding. Factoring in climate change +70%, the site will be subject to further depths of flooding, with approximated maximum flood depths of up to 2.2m. As the site is located wholly within FZ3, options are limited in terms of sequential location of uses. Low vulnerability uses should be on lower ground floors with more vulnerable uses such as residential on upper floors. There should be no overall increase in ground floor volume within the site unless it can be suitable compensated for so as not to increase flood risk elsewhere. 15% of the site is at risk of surface water flooding. This is predicted on hard standing to the south east of the site and to the west of the Unisys building during the 1 in 30 year pluvial event or greater. The majority of the ground coverage on the site is impermeable surfacing, and surface water flood risk on the site is likely caused by ponding on these surfaces. An overland flow path is observed along the surrounding road network connecting to the railway embankment. Flows are below 0.25m/s. In the case of any planning applications on this site, a drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Permeable surfaces should be increased and open space maximised to ensure space for water to flow during times of flood. Within FZ3 (surface water), flood plain compensation must account for

predicted flood depths for the 1 in 30 year and 1 in 100 year risk of flooding from surface water mapping or depth predicted for the site. Surface water flooding should therefore be addressed through ground levels, building placement and a drainage strategy to reduce ponding, reduce off-site flows and keep buildings away from flood risk. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime. Safe dry access to and from the site should be provided for higher probability surface water and fluvial flood events. The height of flood waters in the 1:100 year event plus depths of water in adjacent areas and movements corridors such as Brentfield means that dry access in and out of the site is unlikely to be possible through built structures. The buildings must therefore contain safe / dry access to refuge points for those on lower floors if below 1:100 +35% +30cm until the area is no longer flooded. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development, as well as details regarding safe refuge areas above ground floor if dry egress routes for evacuation cannot be guaranteed. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and potentially reduce flood risk elsewhere.
Recommendation: Allocate for development

Site Allocation Ref: BSA3	**Site Allocation Name:** Brook Avenue	
Delivery 19/20-28/29: 80	**Delivery 29/30-40/41** 370	**Highest vulnerability of proposed use**:
Flood zone and other sources of flooding: 58% Flood Zone 2, 55% Flood Zone 3 and 2% Flood Zone 3b Climate Change +70%: 63% Zone 3 Depth 1.8metres - Danger to all 65% flood zone 3 surface water depths in excess of 120cm on 50% of the site. <25% susceptibility to ground water flooding Increased potential for elevated ground water Not in a source protection zone In a critical drainage area 70% area at risk of reservoir flooding depths over 2 metres close to the brook and between 0.3 and 2 metres elsewhere.		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zone 1 and 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is within the Wembley Opportunity Area within the London Plan. It is also within the Wembley Growth Area, which is identified to meet a significant proportion of the borough's housing and employment need. The site is located in an area with good public transport accessibility levels. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility. It has good access to local shops and services. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to reduce flood risk on site compared to existing properties and increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
A small amount of the site is within 3b, with the most significant proportion within Fluvial Flood Zone 3a, with the majority in flood zone 3. Some of the site is within Zone 1 and Zone 2. Taking account of the proposed residential use of the site, factoring in climate change of +70% a large part (63%) of the site would become flood zone 3. Sequentially more vulnerable development should be preferably situated in Flood Zone 1 which the site allows in part. Many of the existing residential properties are within flood zone 3 and in a 1:100 event will get flooded. New dwellings can replace them and be suitably designed to reflect the flood risk, reducing danger to occupants and property. New residential within Zone 3 should be brought closer to Brook Avenue to reduce the flood depth the properties are within. The location of existing buildings within the likely extent of flood zone 3a +70% means that no overall increase in ground floor volume within the boundary of Zone 3+ climate change should occur, so as not to increase flood risk elsewhere. To reduce flood risk residential floors should be elevated, to above +70% climate change + freeboard which if necessary can create space for other functions such as parking. Highly vulnerable development should be avoided within the Zone 3+ 70% climate change parts of the site. Encroachment into Functional Floodplain will not be permitted. Basement for servicing/ vehicle parking is unlikely to be acceptable in Zone 3 climate change. Consistent with the need to move development towards Brook Avenue, development should be create more space for water near the Wealdstone Brook (well beyond the Environment Agency 8metre zone) and flow routes for fluvial water should not be obstructed.

Depths on approximately 50% of the surface water flood zone 3 are predicted in in excess of 1200mm during the 1% annual chance. An overland flow path is observed through the site. Flows are at over 0.25 m/s on parts towards the western end of Brook Avenue, where water flows from Forty Avenue towards the Wealdstone Brook. Elsewhere the majority of flows are below 0.25 m/s. Whilst rear gardens contain soft landscaping front gardens largely comprise hard standing. This can compound surface water flooding. Less water is able to drain away through infiltration, which increases the surface water flood risk in these areas. Surface water flooding follows the location of the fluvial flood zones. The drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Suitable

design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime. In terms of safe access/ egress for floods of 1 in 100 year or less, Brook Avenue to the north of the site provides the best potential for moving away from flood areas and risk. For events that start to take account of climate change, e.g. from +25%, Brook Avenue starts to be flooded towards its western end. The placing of residential accommodation above the flood zone 3 +70% flood heights allows for safe refuge until the area is no longer flooded. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.
Recommendation: Allocate for development

Site Allocation Ref: BCSA11	**Site Allocation Name:** College of North West London	
Delivery 19/20-28/29: 155	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 78% Flood Zone 2, 17% Flood Zone 3 and 16% Flood Zone 3a Climate Change +70% 79% Zone 3 Depth 1.27metres - Danger to all 68% flood zone 3 surface water depths in excess of 120cm on small part, majority is within 30-60cm and 60-90cm ranges. Sewer flooding incidents. <25% susceptibility to ground water flooding Increased potential for elevated ground water Not in a source protection zone In a critical drainage area 80% area at risk of reservoir flooding depths between 0.3 and 2 metres.		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The site is within the Wembley Opportunity Area within the London Plan. It is also within the Wembley Growth Area, which is identified to meet a significant proportion of the borough's housing and employment need. The site is located in an area with excellent public transport accessibility levels. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one. It has good access to local shops and services. The site is likely to be surplus to the college's requirements as part of a process of consolidation of better facilities on another site within Wembley Park. The site's location on Olympic Way provides an opportunity to create a high quality development to act as a gateway from Wembley Park Station to the stadium. Positive impacts are anticipated due to the delivery of housing in an area with a good PTAL and good accessibility to infrastructure. New development can help improve air quality by increasing tree planting, being designed to modern sustainability standards to reduce energy usage and emissions. The redevelopment of the site also provides the opportunity to increase permeability and incorporate other mitigation measures such as SUDS. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet London Plan housing targets

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The majority of the site lies within Fluvial Flood Zone 2, with about 17% in Flood Zone 3 currently, including and adjacent to the Wealdstone Brook channel. A small part to the site, principally to the west is located within Zone 1. Taking account of the proposed residential use of the site, factoring in climate change of +70% a significant part of the site would become flood zone 3. Whilst the more vulnerable development should be preferably situated in Flood Zone 1, given its town centre location, the site is in any case likely to have a significant amount of commercial use at ground flood, whilst residential accommodation should be on the uppers. Taking account of the climate change scenario, if development is necessary within Flood Zones 2 or 3a, then all residential accommodation should ideally be located in the first floor level or above. Lower vulnerability uses including landscaped open space or gardens should be prioritised in flood zone 3a. Commercial uses should have ground floor levels of 1 in 100+ 35% climate change plus, 30cm freeboard. Encroachment into functional floodplain adjacent the site boundary will not be permitted. Flow routes adjacent to the river and potentially across the site to the east where both fluvial and surface waters could flow over Olympic Way should not be obstructed. Zone 1 provides the opportunity for more ground floor buildings/volumes, whilst the location of the existing building within the likely extent of flood zone 3a +70% means that no overall increase in ground floor volume within the boundary of Zone 3+ climate change should occur, unless compensatory measures can be shown so as not to increase flood risk elsewhere. Basement for servicing/ vehicle parking will need careful consideration if located on this site in terms of its location and extent, to resist water ingress and also provide safe egress via internal stairway in times of flood.

Surface water ponding is predicted on the eastern portion of the site during the 1 in 30-year pluvial event or greater. Potential depths in excess of 120cm are identified on the site during the 1% annual chance. This is however within the river channel. Elsewhere on-site the majority is within 30-60cm and 60-90cm ranges. An overland flow path is observed through the site along the Wealdstone Brook and around the college building. The building is surrounded by hardstanding which can compound surface water flooding as the runoff rate is greater on impermeable grounds compared to permeable areas. In addition, less water is able to drain away through infiltration, which increases the

surface water flood risk in these areas. Surface water flooding follows the location of the fluvial flood zones. For the 1:100 event approximately half flows at over 0.25m per second, in the area between Crescent House and Olympic Way which forms a flow path, whilst the remainder travels at less than 0.25 m/s. The drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime. In terms of safe access and egress the west of the site towards Wembley Park Drive provides the best potential for moving away from flood areas and risk. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.
Recommendation: Allocate for development

Site Allocation Ref: BSSA6	**Site Allocation Name:** Argenta House & Wembley Point	
Delivery 19/20-28/29: 569	**Delivery 29/30-40/41** 0	**Highest vulnerability of proposed use**: More Vulnerable
Flood zone and other sources of flooding: 100% in flood zone 2, 99% in flood zone 3a (fluvial), 72% in flood zone 3b (fluvial) 35% in flood zone 3a (surface water), the majority (approximately 60%) of which is in the 15-30cm range, with some areas adjacent to the Brook within the >120cm range, and smaller areas within the 30-60cm range. Sewer flooding incidents. >=25% <50% susceptibility to groundwater flooding		**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Increased potential for elevated groundwater Not in a source protection zone In a critical drainage area Whole site is at risk of reservoir breach, with the majority of the site with depths over 2m and the remainder 0.3-2m	

Exception Test:

Sustainability benefits outweigh flood risk? Yes

In its current state the site is of a poor environmental quality, with dated buildings. Redevelopment would improve the environmental quality of the area, help reduce flood risk and create an attractive gateway to the borough and Stonebridge. The Wealdstone Brook is not achieving good status as required by the EU Water Framework Directive. Development on this site could facilitate naturalisation of the Wealdstone Brook, delivering objectives in the Thames River Basin Management Plan and Brent River Corridor Improvement Plan, and improving water quality. The site benefits from good public transport access being adjacent Stonebridge Park Station and having a PTAL rating of 4. The NPPF and London Plan support residential development on underutilised sites in areas of good public transport accessibility, such as this one.

Although the majority of the site is within flood zone 3b and therefore not suitable for development other than water compatible uses, land within flood zone 3a could be developed to deliver benefits to the wider community. In conclusion, alternative sites would not bring the regenerative benefits and are insufficient to provide the capacity to meet Brent population's required housing targets.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site already benefits from permissions at both Argenta House and Wembley Point (18/4847 and 18/3125 respectively). 100% of the site is within flood zone 2, while 99% of the site (excluding a small area on the south-western edge) is within FZ3a (fluvial). 72% of the site is within FZ3b (fluvial), and the River Brent runs in a culvert to the south of the site, which is a source of flooding. During the +25% climate change event, all of the site becomes FZ3 (fluvial), and during the +70% climate change event the site will have a maximum approximate flood depth of 2.4m. Given the site's location essentially wholly within FZ3, options are limited in terms of the sequential location of uses and means that there should be no overall increase in footprint within the site unless this can be adequately compensated for so as not to increase flood risk elsewhere. Additionally, no development that is not water-compatible in use should be permitted in what is identified as functional floodplain. An exception to this might be the Argenta House part of the site, where existing structures in the floodplain if amended could reduce flood risk by for example reducing river flow potentially being blocked by debris, if not increasing the volume of structures within what would be classed as functional floodplain. In the case of an application a site specific flood risk assessment should be submitted. If this shows that development can be accommodated on site without increasing flood risk elsewhere, given predicted flood heights, low vulnerability uses should be located on lower floors with more vulnerable uses (such as residential) should be on upper floors. To ensure that development is safe for its lifetime, building ground floors for low vulnerability uses should be above fluvial climate change levels +35%

+30cm freeboard. Approximately 36% of the site is also at risk of surface water flooding. The majority (approximately 60%) of this is within the 15-30cm range, spread throughout various parts of the existing car ark of the site. Smaller areas within this are in the 30-60cm range. This is likely due to ponding due to run off from buildings and impermeable surfacing, as the existing site lacks soft landscaping. Potential depths of up to 1.2m are identified on land surrounding the Brook during the 1% annual chance, and an overland flow path is observed along the Brook connection to the surrounding road network. Flows are generally below 0.25m/s. In the case of any new planning applications on this site, a drainage strategy for the site must be considered early in the site planning process to ensure adequate inclusion of Sustainable Drainage Systems (SuDS). SuDS should aim to achieve greenfield run off rates, providing management and attenuation features that ensure that surface water runoff is managed as close to the source as possible in accordance with the London Plan drainage hierarchy. Permeable surfaces should be increased and open space maximised to ensure space for water to flow during times of flood. Within FZ3 (surface water), flood plain compensation must account for predicted flood depths for the 1 in 30 year and 1 in 100 year risk of flooding from surface water mapping or depth predicted for the site. Suitable design features and resilience and resistance measures should ensure that development on the site can be safe for its lifetime. Dry access in and out of the site is only likely in a 1:100 event onto Argenta Way, however, the wider movement network (apart from the elevated underground line) is likely to be closed due to flooding. In a +70% climate change scenario all routes would be inaccessible. Safe / dry access to refuge points to those on the lower floors if below 1:100 +35%+30cm would be required. Specific emergency planning actions will need to be agreed. Flood warnings and/ or flood alerts need to be considered along with the emergency evacuation procedures in the design and layout of the proposed development, as well as details regarding safe refuge areas above ground floor if dry egress routes for evacuation cannot be guaranteed. A Site Specific Flood Risk Assessment will be required to support of any future planning applications. Taking account of the above it is considered that development on site can be safe for its lifetime and through addressing surface water drainage issues, has the potential to reduce potential flooding elsewhere.
Recommendation: Allocate for development

Appendix 6 Intensification Corridors Sequential and Exception Test Assessment

Intensification Corridors within Flood Zone 1 and outside Surface Water Flood Zone 3

Policy Ref	Intensification Corridor Name
BD2	41-685 Kenton Road Corridor (except 327-383)
BD2	Edgware Road (South) Corridor
BD2	High Road, Willesden Corridor
BD2	Neasden Lane, Crispin Close, Berkeley Court Corridor
BD2	Foxholt Gardens and Hillside Corridor
BD2	Cromwell Court and 412 Ealing Road Corridor
BD2	70 - 167 Harrow Road and 92 - 176 Harrow Road Corridor
BD2	50 Forty Avenue Corridor

Intensification Corridors with a small element of surface water (under 20%) within Flood Zone 3

Policy Ref: BD2	**Intensification Corridor Name:** Fryent Way Corridor
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 1% of flood zone 3 surface water with most in the 0-15cm range and small amount in the 15-30cm range. Sewer flooding incidents. No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone Not in a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The site has a PTAL rating of 3, and therefore has fairly good access to public transport. The corridor is adjacent to Kingsbury town centre boundary and therefore has access to a range of facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently includes large plots with significant parking including garages. The existing risk of surface water flooding extends from the highway and only encompasses a small part of the site. Development on this site could be safe for its lifetime by either directing development away from the areas at risk of surface water flooding if possible or that flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	
Recommendation: Identify as an intensification corridor	

Policy Ref: BD2	**Intensification Corridor Name:** Forty Lane, Blackbird Hill and Neasden Lane North Corridor excluding area near River Brent and Brent Feeder
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 1% in flood zone 3a surface water, equal elements in the 15-30cm range and 30-60cm range Majority of the site is >=25% < 50% susceptibility to groundwater flooding, the rest at <25% susceptibility to groundwater flooding No increased potential for elevated groundwater Half of the site is within a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Majority of corridor within PTAL 3, with the western most end within PTAL 4. Some sections are within PTAL 2. Eastern end backs onto Neasden town centre, with the western end being within close proximity to Wembley Park town centre. Close proximity to a number of parks, including the River Brent park, Welsh Harp, and Fryent Country Park. Therefore, the corridor is well provided with amenities, and well positioned to come forward with limited parking, reducing the reliance upon personal vehicles which is prevalent within this part of the borough. This will assist in improving air quality, in addition to the delivery of modern sustainability standards. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a mix of building types, including semi-detached dwellings, commercial uses, garages, access roads, blocks of flats and some detached homes on large plots. The whole corridor has been identified as being potentially suitable for redevelopment, while a smaller part of it (Acadia Court and 311-329 Neasden Lane and Area) have been identified as being potentially suitable for backland development. A very small proportion of the site is at risk of surface water flooding, with equal amounts in the 15-30cm and 30-60cm ranges. The area at risk of flooding extends from the rear gardens of dwellings on Birchen Grove towards an access road to the rear of 25-51 Blackbird Hill, which is hardsurfaced. The surface water flooding is likely due to run off from buildings, lack of permeable surfacing and ponding caused by this. Redevelopment of this part of the corridor through adequate surface water management plan/ design could be safe for its lifetime, by locating buildings outside flood areas and above flood heights and reduce flood risk overall by increasing permeability and soft landscaping and introducing elements such as green roofs and storage tanks to reduce off-site surface water flows from current levels. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	
Recommendation: Identify as an intensification corridor	

Policy Ref: BD2	**Intensification Corridor Name:** Dudden Hill Lane, Willesden High Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 1% flood zone 3 surface water, mostly in the 15-30cm range, but also with some small areas in the 0-15cm range, 60-90cm and 30-60cm range Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Within a critical drainage area Not within a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Corridor almost entirely within PTAL 5, with a small section within PTAL 4. This is associated with its close proximity to Dollis Hill LUL station and numerous bus routes. Also immediately adjacent to Willesden town centre at its eastern edge. Therefore well served by both amenities and public transport, in addition to local employment sites. Redevelopment will therefore assist in reducing dependence of personal vehicles through limiting parking as far as practicable, helping to improve the local environment and air quality. Redevelopment will also bring living conditions up to modern standards, as many of these units are likely to have been inappropriately sub-divided in the past. Permitted development conversions from retail to residential are also prevalent within the corridor, reducing the coherence and standard of their design which will be significantly improved upon redevelopment. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of terraced housing and some commercial units. The whole corridor has been identified as being potentially suitable for redevelopment. A very small percentage of the total corridor is at risk of surface water flooding (1%). The main area of surface water flood risk relates to an area to the rear of 261 - 265 High Road with a maximum depth of 60-90cm and is likely due to hardsurfacing in rear gardens and surface water ponding caused by run off from buildings. It is considered that development could be safe for its lifetime by increasing the amount of permeable surfacing on site and utilising features such as green roofs and storage tanks and locating buildings/ amenity space away from areas of potential flooding. Other areas at risk of flooding in the corridor are extensions of flood risk from the highway which marginally fall into the site boundary. These depths are generally between 0-15cm and could likely be mitigated by redevelopment incorporating permeable surfacing. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Bridgewater Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 1% in flood zone 3 surface water with the majority in the 15-30cm range and some small areas in the 0-15cm and 30-60cm range Sewer flooding incidents Over half of the site is at <25% susceptibility to groundwater flooding, less than half of the site is at no susceptibility to groundwater flooding No increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

PTAL ranges from 2-4, with greater access in the south due to closer proximity to Alperton LUL station. Also within reasonable proximity to Ealing Road town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Corridor also adjacent to One Tree Hill park and a number of employment sites. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently primarily consists of two storey terraced housing with some semi-detached units. The site has been identified as being potentially suitable for redevelopment. A small proportion of the site (1%) is at risk of surface water flooding, and relates to areas at the rear (and some at the side) of the existing properties. The areas at risk of flooding are likely due to impermeable hardsurfacing to the rear of these properties and run off from the existing buildings. The majority of the flood risk area has depths of up to 15-30cm with smaller areas within the 0-15cm and 30-60cm ranges. Redevelopment of the site would be likely to change which areas are at risk of flooding, as the current areas at risk of flooding sit at the rear elevations of the footprints of the existing dwellings. It is considered that

redevelopment could improve the existing situation and be safe for its lifetime by ensuring that impermeable surfacing is replaced with permeable surfacing and soft landscaping, in addition to incorporating elements such as green roofs and storage tanks. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Dudden Hill Lane Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 1% in flood zone 3 surface water with equal amounts in the 1-15cm range and 15-30cm range Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Less than half of the site is within a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL ranges from 2-4, with greater PTAL in the northern section due to closer proximity of Neasden LUL station. North section is within close proximity to Neasden town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Site also within close proximity to Gladstone Park. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and consists of a self-storage warehouse with parking and garages, commercial uses, a petrol station, semi-detached units, blocks of flats and detached dwellings. A very small proportion of the site is at risk of surface water flooding, within the central area of the corridor, extending from the highway, with depths ranging from 0-15cm to 15-30cm. It is considered that new development	

could be located away from these areas at risk of flooding. Alternatively, it is considered that redevelopment could improve the existing situation and be safe for its lifetime by ensuring that impermeable surfacing is replaced with permeable surfacing and soft landscaping, in addition to incorporating elements such as green roofs and storage tanks and incorporating appropriate floor heights. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Craven Park Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 1% in flood zone 3 surface water in the 15-30cm range. Sewer flooding incidents <25% susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone In a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

PTAL ranges from 4-5 due to proximity to Harlesden LUL station and a number of bus routes. Within reasonable distance of Harlesden town centre. Also served by a number of Neighbourhood Parades. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and consists of a church, 3 storey detached homes of a low density and a 3-6storey block of flats. A very small element of the Evangelical Church site is at risk of surface water flooding with depths of 15-30cm and is located on area of hardsurfacing, with the flood risk extending from the site to the south. It is considered that redevelopment could be located away from this very small flood risk area, and that redevelopment could improve the existing situation and be safe for its lifetime by ensuring that

impermeable surfacing is replaced with permeable surfacing and soft landscaping, in addition to incorporating elements such as green roofs and storage tanks and if necessary incorporating appropriate floor heights. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Kingsbury Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 2% of flood zone 3 surface water with equal amounts in the 15-30cm and 30-60cm ranges, and small areas in the 0-15cm range. Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone In a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

The PTAL of the site varies from 2 - 3 with fairly good access to public transport, but is located adjacent to Kingsbury town centre and therefore has access to a range of facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of a garage with significant hardstanding, a Kwik Fit, blocks of flats and two storey detached dwellings. The western element of the corridor has an element of surface water flood risk to the north with maximum depths of between 30-60cm, but primarily between 15-30cm. The other element of surface water flooding is located to the south of the existing Kwik Fit garage with maximum depths of up to 30-60cm. This is likely due to changes in ground levels and run off from the highway / impermeably surfacing. Development on this site could be safe for its lifetime by either directing development away from the areas at risk of surface water

flooding and ensuring that if possible flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Harrow Road Sudbury Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 2% of flood zone 3 surface water with equal amounts in the 0-15cm and 15-30cm ranges, and a smaller amount in the 30-60cm range. Sewer flooding incidents Part of the site has <25% susceptibility to groundwater flooding, majority of the site is at no risk No increased potential for elevated groundwater Not in a source protection zone Majority of the site is within a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The majority of the corridor has good access to public transport, within PTAL 3. A smaller part of the site has a PTAL rating of 2. However, the eastern part of the corridor is located within close proximity of Sudbury town centre, and the western part of the site is located adjacent to the boundary with another borough and therefore may be served by facilities within that borough. The whole corridor is well served by different open space typologies, including that of Sudbury Hill Playing Fields, Butler's Green, and Vale Farm. This includes associated sports infrastructure. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. The corridor currently includes semi-detached dwellings, a builders' yard, blocks of flats and garages. Many of the homes are sited on large plots. Two small pockets of surface water flood risk are located on the eastern part of the corridor, however,	

these have a maximum depth of 30cm and only cover a small area. It is considered that redevelopment at this end of the corridor could ensure that development is safe for its lifetime and does not increase flood risk elsewhere by increasing permeability of surfaces on the site and putting in place measures such as green roofs and storage tanks to reduce surface water flooding, particularly as redevelopment or backland development could result in the loss of garden space. The western end of the corridor also has elements of surface water flood risk. Surface water flood risk exists at the front of existing properties and ranges from 0-30cm and is likely due to impermeable hardsurfacing to the front of the properties. An area of surface water flood risk also exists in some of the rear gardens adjacent to Sudbury Hill playing field to a maximum depth of 60cm. This is likely caused by changes in ground levels. Development on this site could be safe for its lifetime by either directing the garden land and backland development away from the areas at risk of surface water flooding (and ensuring that if possible, flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included), or in the case of redevelopment, ensuring that impermeable surfacing is replaced with permeable surfacing and features such as green roofs and storage tanks are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Kenbrook Forty Avenue Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 2% in flood zone 3a surface water with equal amounts in the 0-15cm range and 30-60cm ranges Sewer flooding incidents <25% susceptibility to groundwater flooding Increased potential for elevated groundwater Not in a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3-4 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Site set on significant brownfield land which is currently underutilised with some single storey aspects. Redevelopment would therefore assist	

in meeting housing targets. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and consists of a nursing home within a large plot. A very small part of the site is at risk of surface water flooding with equal amounts in the 0-15cm range and 15-30cm ranges. The area of flood risk runs from the highway and likely relates to ponding due to impermeable surfaces and run off from surrounding buildings. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Honeypot Lane Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 3% of flood zone 3 surface water with most in the 15-30cm range and some small areas in the 0-15cm range. Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone Not in a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The majority of the site has a PTAL rating of 3, and therefore had fairly good access to public transport. The corridor is adjacent to Kingsbury town centre boundary to the south and therefore has access to a range of facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and currently consists of terraced / semi-detached 2 storey units. The existing risk of surface water flooding is scattered throughout the corridor, predominantly within the rear gardens of some of the dwellings, and is likely due to impermeable hardsurfacing. Development on this site could be safe for its lifetime by either directing development away from the areas at risk of surface water flooding if possible or that flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Colindale Edgware Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 3% of flood zone 3 surface water with most in the 0-15cm range and a small amount in the 15-30cm range. Sewer flooding incidents <25% susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a source protection zone More than half in a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The northern and central parts of the corridor have a PTAL of 3/4, while the southern part of the corridor has a PTAL of 2. However, the southern part of the corridor is adjacent to Colindale town centre. The central part of the corridor is in close proximity to Colindale and Burnt Oak town centres, while the northern part of the corridor is adjacent to Burnt Oak town centre. The sites therefore have access to a range of facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and currently consists of a three storey block (the northern part of the corridor), a mixed use block in the centre, and a convenience store and bar with significant hardstanding (southern part of the corridor). Only the northern part of the corridor is at risk of surface water flooding, with most in the 0-15cm range and a small amount in the 15-30cm range. The surface water flood risk relates to an area of hardstanding to the rear of the building. Development on this site could be safe for its lifetime by either directing backland development away from the areas at risk of surface water flooding (and ensuring that if possible, flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included), or in the case of redevelopment, ensuring that impermeable surfacing is replaced with permeable surfacing and features such as green roofs and storage tanks are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Wembley Park Drive Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 3% in flood zone 3a surface water, with the majority in the 15-30cm range and smaller amounts in the 30-60cm, 60-90cm and 0-15cm ranges Less than half of the site has <25% susceptibility to groundwater flooding, the majority of the site has no susceptibility No potential for elevated groundwater	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

In a critical drainage area Not in a source protection zone	

Exception Test:
Sustainability benefits outweigh flood risk? Yes
Corridor predominantly within 4/5 PTAL, with some small elements within 3. This is associated with their close proximity to both Wembley Park LUL station in the North, and Wembley Central LUL station in the south. It is also close to both Wembley Park Town Centres, and Wembley Town Centres respectively, being immediately adjacent at each end of the corridor. Therefore the corridor is well served by local amenities and transport, reducing the likely requirement for transit by personal vehicles. The corridor is also within close proximity to King Edward VII park, Wembley and Park Lane Primary Schools, and local GP surgeries. Redevelopment of these sites will improve sustainability standards, reduce local parking provision, improve design standards and associate crime, and generally improve the sustainability of the area whilst maximising land utility, helping to meet the Councils housing target.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed. The corridor consists of terraced / semi-detached / detached homes and some garages, in addition to some commercial units and a doctors surgery. Some of the dwellings are set on large plots. The southern part of the corridor is not subject to any areas of surface water flood risk. The areas at risk of surface water flooding are scattered around the northern parts of the corridor, with the majority of the depths being between 15-30cm but some very small elements being up to 60-90cm. The majority of this surface water flood risk appears to relate to areas at the rear of existing properties and is likely due to hardsurfacing to the rear of these properties. Development on this site could be safe for its lifetime by either directing the garden land and backland development away from the areas at risk of surface water flooding (and ensuring that if possible, flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included), or in the case of redevelopment, ensuring that impermeable surfacing is replaced with permeable surfacing and features such as green roofs and storage tanks are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Ealing Road (North) Corridor
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 3% flood zone 3 surface water with the majority in the 15-30cm range and a small amount in the 0-15cm and 30-60cm ranges Sewer flooding incidents Over half of the site is at <25% susceptibility to groundwater flooding, less than half of the site is at >=25% < 50% susceptibility to groundwater flooding No increased potential for elevated groundwater Not within a source protection zone Over half of the site is within a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

Northern portion primarily within PTAL 5 being within close proximity to Wembley Central LUL station, with southern portion within PTAL 3-4 being close to Alperton LUL station. Each is adjacent to Ealing Road town centre. Therefore each has good access to public transport and a range of local amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of a mix of semi-detached houses, a community centre, blocks of flats (some with backland) and garages. Some of the semi-detached units have relatively large amounts of land. All parts of the corridor have been identified as being potentially suitable for redevelopment. A small proportion of the site is at risk of surface water flooding and this is located in a few areas throughout the corridor. Part of the area to the rear of Neeld Court has been identified as being at risk of surface water flooding to maximum depths of 15-30cm. This is likely due to ponding due to impermeable surfaces and surface water run-off. It is considered that development could be safe for its lifetime by either being located outside of this area of flood risk (and incorporating measures such as green roofs to reduce run off rate, thereby improving the existing situation) or new development resulting in increased permeable paving or soft landscaping to reduce surface water flood risk. The other areas at risk of surface water flooding are located at the north of the corridor and appear to be located in back gardens, with most depths within the 15-30cm range, some depths within the 30-60cm range and some very small elements in the 0-15cm range. It is considered that development could be safe for its lifetime by either being located away from these areas of flood risk, or incorporating measures such as floor levels/ surfaces above flood levels and could also improve the existing situation by providing increase permeable surface, in addition to incorporating elements such as green roofs and storage tanks to control surface water run-off. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Bridgewater Court, Fernwood Avenue, Barnham Close, Harrow Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 3% in flood zone 3 surface water with the majority in the 15-30cm range, a smaller area in the 30-60cm range, and lesser areas in the 0-15cm range. Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Less than half of the site is in a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Corridor PTAL ranges from 2-5, but predominantly within 4-5 due to proximity to Sudbury Town LUL station and a number of bus routes. Also within close proximity to Sudbury town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. The corridor also adjacent to Barham Park. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a mix of semi-detached houses on large plots, warehouses, some access roads and blocks of flats. The northern part of the corridor contains the two areas at risk of surface water flooding. One of these relates to the hardsurfaced highway on Colyton Close and is likely due to impermeable surfacing and surface water run-off from buildings. The depth of this is mostly within the 15-30cm range with smaller elements in the 0-15cm range. It is considered that redevelopment could improve the existing situation and be safe for its lifetime by ensuring that impermeable surfacing is replaced with permeable surfacing and soft landscaping, in addition to incorporating elements such as green roofs and storage tanks, locating buildings away from areas of risk and incorporating appropriate floor heights. The other pocket is located to the rear of Marnham Court and relates to an area of hardsurfaced car parking, which then extends into the rear gardens behind this. The majority of this has a depth of 15-30cm, with a smaller element in the 30-	

60cm range and even smaller elements in the 0-15cm range. Again, it is considered that redevelopment could improve the existing situation and be safe for its lifetime by ensuring that impermeable surfacing is replaced with permeable surfacing and soft landscaping, in addition to incorporating elements such as green roofs and storage tanks, locating buildings away from areas of risk and incorporating appropriate floor heights. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 231-255 and 248-298 Harrow Road Corridor

Highest vulnerability of proposed use: More Vulnerable

Flood zone and other sources of flooding:	**Sequential Test:**
4% flood zone 3 surface water with the majority in the 30-60cm range, a smaller amount in the 15-30cm range and an even smaller amount in the 0-15cm range. Sewer flooding incidents Over half of the site is at <25% susceptibility to groundwater flooding, less than half of the site is at >=25% < 50% susceptibility to groundwater flooding No increased potential for elevated groundwater Not within a source protection zone Within a critical drainage area	**Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

Corridor within PTAL 3. Immediately adjacent to Wembley town centre. Therefore has good access to public transport and a range of amenities. Redevelopment will assist in reducing parking and associated vehicle dependence, helping improve a number of inter-related issues, namely health and climate crisis. Redevelopment will also increase sustainability standards up to modern requirements, helping improve local air quality for which there remains a problem. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of blocks of flats, semi-detached and terraced units with some commercial / a doctors surgery. The whole corridor has been identified as being potentially suitable for redevelopment, with some elements of it being identified as being potentially suitable for upward extensions. Only an area adjacent to Neeld Court is identified as being at risk of surface water flooding with the majority in the 30-60cm range and some elements in the 0-15cm and 15-30cm ranges. It is likely that this relates to an area of hardsurfacing. Development can be safe for its lifetime by replacing hardsurfacing with permeable surfacing, soft landscaping, and incorporating elements such as green roofs and storage tanks to control run off rates. Additionally, development could be constructed to minimum finished floor levels and with flood-resilient materials. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 82-140 The Mall Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 5% of flood zone 3 surface water with most in the 15-30cm range, a small amount in the 0-15cm range and in the 30-60cm range. Sewer flooding incidents. Majority of site at <25% susceptibility to groundwater flooding, a small element of the site is of no susceptibility of groundwater flooding. No increased potential for elevated groundwater Not in a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The majority of the site has a PTAL rating of 3, and therefore had fairly good access to public transport. The site is located close to Kingsbury town centre and therefore has access to a range of facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes**	

The site is previously developed and consists of 2/3 storey semi-detached dwellings. The areas at risk of surface water flooding extends from the highway via an electricity substation and partly located at rear of properties, which may be due to impermeable hardsurfacing / patios in rear gardens. Development on this site could be safe for its lifetime by either directing development away from the areas at risk of surface water flooding if possible or that flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Empire Way Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 5% in flood zone 3 surface water, with equal amounts within the 15-30cm and 30-60cm ranges, a small amount in the >1.2m range, and lesser amounts in the 60-90cm and 90cm-1.2m ranges. Sewer flooding incidents Part of the site has <25% susceptibility to groundwater flooding, more than half the site is at no risk No increased potential for elevated groundwater Not in a source protection zone Within a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Corridor entirely within PTAL 4, being within close proximity to Wembley Park LUL station. It is also immediately adjacent to Wembley Park Town Centre, providing a range of amenities. Current development includes significant parking which would not be re-provided going forward. In addition to this, redevelopment would be delivered to modern sustainability standards, helping improve air quality, and reaping other associated benefits. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes**	

The site is previously developed. The existing site consists of a number of blocks of flats varying in height, some residential gardens and backlands with hardsurfacing. The two small areas at risk of surface water flooding are located to the rears of two existing blocks and relate to areas of hardsurfacing. It is likely that this is caused by impermeable surfacing and run off from the existing buildings. The area to the rear of Imperial Court (at the north of the corridor) at risk of surface water flooding has a maximum potential flood depth of over 1.2m, however, this appears to relate to changes in ground levels due to access to underground parking. The area at risk of surface water flooding to the south of the site is mostly in the 15-30cm and 30-60cm range and appears to be due to hardsurfacing. Development on this site could be safe for its lifetime by either directing the garden land and backland development away from the areas at risk of surface water flooding (and ensuring that if possible, flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included), or in the case of redevelopment, ensuring that impermeable surfacing is replaced with permeable surfacing and features such as green roofs and storage tanks are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Harrow Road (East) Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 5% in flood zone 3 surface water with the majority in the 15-30cm range, and lesser amounts in the 0-15cm and 30-60cm ranges. Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
The PTAL rating of the site varies from 1b -6a, due to the length of the corridor**.** The corridor is within reasonable distance from Wembley town centre and is located in very close proximity to Barnham Park, therefore having access to a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards, will help improve a number of inter-related issues including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and currently consists of a number of uses, including semi-detached housing (some within large plots), garages, a pub with significant hardstanding, blocks of flats and a Royal Mail sorting office. Some parts of the corridor towards the east have been identified as being at risk of surface water flooding. The part of the corridor which includes 628 Harrow Road has elements of flood risk is due to two access roads within the site, with flood risk depths of 0-15cm and 15-30cm. This is likely due to surface water run-off from existing buildings on site and ponding on the highways due to impermeable surfacing. Development could improve the existing situation and ensuring that flood risk is not increased elsewhere by incorporating features such as green roofs and storage tanks to control / reduce surface water run-off, reducing risk of flooding elsewhere on the site. The other parts of the site at risk of flooding are to the side of the Royal Mail sorting office and adjacent to the Coplands care home, both of which are areas of hardsurfacing adjacent to the footprint of the existing buildings. The majority of the area of flood risk adjacent to Coplands care home has a maximum depth of 15-30cm, and some small areas of 0-15cm. The area of hardsurfacing adjacent to the sorting office has a maximum flood risk depth of 30-60cm with some areas of 15-30cm depth. It is considered that redevelopment could improve the existing situation and be safe for its lifetime by ensuring that impermeable surfacing is replaced with permeable surfacing and soft landscaping, in addition to incorporating elements such as green roofs and storage tanks, locating buildings out of areas that can flood and increasing floor heights. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Willesden Lane (North)
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 5% in flood zone 3a surface water, the majority of which is within the 15-30cm range, with smaller elements in the 30-60cm and 0-15cm ranges Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 3-4, with western most portion within 4 due to proximity to Willesden LUL station. Western portion also immediately adjacent to Willesden Green town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and consists of a mix of buildings, including blocks of flats, garages, detached homes, areas of hardstanding and terraced homes. The areas at risk of surface water flooding are scattered throughout the site and generally relate to areas of hardsurfacing, mostly within the 15-30cm range, with smaller elements in the 30-60cm and 0-15cm depth ranges. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	
Recommendation: Identify as an intensification corridor	

Policy Ref: BD2	**Intensification Corridor Name:** Site at The Mall & Kenton Road Corridor
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 7% flood zone 3 surface water with most in the 15-30cm range, a small amount in the 0-15cm range, and an even smaller amount in the 30-60cm range. Sewer flooding incidents Part of the site is of <25% susceptibility to groundwater flooding, over half of the site has no susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a critical drainage area Not within a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

Corridor predominantly within PTAL 3, with small a portion in 4. Is immediately adjacent to Kingsbury town centre, and within close proximity to a number of parks and sporting facilities, including Fryent Country Park. The units also include significant parking. Redevelopment would seek to reduce this as far as practicable, helping reduce the prevalence of personal vehicles, which is the predominant mode of transport within this part of the borough. Kenton Road in particular would benefit from soft landscaping and greening improvements which it currently lacks, making it a harsh environment. Implications of redevelopment upon air quality are also noted, including the delivery of modern sustainability standards. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of 3 storey blocks with significant parking to the rear, a petrol station, a hotel, ambulance station and a church. The site has been identified as being potentially suitable for upward extensions, backland development and redevelopment. Two parts of the site are at risk of surface water flooding. The pocket of flood risk to the rear of the ambulance station is within the 15-30cm range and is likely due to run off from buildings and impermeable hardsurfacing. Development on this part of the site could be safe for its lifetime by directing development away from this particular area of flood risk or through redevelopment ensuring that flood risk is reduced overall by increasing permeability and incorporating features such as green roofs and storage tanks. The other area at risk of flooding extends from the highway o the fronts of existing buildings and down an access road and is likely due to impermeable surfacing on the highway and run off from buildings. The majority of this is within the 15-30cm depth range with elements in the 0-15cm and 30-60cm range. It is considered that development could be made safe for its lifetime by providing permeable surfacing, utilising features such as green roofs and storage tanks, and ensuring that development does not take place within areas at risk of flooding. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Willesden Lane (South) Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 8% flood zone 3 surface water, mostly in the 15-30cm range and with some areas within the 0-15cm and 30-60cm ranges. Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a critical drainage area Not within a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

Corridor predominantly within PTAL 3, with a small section within 4. Also within close proximity to Kilburn town centre. Therefore, the site is well provided for in terms of transport and amenities, helping the site come forward with significantly reduced parking upon existing. Existing buildings provide more urban environment, with limited private amenity/ usable communal amenity for residents. Redevelopment will improve design standards to reduce crime, and deliver modern sustainability standards. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of blocks of flats and has been identified as being potentially suitable for redevelopment. Areas at risk of surface water flooding are scattered throughout the corridor with the majority in the 15-30cm range and smaller elements in the 0-15cm and 30-60cm range. This likely relates to areas of hardsurfacing and lower ground levels than the surrounding area / highway. It is considered that development could be safe for its lifetime through either being located away from the areas of flood risk, or a combination of increased permeable surfacing, changes to ground levels to reduce risk of ponding, and incorporating elements such as green roofs and storage tanks. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 56 Watford Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 10% flood zone 3 surface water with most in 15-30cm range, a smaller amount in the 0-15cm range, and an even smaller amount in the 30-60cm range. Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Within a critical drainage area Not within a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** The corridor has good access to public transport, with a PTAL of 2-5 (primarily 3). It is also located immediately adjacent to Sudbury town centre. Therefore it has immediate access to a range of amenities and public transport, enabling development to come forward with reduced parking upon existing, helping to improve a number of inter-related issues, namely health and climate crisis. The corridor is well served by different open space typologies, including that of Butler's Green and Vale Farm. This includes associated sports infrastructure. Redevelopment could help to improve air quality by being designed to modern sustainability standards which reduce energy usage and emissions. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of semi-detached homes and a small 3 storey block. The site has been identified as potentially suitable for redevelopment. 10% of the site is at risk of surface water flooding, with the majority in the 15-30cm range and some elements within the 0-15cm and 30-60cm ranges. The surface water flood risk appears to relate to run off from the highway towards the residential units' front gardens, likely due to impermeable surfacing. Development on this site could be safe for its lifetime through either being located away from this area of flood risk. Alternatively, redevelopment could see an increase in the amount of permeable surfacing on site and could also incorporate elements such as green roofs and storage tanks. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Sattavis Gam Patidar Centre, Forty Avenue
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 16% in flood zone 3a surface water Evenly split between ranges 0-15cm, 15-30cm, 30-60cm and 60-90cm. Sewer flooding incidents <25% susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3-4 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Site set on significant brownfield land which is currently underutilised with sprawling surface level parking. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and consists of a large modern commercial venue for weddings / events with significant hardstanding. The element of the site at risk of surface water flooding is to the north of the footprint of the existing building and relates to an area of hardsurfacing, which is likely impermeable. It is likely that the surface water flood risk relates to run off from buildings and impermeable surfacing. The maximum depths are in the 30-60 and 60-90cm ranges, with smaller amounts in the 15-30cm and 0-15cm ranges. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk	

assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Brunel Court, High Street, Harlesden Corridor

Highest vulnerability of proposed use: More Vulnerable

Flood zone and other sources of flooding:	**Sequential Test:**
18% flood zone 3 surface water, mostly in the 0-15cm range and with a smaller amount in the 15-30cm range Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated ground surface water Not within a critical drainage area Not within a source protection zone	**Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

Corridor PTAL ranges from 3-5, primarily within 4. Also within close proximity to Harlesden town centre. Therefore site has good access to local amenities and public transport. This will assist redevelopment in reducing parking over existing substantially. The site is also at a prominent location on a busy junction between Harrow Road and Scrubs Lane. In addition to reducing dependence of private vehicles, redevelopment will bring sustainability up to modern standards, improving air quality. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of blocks of flats. It has the potential for redevelopment, upward extensions and backland development. However, it is noted that there are areas at risk of surface water flooding, with the majority of the depths being between 0-15cm and some elements being within the 15-30cm range. The areas of flood risk relate to hardsufacing which is likely

impermeable and therefore at risk of ponding. Development can be safe for its lifetime by replacing hardsurfacing with permeable surfacing, soft landscaping, and incorporating elements such as green roofs and storage tanks to control run off rates. Additionally, development could be constructed to minimum finished floor levels and with flood-resilient materials. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Intensification Corridors with Small Proportions (under 20%) of Fluvial Zone 3

Policy Ref: BD2	**Intensification Corridor Name:** 57 Harrow Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 1% in flood zone 2 (fluvial) Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding No increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 2-4, but predominantly 4, with site served by local Neighbourhood Parades. The area set to experience significant growth. Current development on site does not effectively mitigate against harsh, road dominated environment which would be better considered by modern design standards. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Also immediately adjacent to Tokyngton Recreation Ground, with sports facilities nearby. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of residential buildings. A very small part of the southern edge of the site is located within FZ2. Taking account of 70% climate change, a similar area will be in FZ3 to what is currently in FZ2. The south-eastern edge of site is also at reservoir breach risk, the majority of which is below 0.3m depth and with speeds of below 0.5ms, but with element in between 0.3 and 2m and a speed of between 0.5 and 2m/s. This part of the site is already developed with a dwelling. A sequential approach to development should be taken, with more vulnerable uses being located way from areas of flood risk, with floor heights Fluvial Z3 +70% climate change and if this cannot be achieved properties should incorporate flood resistance/ resilience features. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 76 Harrow Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 5% in flood zone 2 (fluvial), 1% in flood zone 3a (fluvial) Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding A small part of the site has increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 2-4, but predominantly 4, with site served by local Neighbourhood Parades. The area set to experience significant growth. Current development on site does not effectively mitigate against harsh, road dominated environment which would be better considered by modern design standards. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Also immediately adjacent to Tokyngton Recreation Ground, with sports facilities nearby. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of mixed use buildings with ground floor commercial units and semi-detached residential dwellings. It has been identified as being potentially suitable for redevelopment. The south-eastern edge of the site is located within FZ2, with an even smaller part of the site being located within FZ3a (fluvial). Taking into account 25% climate change, the south eastern edge of the site will be in FZ3 and at 70% climate change, a similar area will be in FZ3 to what is currently in FZ2. The south-eastern edge of site is also at reservoir breach risk, the majority of which is below 0.3m depth and with speeds of below 0.5ms, but with element in between 0.3 and 2m and a speed of between 0.5 and 2m/s. This part of the site is already developed, with commercial uses on the ground floor and residential uses above. Due the small amount of the site at risk of flooding, it is considered that a sequential approach to development should be taken, with more vulnerable uses being located way from areas of flood risk. It is likely that replacement less	

vulnerable commercial uses will be required at ground floor level. In this scenario, floor heights should be above Fluvial Z3 +35% + 30cm and if this cannot be achieved properties should incorporate flood resistance/ resilience features. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Ainslie Court Ealing Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 6% in flood zone 2 (fluvial) 5% in flood zone 3 surface water in the 15-30cm range Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Increased potential for elevated groundwater for over half of the site Critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL ranges from 3-5, and served by a number of neighbourhood parades. Also adjacent to significant amount of employment land. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Site also in close proximity to a park and associated sporting facilities. The Grand Union Canal is also nearby which provides green/ blue infrastructure and serves as a sustainable transport route. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a mix of detached and semi-detached units, and blocks of flats. The site has been identified as potentially suitable for redevelopment. The southernmost tip is within FZ2, and part has the potential to become FZ3 when taking account of +25% climate change. Taking account of climate change +70%, the majority of zone 2 becomes zone 3, and parts of zone	

3 also extend out further than zone 2. The southernmost tip of the site is also at reservoir breach risk, with depths below 0.3m and a speed of below 0.5m/s. This part of the site is already occupied by residential dwellings. Should the site be redeveloped, if possible, sequentially more vulnerable uses should be located away from this part of the site. Alternatively, development will be required to be made safe for its lifetime by measures such as appropriate finished floor levels, flood-resilient materials and an emergency action plan being agreed with the Council's emergency planning team. A small part of the site is at risk of surface water flooding, to the rear of Ainslie Court with a depth of 15-30cm. This relates to a carpark with hardsurfacing which is likely impermeable. Surface Water flood risk could be reduced through redevelopment by introducing better surface water management, by incorporating measures such as permeable surfacing, soft landscaping, green roofs and storage tanks and if necessary appropriate floor heights. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 327-383 Kenton Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 15% in flood zone 2 (fluvial) 7% of flood zone 3 surface water with most in the 15-30cm and some in the 30-60cm range Sewer flooding incidents. <25% susceptibility to groundwater flooding Small area with increased potential for elevated groundwater Not in a source protection zone Critical drainage area	**Sequential Test:** **Pass**: It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 2-3, but primarily 3. The site is within reasonable distance to Kenton town centre. It therefore has good access to public transport and a range of local amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. The site backs onto Woodcock Park. It is also adjacent to the LB Harrow, and therefore may be served by facilities outside of the borough. Positive	

impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is already developed and consists of mixed use parades, blocks of flats and semi-detached units. The western tip is within fluvial flood zone 2, while the rest of the site is in FZ1. Over half of the area within flood zone 2 already contains buildings (primarily commercial uses on the ground floor with residential above, but with some ground floor residential units on Woodgrange Avenue) and this area has potential to become flood zone 3 when taking into account of the +25% climate change. Taking into account +70% climate change, nearly all of zone 2 becomes zone 3. Should redevelopment take place, sequentially more vulnerable uses should be directed away from this area. The same part of the site is also at risk of surface water flooding, although around the footprint of the existing buildings. The majority of this has a depth of 30-60cm with some in the 15-30cm range, and very small elements in the 0-15cm range. The area at risk of surface water flooding of hardsurfacing around the existing buildings, extending from the highway. This is likely due to ponding due to run off from existing buildings and impermeable surfaces. Flood risk can be managed and reduced through locating buildings away from areas at risk, incorporation of SUDS (e.g. through improving permeability), features such as green roofs and storage tanks, and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Intensification Corridors with Over 20% Surface Water Zone 3 subject to SFRA Level 2

Policy Ref: BD2	**Intensification Corridor Name:** Springhill House, Willesden Lane Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 21% in flood zone 3a surface water, the majority in 15-30cm and with a slightly smaller amount in 0-15cm range Sewer flooding incidents No susceptibility to groundwater flooding No increased potential for elevated groundwater Not in a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 3-4 due to proximity to Willesden LUL station. Also immediately adjacent to Willesden Green town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and consists of a block of flats. 21% of the site is at risk of surface water flooding, the majority of which is within the 15-30cm range (with slightly smaller amounts in the 0-15cm range), and it is likely that this is due to the site being cut into a hillside, resulting in rainfall ponding over the site in times of surface water flood. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	
Recommendation: Identify as an intensification corridor	

Policy Ref: BD2	**Intensification Corridor Name:** 84-98 Wembley Park Drive Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 30% in flood zone 3a surface water, with the majority in the 15-30cm range, a smaller amount in the 30-60cm range, and some small elements in the 0-15cm range Sewer flooding incidents <25% susceptibility to groundwater flooding No potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Corridor within PTAL 5. This is associated with its close proximity to Wembley Park LUL station. It is also close to Wembley Park Town Centre. Therefore the corridor is well served by local amenities and transport, reducing the likely requirement for transit by personal vehicles. The corridor is also within close proximity to King Edward VII park, Wembley and Park Lane Primary Schools, and local GP surgeries. Redevelopment of these sites will improve sustainability standards, reduce local parking provision, improve design standards and associated crime, and generally improve the sustainability of the area whilst maximising land utility, helping to meet the Councils housing target. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. The existing site consists of detached / semi-detached homes on large plots with mostly paved from gardens and large rear gardens. Approximately 30% of the site is at risk of surface water flooding, the majority within the 15-30cm range but with potential maximum depths of 60cm. The area currently at risk of flooding relate to the rear gardens of the properties and is likely due to run off from the highway, impermeable surfacing on the highway and to the front of the properties, and changes in ground levels. Development on this site could be safe for its lifetime by either directing the garden land and backland development away from the areas at risk of surface water flooding (and ensuring that if possible, flood risk is reduced overall by ensuring that features such as green roofs and storage tanks are provided and appropriate floor levels are included), or in the case of redevelopment, ensuring that impermeable surfacing is replaced with permeable surfacing and features such as green roofs and storage tanks are included. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 438-444 Neasden Lane and Pitt House Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 40% in flood zone 3 surface water, with equal amounts in the 15-30cm range and 0-15cm range. Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding No increased potential for elevated groundwater Not within a source protection zone Within a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 3. Also in close proximity to Neasden town centre. Close proximity to a number of parks, including the River Brent park, Welsh Harp, and Fryent Country Park. Therefore the corridor is well provided with amenities, and well positioned to come forward with limited parking, reducing the reliance upon personal vehicles which is prevalent within this part of the borough. This will assist in improving air quality, in addition to the delivery of modern sustainability standards. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a large plot with 2 storey terrace style blocks with communal garden and four terraced units of similar design on large plots. The site has been identified as potentially suitable for redevelopment. 40% of the site is at risk of surface water flooding with equal amounts in the 15-30cm range, 0-15cm range. Much of the area at risk of flooding comprises hardsurfacing which is likely impermeable and much of the flood risk area appears to be run off from the highway and existing buildings. However, some soft landscaping (e.g rear gardens) are also at risk of flooding. As the site is identified for redevelopment and due to the amount of the site identified as being at risk of surface water flooding, it would not be possible to locate new development only in areas at risk of no surface water flooding, however, redevelopment of the site would also likely change which areas of the site would be at risk of flooding due to the footprints of the buildings changing and removal of impermeable hardsurfacing. It is considered that development could be made safe for its lifetime by ensuring that permeable surfacing is utilised in addition to features such as green roofs and storage tanks. As	

the majority of the site is within the 0-30cm depth range, it is also considered that measures could be incorporated into the construction of new development such as meeting minimum finished floor levels and flood-resilient materials. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 1 Forty Close & Meeting Room Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 99% in flood zone 2 (fluvial), 4% in flood zone 3a (fluvial), 4% in flood zone 3b (fluvial) 71% in flood zone 3 surface water, flood depths are 50% in the 60-90cm range, with the remainder split evenly within the ranges 30-60 and 15-30cm ranges. Sewer flooding incidents >25%<50% susceptibility to groundwater flooding No increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Therefore has good access to transport and a range of amenities. Improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The sites are previously developed and currently consist of a large bungalow and place of worship next to Wealdstone Brook. The vast majority of the site is in FZ2 and a small proportion of the site is located within flood zones 3a and 3b (along the Wealdstone Brook which is	

sited east boundary of the site). Taking into account 70% climate change, the majority of the site becomes FZ3. The site is also at risk of reservoir flooding breach, with depths of between 0.3 and 2m with flow speed predominantly below 0.5m/s and some parts of between 0.5 and 2m/s. The site already contains a buildings located within FZ2. In order to ensure that development can be safe for its lifetime and not increase flood risk elsewhere, no development should take place within current fluvial zones 3a and 3b, and there should be no overall increase in footprint, unless this can be appropriately addressed by creating replacement capacity on site so as not to increase risk elsewhere. It is considered that redevelopment of the site could be safe for its lifetime through a number of measures, including: taking a sequential approach to development to prioritise development within FZ2 (and non-water compatible uses not being permitted in FZ3b), appropriate finished floor levels for residential above climate change +70%, flood resilient materials, safe refuge or access / egress and emergency plan. A significant proportion of the site (71%) is also at risk of surface water flooding, with flood depths 50% in the 60-90cm range, with the remainder split evenly within the ranges 30-60 and 15-30cm ranges. The potential depths increase closer to Wealdstone Brook and an overland flow path is observed from the highway to the brook, with flows over 0.25m/s on most of the site. The gardens of 1 Brook Close largely contain soft landscaping, whilst car parking for the meeting room is extensive and hardstanding, this can compound surface water flooding. It is considered that new development could be safe for its lifetime by reducing impermeable surfacing on site, incorporating SUDS, appropriate ground levels, and utilising features such as green roofs and storage tanks to reduce / control run off. A drainage strategy would reduce surface water discharge rates from the site compared to existing, thus reducing water passage into the wider drainage network and therefore likely to reduce flood risk elsewhere. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime.
Recommendation: Identify as an intensification corridor

Intensification Corridors with Over 20% Fluvial Zone 3 (including +70% climate change) subject to SFRA Level 2

Policy Ref: BD2	**Intensification Corridor Name:** 53-63 Forty Avenue, Perrin Grange, the City Learning Centre and Brook House and 58-64 Forty Avenue Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 31% in flood zone 2 (fluvial) 12% in flood zone 3 surface water with flood depths evenly split across the ranges from 0-15 up to >120cm Sewer flooding incidents >25% <50% susceptibility to groundwater flooding No increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The sites are previously developed and currently consist of detached homes on large grounds, block of flats with parking and a school. 31% of the site is located within FZ2. At 70% climate change, 29% of the site would be within FZ3. 16%of the site at risk of reservoir breach flooding, the depths are between 0.3 and up to 2 metres on nearly all of the southern site affected site and below 0.3 metres on the northern side of Forty Avenue, with flow below 0.5 m/s. . The location of existing buildings within the +70% climate change scenario means that no increase in footprint should occur, unless this can be appropriately addressed by creating replacement capacity on site so as not to increase flood risk elsewhere. It is considered that development could be made safe for its lifetime through a number of measures, including: taking a sequential approach to development and prioritising parts of the site within zone 1 for development, appropriate finished floor levels, flood resilience measures, safe access / egress. Part of the site is also at risk of surface water flooding, flood depths are evenly split across the ranges from 0-15 up to >120cm. An overland flow path is observed from Hollycroft Avenue to the gardens at the rear of the site. The rear	

gardens on the site largely consist of soft landscaping, but areas to the front of the dwellings are hardsurfaced and the land surrounding the Learning Centre is also hardsurfaced. It is likely that this hardsurfacing is impermeable and likely exacerbates surface water flood risk. Based on the small area being at risk of flooding, it is considered that future development on this site could be directed towards areas of lower risk of flooding, or flood risk managed and reduced through SUDS (e.g. through improving permeability) and / or appropriate finished floor levels above the predicted maximum surface water flood levels, amongst other measures. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Pargraves Court Forty Avenue Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 97% in flood zone 2 (fluvial) 50% in flood zone 3 surface water with the majority in the 30-60cm range and a slightly smaller area in the 15-30cm range. Sewer flooding incidents >25% <50% susceptibility to groundwater flooding More than half of the site has increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3-4 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a block of flats, with residential accommodation incorporating bedrooms at ground	

floor with parking land to the rear. The majority of the site is within FZ2, and part of the site will fall into FZ3 (fluvial) in the 25% climate change event. The majority of the site will be in FZ3a (fluvial) in the 70% climate change event. Flood heights will reach approximately 0.5 m. Approximately 80% of the site is also at risk of reservoir breach flooding, with depths of between 0.3 and 2m and flow speeds of below 0.5m/s. Development on the site should not increase the overall built footprint, unless this can be appropriately addressed by creating replacement flood storage capacity on site so as not to increase risk elsewhere. It is considered that redevelopment of the site could be safe for its lifetime by taking a sequential approach to the location of new buildings and incorporating measures in new buildings such as ensuring floor heights are above +70% climate change. Flood resilient / resistance measures should be incorporated in buildings where this is not possible. Safe egress and access to Forty Avenue should be maintained for up to a +35% event. For a 70% event, there should be sufficient safe refuge on site. An emergency plan will have to be agreed to ensure residents safety. 50% of the site is also at risk of surface water flooding, with the majority in the 30-60cm range and a slightly smaller area in the 15-30cm range. This relates to land to the front of the building (flowing from the highway) and the hardsurfaced carpark to the south east, which is likely impermeable. It is considered that redevelopment could ensure that development is safe for its lifetime and improve the existing situation by incorporating SUDS and increasing permeable surfacing on site and incorporating measures such as green roofs and storage tanks. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Esso Filling Station Ealing Road Corridor
Highest vulnerability of proposed use: Less Vulnerable	
Flood zone and other sources of flooding: 2% in flood zone 3, 48% in flood zone 2 (fluvial) Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Increased potential for elevated groundwater Not in a critical drainage area Not in a source protection zone 50% site at risk of reservoir breach	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term industrial needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: Not applicable	

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Century House Forty Avenue Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 60% in flood zone 2 (fluvial), 2% in flood zone 3a (fluvial) 15% in flood zone 3 surface water with the majority in the 30-60cm range, a smaller area in the 15-30cm range, and a very small area in the 0-15cm range. Sewer flooding incidents < 25% susceptibility to groundwater flooding More than half of the site has increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3-4 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of flats. Over half of the site is in FZ2, with a small part of the site being within FZ3a (fluvial), to the south, with approximate 1 in 100 year flood depths of 0.1m. Taking into account climate change, at 25% climate change the southern part of the site would be in FZ3a and at 70% climate change over half of the site would be in FZ3 with flood depths up to 0.7m. Just over half of the site is at risk of reservoir breach flooding, with depths between 0.3 and 2m for over half of the area affected and below 0.3m on the rest, with flow below 0.5m/s. The site already comprises blocks of flats with residential flats with bedrooms on the ground floor. New development on the site should not increase the built footprint unless this can be appropriately addressed by creating replacement capacity on site so as not to increase flood risk elsewhere. It is considered that redevelopment of the site could ensure that new development is safe for its lifetime and ensure that flood risk is not increased elsewhere by taking a sequential approach to development, prioritising development away from Forty Avenue, and other measures such as ensuring that built ground floor levels for residential accommodation are above fluvial	

climate change levels 70%, safe access / egress and emergency planning and flood resilient materials. 15% of the site is also at risk of surface water flooding, with the majority in the 30-60cm range, a smaller area in the 15-30cm range and an even smaller area in the 0-15cm range. The greatest depths are located near the highway (with the flood risk extending from the highway onto the site), with flooding occurring on front landscaping and the hardsurfaced carpark to the rear. It is considered that development could be safe for its lifetime and flood risk reduced overall elsewhere by incorporating SUDS, increasing the amount of permeable surfacing on site, and utilising features such as green roofs and storage tanks to reduce / control run off. A drainage strategy would reduce surface water discharge rates from the site compared to existing, thus reducing water passage into the wider drainage network and therefore likely to reduce flood risk elsewhere. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 460-492 Neasden Lane
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 82% in flood zone 2 (fluvial), 3% in flood zone 3a (fluvial) 27% in flood zone 3 surface water, with 50% within the 30-60cm range and the remainder in the 0-15cm and 15-30cm ranges. Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Small part of the site has increased potential for elevated groundwater Not within a source protection zone Within a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL ranges from 2-3. Also in close proximity to Neasden town centre. Close proximity to a number of parks, including the River Brent park, Welsh Harp, and Fryent Country Park. Therefore, the corridor is well provided with amenities, and well positioned to come forward with limited parking, reducing the reliance upon personal vehicles which is prevalent within this part of the borough. This will assist in improving air quality, in addition to the delivery of modern sustainability standards. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.	

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and consists of a number of terraced dwellings and commercial units with residential above. The site has been identified as being potentially suitable for redevelopment. The majority of the site is in flood zone 2(fluvial) with a small element to the north-west also located within flood zone 3a. Taking into account 25% climate change, approximately half of the site would be in flood zone 3 while 70% climate change would result in the majority of the site being in flood zone 3. The whole site is at risk of reservoir breach flooding with the majority of the site having a maximum depth of over 2m and flood speeds of between 0.5 and 2m/s, and a smaller part of the site having flood depths of between 0.3 and 2m with speeds of below 0.5m/s. Should redevelopment of the site take place, less vulnerable uses should be located at ground floor (e.g. commercial). Appropriate finished floor levels should be utilised in addition to flood resistant materials and safe refuge at upper floor levels. The site is also at risk of surface water flooding, with the majority of flooding located in the rear gardens of the existing dwellings and also to the front of some of the existing dwellings, with the majority being in the 15-30cm range but with other elements being within the 30-60cm and 0-15cm ranges. Much of this surface water flooding appears to correlate to areas of hardstanding and is likely due to impermeable surfacing and run off from existing buildings. The existing situation could be improved by redevelopment by introducing features such as green roofs and storage tanks to improve drainage and reduce risk of ponding. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Sylvia Court Harrow Road Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 100% in flood zone 2 (fluvial), 60% in flood zone 3a (fluvial) 1% in flood zone 3 surface water in the 15-30cm range Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Over half of the site has increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:
Sustainability benefits outweigh flood risk? Yes
PTAL is 2-5, with site served by local Neighbourhood Parades. The area set to experience significant growth. Current development on site does not effectively mitigate against harsh, road dominated environment which would be better considered by modern design standards. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Also adjacent to Tokyngton Recreation Ground, with sports facilities nearby. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and currently consists of a block of flats including garages and other backlands. The site is wholly within FZ2 and over half of it is within FZ3a (fluvial), and during the 70% climate change event, the whole site will be in FZ3. As the site is already developed, the existing dwellings (which already appear to have a height about 30cm above external ground levels) would flood in the region of 0.3m in a 1 in year flood event. The whole site is also at risk of reservoir flooding breach, with depths of between 0.3 and 2m and with speeds of between 0.5 and 2m/s and below 0.5m/s. Development on the site should not increase the overall built footprint unless this can be compensated for on-site or through compensation elsewhere. The existing development comprises residential flats on the ground floor, and as such redevelopment could be safe for its lifetime by ensuring that new residential ground floor heights are designed above the 1 in 100 year plus climate change event, and other measures such as flood resilient materials, safe refuge and emergency planning. Ensuring that the built footprint within Zone 3 is not increased (unless compensatory measures are agreed) will ensure that flood risk elsewhere will not be increased. A very small part of the site is at risk of surface water flooding within the 15-30cm range and relates to run off from the highway. Redevelopment of the site could ensure that development is located away from areas at risk of surface water flooding and could improve the existing situation by incorporating SUDS, increasing permeable surfacing and incorporating features such as green roofs / storage tanks to control and if necessary raised floor heights. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 494-502 Neasden Lane Corridor
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 100% in flood zone 2 (fluvial), 96% in flood zone 3a (fluvial) <25% susceptibility to groundwater flooding Sewer flooding incidents Potential for elevated groundwater Not within a source protection zone Not within a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 3. Also in close proximity to Neasden town centre. Close proximity to a number of parks, including the River Brent park, Welsh Harp, and Fryent Country Park. Therefore the corridor is well provided with amenities, and well positioned to come forward with limited parking, reducing the reliance upon personal vehicles which is prevalent within this part of the borough. This will assist in improving air quality, in addition to the delivery of modern sustainability standards. Positive impacts are anticipated due to the delivery of housing and making the most effective us of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a mix of terraced homes and areas of hardstanding to the rear. The site backs onto the canal feeder and has been identified as potentially suitable for redevelopment. The whole site is within FZ2, while the majority of the site is also within FZ3a (fluvial). Taking into account 25% climate change and above, the whole site would be in FZ3. The whole site is at risk of reservoir breach flooding with maximum depths of over 2m and maximum speeds of between 0.5 and 2m/s. The site already includes residential dwellings. It is considered that redevelopment could result in an improvement on existing through ensuring that new development provides measures such as appropriate finished floor levels, safe refuge, increasing flood storage and flood resistant materials to reduce risk of flooding compared to the current situation if left as is. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime.	
Recommendation: Identify as an intensification corridor	

Policy Ref: BD2	**Intensification Corridor Name:** 26 Harrow Road
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 100% in flood zone 3a (fluvial) Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 2-5, with site served by local Neighbourhood Parades. The area is set to experience significant growth. Current development on site does not effectively mitigate against harsh, road dominated environment which would be better considered by modern design standards. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Also immediately adjacent to Tokyngton Recreation Ground, with sports facilities nearby. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of terraced properties with ground floor commercial units and residential uppers. It has been identified as being potentially suitable for redevelopment. It is located wholly within FZ3a (fluvial). As the site is already in FZ3, with a 70% climate change event depths will increase. The whole site is also at risk of reservoir breach flooding, with depths predominantly between 0.3 and 2m and with speeds predominantly between 0.5 and 2m/s, with some areas with a speed of below 0.5m/s. As the site is already developed, the existing dwellings on site would be flooded in the 1 in 100 year flood event to a depth of around 0.4m. Should redevelopment of the site take place, it is considered that development can be safe for its lifetime and improve the existing situation by ensuring that the built footprint of the site is not increased (unless this can be compensated for on-site or elsewhere), ensuring that residential finished floor levels are designed above the 1 in 100 year + climate change event, with commercial above the 1 in 100 +35% climate change + freeboard and other measures such as flood resilient materials, safe refuge and emergency planning. Additionally, as any future redevelopment would have to accommodate the existing commercial uses, these less vulnerable uses should be located at ground floor with safe egress in case of flooding. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.	
Recommendation: Identify as an intensification corridor	

Policy Ref: BD2	**Intensification Corridor Name:** 32 Brentfield Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 100% in 3a (fluvial) 1% in flood zone 3 surface water, ranging equally from 15-30cm and 30-60cm. Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Increased potential for elevated groundwater Not in a source protection zone In a critical drainage area	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 4, with the site served by local Neighbourhood Parades. The adjacent area set to experience significant growth. Current development on site does not effectively mitigate against harsh, road dominated environment which would be better considered by modern design standards. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Nearby there is open space and sports facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed. It currently consists of semi-detached homes on large plots and has been identified as being potentially suitable for redevelopment. All of the site is within FZ2 and FZ3a (fluvial). As the site is already in FZ3, in the 70% climate change event depths will increase. Half of the site also has a reservoir breach risk of flood depths of over 2m, while the other half of the site is between 0.3m-2m. Water speeds for a breach for whole site is between 0.5 and 2m/s. As the site is previously developed, the existing dwellings on site would be flooded in the 1 in 100 year flood event in the region of 1.5m. The depths, aligned with the speed of water presents a considerable risk to existing properties and occupants. Should redevelopment of the site take place, it is considered that development can be safe for its lifetime and improve the existing situation by ensuring that residential finished floor levels are designed above the 1 in 100 year + 70% climate change event, and other measures such as flood resilient materials, safe refuge and emergency planning are incorporated. Ensuring that the built footprint on site is not increased (unless this can be compensated for on-site or elsewhere) will not increase flood risk elsewhere. In addition to fluvial flood risk, a very small element of the site on its north eastern edge is subject to surface water flood risk	

within the 15-30cm and 30-60cm ranges and appears to relate to ponding in the rear gardens of properties adjacent to the site. It is considered that redevelopment could improve the existing situation and not increase flood risk elsewhere by incorporating SUDS, increasing permeable surfacing that incorporating measures such as green roofs. For lower level flood events this will reduce the surface water discharge into the drainage network, thus potentially reducing flood risk elsewhere. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** 14 Brentfield
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 100% in flood zone 3 (fluvial) 75% in flood zone 3 surface water with the majority in the 30-60cm range, a smaller proportion within the 15-30cm range, and a very small area in the 60-90cm range. Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Increased potential for elevated groundwater In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** PTAL is 3-4, with site served by local Neighbourhood Parades. Area set to experience significant growth. Current development on site does not effectively mitigate against harsh, road dominated environment which would be better considered by modern design standards. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. This is significant as car dependency is high in this part of the borough. Also has nearby open space and sports facilities. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land.	

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes The site is previously developed and currently consists of semi-detached / terraced housing, with large plots. It has been identified as being potentially suitable for redevelopment. The site is wholly within fluvial flood zone 3a. The existing dwellings on site would be flooded in the 1 in 100 year flood event in the region of 1.5m. The depths, aligned with the speed of water presents a considerable risk to existing properties and occupants. As the site is already in FZ3, for the 70% climate change event, flood depths will increase. The whole site is at risk of reservoir breach flooding, with depths of over 2m and speeds of between 0.5 and 2m/s. Should redevelopment of the site take place, it is considered that development can be safe for its lifetime and improve the existing situation by ensuring that residential finished floor levels are designed above the 1 in 100 year + climate change event, and other measures such as flood resilient materials, safe refuge and emergency planning measures are incorporated. If the built footprint of the site is not increased (unless this can be compensated for on-site or elsewhere), flood risk will not increase elsewhere. 75% of the site is also at risk of surface water flooding, with the majority in the 30-60cm range, a smaller proportion in the 15-30cm range, and a very small area in the 80-90cm range. The areas at risk of flooding relate to front and rear gardens of existing dwellings, which have a mix of permeable and impermeable surfacing. It is considered that redevelopment could be safe for its lifetime and improve the existing situation by increasing the amount of permeable surfacing on site and incorporating measures such as green roofs and storage tanks to reduce run off rates. For lower level flood events this will reduce the surface water discharge into the drainage network, thus potentially reducing flood risk elsewhere. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.
Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Blackbird Court, Blackbird Hill Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 89% in flood zone 2 (fluvial), 54% in flood zone 3a (fluvial), 1% in flood zone 3b (fluvial) 1% in flood zone 3 surface water within the 15-30cm range Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Part of the site has increased potential for elevated groundwater	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Not within a critical drainage area Not within a source protection zone	

Exception Test:
Sustainability benefits outweigh flood risk? Yes
PTAL is 3. Also in close proximity to Neasden town centre. Close proximity to a number of parks, including the River Brent park, Welsh Harp, and Fryent Country Park. Therefore the corridor is well provided with amenities, and well positioned to come forward with limited parking, reducing the reliance upon personal vehicles which is prevalent within this part of the borough. This will assist in improving air quality, in addition to the delivery of modern sustainability standards.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes
The site is previously developed and consists of a number of terraced dwellings and flats. The site has been identified as being potentially suitable for redevelopment. The majority of the site is in flood zone 3a. Taking into account of 70% climate change would result in the majority of the site being in flood zone 3. The whole site is at risk of reservoir breach flooding with depths over 2 metres on the majority of the site, with the remainder 0.3 - up to 2 metres. Water speeds are mostly between 0.5 and 2m/s, with part adjacent to the Brook at over 2.5m/s. The site has a small area of surface water flooding. Redevelopment would allow dwellings to be pulled further away from the river Brent and provide sufficient floor heights and flood resilience and means of safe refuge/ escape compared to the existing situation where it appears ground floor flats with sleeping accommodation would be inundated. For surface water, the existing situation could be improved by redevelopment by introducing features such as green roofs and storage tanks to reduce surface water run-off rates compared to currently. Overall with appropriate design, development has the potential to reduce flood risk on and off-site due to fluvial and surface water flooding. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Talbot Court to English Martyrs RC Church Blackbird Hill Corridor
Highest vulnerability of proposed use: More Vulnerable	

Flood zone and other sources of flooding: 30% in flood zone 2 (fluvial), 4% in flood zone 3a (fluvial), 2% in flood zone 3b (fluvial) 0% in flood zone 3 surface water Sewer flooding incidents >=25% < 50% susceptibility to groundwater flooding Part of site has increased potential for elevated groundwater Not in a critical drainage area Not within a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.

Exception Test:

Sustainability benefits outweigh flood risk? Yes

PTAL ranges from 2-3. Site is equidistant to Wembley Park and Neasden town centres. Close proximity to a number of parks, including the River Brent park, Welsh Harp, and Fryent Country Park. Therefore the corridor is well provided with amenities, and well positioned to come forward with limited parking, reducing the reliance upon personal vehicles which is prevalent within this part of the borough. This will assist in improving air quality, in addition to the delivery of modern sustainability standards.

Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes

The site is previously developed and currently consists of a church with associated buildings, petrol station, supermarket with significant parking, car dealerships, bungalows and blocks of flats, including a number of access roads. Less than half of the site is in FZ2, with approximately 4% within fluvial flood zone 3a and an even smaller area in FZ3b. The area at risk of fluvial flooding relates to the south eastern part of the site, adjacent to the River Brent. At 25% climate change, part of the area which is currently in FZ2 would become FZ3, and at 70% climate change, the majority of FZ2 becomes FZ3. The south eastern part of the site is also at risk of reservoir breach, with a small area towards the River Brent having potential flood water depths of 2m, an area having a depth of between 0.3 and 2m, and an even smaller area (onto Barnhill Road) having potential of depths below 0.3m. Potential speeds range from over 2m/s (closest to the River Brent), between 0.5 and 2m/s, and an area (onto Barnhill Road) of below 0.5m/s. The area at risk of flooding already consists of residential dwellings, while commercial units are located on the ground floor further away from the river. Development will not be permitted in the part of the site within FZ3b (adjacent to the River Brent). A sequential approach should be taken to redevelopment of the site such that 'less vulnerable' uses are located on the ground floor, and 'more vulnerable' uses are not located in areas of flood risk or are located on upper floors. Appropriate finished floor levels should be utilised in addition to flood resistant/resilience measures, and other measures such as emergency planning and safe egress/ escape have the potential to reduce fluvial flood risk compared to currently. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime. Overall development of this site is likely to reduce flood risk on site and elsewhere through better management of surface water and reducing run-off from the site.

Recommendation: Identify as an intensification corridor

Policy Ref: BD2	**Intensification Corridor Name:** Richmond Court, Forty Avenue Corridor
Highest vulnerability of proposed use: More Vulnerable	
Flood zone and other sources of flooding: 100% in flood zone 2 (fluvial), 70% in flood zone 3a (fluvial), 16% in flood zone 3b (fluvial) 71% in flood zone 3 surface water with 50% in the >120cm range, with the remainder split evenly within the ranges 60-90cm and 90-120cm ranges. Half of the site has increased potential for elevated groundwater Sewer flooding incidents < 25% susceptibility to groundwater flooding In a critical drainage area Not in a source protection zone	**Sequential Test:** **Pass:** It is necessary to identify the site to address longer term housing needs as there are insufficient alternative sites in Zones 1 or 2.
Exception Test: **Sustainability benefits outweigh flood risk? Yes** Site has a PTAL of 3-4 being within close proximity to Wembley Park LUL station. Also within close proximity to Wembley Park town centre. Therefore has good access to transport and a range of amenities. Redevelopment will assist in reducing car dependence through a reduction in parking upon existing. This, along with improved sustainability standards will help improve a number of inter-related issues, including health and climate crisis. Positive impacts are anticipated due to the delivery of housing and making the most effective use of the land. **Safe for its lifetime without increasing flood risk elsewhere and where possible reducing flood risk overall? Yes** The site is previously developed and currently consists of a detached house and Richmond Court flats, with backland space. The site is wholly within FZ2, with 70% in FZ3a and 16% in 3b (fluvial). Flood depths are approximately 1m in the 1 in 100 year event. Together with the speed of flow this brings a danger for all. Taking into account climate change 25%, the whole site would be in FZ3. The site is also at risk of reservoir breach flooding, with depths of between 0.3 and 2m and flow speeds ranging from between 0.5 and 2m/s and below 0.5m/s. The site already comprises residential dwellings, including ground floor flats with bedrooms. The footprint of development should not be greater than existing, unless compensatory measures can be delivered on site so as not to increase flood risk on site and elsewhere. It is considered that redevelopment of the site could be safe for its lifetime through a number of measures, including: taking a sequential approach to development to prioritise development within FZ2 (and non-water compatible uses not being permitted in FZ3b), appropriate finished floor levels above climate change +70%, flood resilient materials, safe refuge or access / egress and agreement on an emergency plan. A	

significant proportion of the site (90%) is also at risk of surface water flooding, with equal amounts in the >1.2m and 60-90cm ranges, and smaller areas in the 30-60cm and 90cm-1.2m ranges. The potential depths increase closer to Wealdstone Brook and an overland flow path is observed from the highway to the brook, with flows over 0.25m/s on most of the site. Although the existing flats' rear gardens are soft landscaped, the parking areas to the front are hardsurfaced. It is considered that new development could be safe for its lifetime and reduce flood risk elsewhere by increasing the amount of soft landscaping or permeable surfacing on site, incorporating SUDS, ground levels, and utilising features such as green roofs and storage tanks to reduce / control run off. A drainage strategy would reduce surface water discharge rates from the site compared to existing, thus reducing water passage into the wider drainage network and therefore likely to reduce flood risk elsewhere. Other flooding risks are small. A site specific flood risk assessment should demonstrate that the development can be safe for its lifetime.
Recommendation: Identify as an intensification corridor

Appendix 7 High Level Assessment of Site Allocations and Intensification Corridors Flood Risk

Sites within Flood Zone 1 and outside Surface Water Flood Zone 3

Policy No.	Site Name	Proposed Use	Vulnerability Classification	Site Area (sqm)	Anticipated Delivery 19/20-28/29	Anticipated Delivery 29/30-40/41	Indicative Site Capacity	IIA Rating EN12A: Flood Risk from Rivers	IIA Rating EN12B: Flood Risk from Ground Water	IIA Rating EN12C: Flood Risk from Surface Water	FZ1%	FZ2 (% of site area)	FZ3a (Fluvial & Tidal - % of site area)	FZ3b (Fluvial & Tidal - % of site area)	FZ3a (Surface Water - % of site area)	Reservoir Breach Risk?	Sequential Test Required?	Exception Test Required?	Level 2 SFRA Recommended?
BCSA10	York House	Educational Establishment	More Vulnerable	7911	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BCSA13	Former Malcolm House, Empire Way	Residential / Office / Retail	More Vulnerable / Less Vulnerable	2152	100	0	100	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BCSA14	St Josephs Social Club	Residential / Community Use	More Vulnerable	3740	0	60	60	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BCSA15	Site W10 Wembley Masterplan	Retail / Office / Assembly and Leisure	More Vulnerable / Less Vulnerable	5752	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BCSA19	Wembley Park Station, Police Station and Adjacent Land Bridge Road	Residential / Police Station	Highly Vulnerable / More Vulnerable	3345	60	0	60	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BESA3	Gower House Blackbird Hill	Residential / Non-residential institution	More Vulnerable / Less Vulnerable	2310	30	0	30	Minor Positive	Minor Negative	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BNSA4	Former Mecca Bingo Site	Community / Employment / Residential	More Vulnerable / Less Vulnerable	1667	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BNSA5	Kingsbury Library and Community Centre	Community / Educational Establishment / Residential	More Vulnerable / Less Vulnerable	5360	0	27	27	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BNSA6	Ex-volkswagen Garage	Residential	More Vulnerable	3511	28	0	28	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BNSA7	Kingsbury Trade Centre - Enterprise, Hand Car Wash, Printers	Employment	More Vulnerable / Less Vulnerable	1870	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA10	Neville & Winterleys	Residential	More Vulnerable	3468	76	0	76	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA12	Wordsworth & Masefield	Educational Establishment / Non Residential Institution / Community use / Residential	More Vulnerable	5627	-40	0	-40	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	no	No	No	No
BSESA13	John Ratcliffe House	Residential	More Vulnerable	1161	-29	0	-29	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA14	William Dunbar & William Saville House	Residential	More Vulnerable	6442	66	0	66	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA15	UK Albanian Muslim Community and Cultural Centre	Community / Commercial / Residential	More Vulnerable / Less Vulnerable	607	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA16	OK Club	Community / Residential	More Vulnerable / Less Vulnerable	1660	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA18	245 - 289 Cricklewood Broadway	Residential / Commercial	More Vulnerable / Less Vulnerable	5743	40	40	80	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA19	Gaumont State Cinema	Community	Less Vulnerable	6786	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No

BSESA20	Kilburn Square	Residential / Retail / Market and Open Public Square	More Vulnerable / Less Vulnerable	11013	50	50	100	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA22	Queen's Parade	Residential / Student Accommodation / Commercial	More Vulnerable / Less Vulnerable	632	42	0	42	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA23	Former Willesden Green police station	Residential / Employment	More Vulnerable / Less Vulnerable	1380	20	0	20	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA24	Kilburn Station arches	Employment	Less Vulnerable	551	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA27	Car wash Strode Road	Residential	More Vulnerable	627	4	0	4	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA28	80 Strode Road	Residential	More Vulnerable	1839	10	0	10	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA3	Carlton House	Residential	More Vulnerable	2942	100	0	100	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA30	61-65 Shoot up Hill	Residential / Non residential institution (doctors' surgery)	More Vulnerable	2935	0	20	20	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA32	45 - 54 Cricklewood Broadway	Residential / Commercial	More Vulnerable / Less Vulnerable	786	10	0	10	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA33	123 - 129 Cricklewood Broadway	Residential / Commercial	More Vulnerable / Less Vulnerable	680	0	12	12	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA35	303 - 309 Cricklewood Broadway	Residential / Business	More Vulnerable / Less Vulnerable	2701	0	12	12	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA5	Craik	Residential	More Vulnerable	2720	-50	0	-50	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSESA9	Kilburn Park Junior School	Open space	Water compatible	4662	0	0	0	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSSA12	296-300 High Road	Mixed-use	More Vulnerable / Less Vulnerable	898	8	0	8	Minor Positive	Minor Negative	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSSA13	Learie Contantine Centre	Mixed-use	More Vulnerable / Less Vulnerable	318	26	0	26	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSSA14	Morland Gardens	Residential	More Vulnerable	3026	60	0	60	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSSA16	Mordaunt Road	Residential / Commercial	More Vulnerable / Less Vulnerable	1103	8	0	8	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSSA5	Willesden Bus Depot	Residential / Employment / Sui Generis (bus depot) / Drinking Establishment	More Vulnerable / Less Vulnerable	9653	30	30	60	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSSA8	McGovern's Yard	Residential / Employment	More Vulnerable / Less Vulnerable	3695	50	0	50	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSWSA11	Wembley Cutting North, Mostyn Avenue	Residential	More Vulnerable	1242	15	0	15	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
BSWSA14	Sudbury Town Station car park	Residential	More Vulnerable	2149	30	0	30	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	0%	No	No	No	No
Harlesden NP	Car sales at junction of High Street and Furness Road	Residential	More Vulnerable	835	5	0	5	Not assessed in IIA	Not assessed in IIA	Not assessed in IIA	100%	0%	0%	0%	0%	No	No	No	No
Harlesden NP	Land at Challenge Close	Residential	More Vulnerable	1964	0	10	10	Not assessed in IIA	Not assessed in IIA	Not assessed in IIA	100%	0%	0%	0%	0%	No	No	No	No

Harlesden NP	Harley Road	Residential	More Vulnerable	868	7	0	7	Not assessed in IIA	Not assessed in IIA	Not assessed in IIA	100%	0%	0%	0%	0%	No	No	No	No
Harlesden NP	Former Willesden Ambulance Station	Residential	More Vulnerable	772	8	0	8	Not assessed in IIA	Not assessed in IIA	Not assessed in IIA	100%	0%	0%	0%	0%	No	No	No	No
Harlesden NP	Harlesden Plaza	Residential	More Vulnerable	9293	120	88	208	Not assessed in IIA	Not assessed in IIA	Not assessed in IIA	100%	0%	0%	0%	0%	No	No	No	No
Harlesden NP	Salvation Army & Manor Park Works	Residential	More Vulnerable	0	45	0	45	Not assessed in IIA	Not assessed in IIA	Not assessed in IIA	100%	0%	0%	0%	0%	No	No	No	No
Total					**929**	**349**	**1278**												

Fluvial Flood Zone 1 but with a small element of surface water (under 20%) within Flood Zone 3

Policy No.	Site Name	Proposed Use	Vulnerability Classification	Site Area (sqm)	Anticipated Delivery 19/20-28/29	Anticipated Delivery 29/30-40/41	Indicative Site Capacity	IIA Rating EN12A: Flood Risk from Rivers	IIA Rating EN12B: Flood Risk from Ground Water	IIA Rating EN12C: Flood Risk from Surface Water	FZ1%	FZ2 (% of site area)	FZ3a (Fluvial & Tidal - % of site area)	FZ3b (Fluvial & Tidal - % of site area)	FZ3a (Surface Water - % of site area)	Reservoir Breach Risk?	Sequential Test Required?	Exception Test Required?	Level 2 SFRA Recommended?
BCSA18	Site W12 Wembley Park Boulevard	Retail / Financial and Professional Services / Café and Restaurant / Drinking Establishment / Non residential institution / Assembly and Leisure	More Vulnerable / Less Vulnerable	1109	0	0	0	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	1%	No	No	No	No
BSWSA5	Abbey Industrial Estate	Residential / Employment / Retail / Commercial / Leisure and Assembly / Community use (e.g. nursery)	More Vulnerable	26317	450	40	490	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No
BSWSA13	Wembley Police & Fire Stations and Wembley Community Hospital	Retail existing police , fire and health facilities / Community use / Residential	Highly Vulnerable / More Vulnerable	38943	0	0	0	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No
BSWSA16	Carphone Warehouse 416 Ealing Road	Residential / Employment / Commercial / Leisure and Assembly	More Vulnerable / Less Vulnerable	4995	80	0	80	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No
BSSA1	Asiatic Carpets	Residential / Employment / Community facilities	More Vulnerable / Less Vulnerable	34713	154	260	414	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No
BSWSA1	Alperton Industrial Sites	Residential / General Industrial / Storage and Distribution / Commercial	More Vulnerable / Less Vulnerable	53908	900	300	1200	Minor Positive	Neutral	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No
BNWSA1	Kenton Road Sainsbury's and adjoining land	Residential / Retail	More Vulnerable / Less Vulnerable	24461	150	0	150	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No
BSSA3	Church End Local Centre	Residential / Commercial / Market	More Vulnerable / Less Vulnerable	9720	99	96	195	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	1%	No	Yes	Yes	No

BCSA9	First Way	Residential / Student Accommodation / Educational Intuition / Business	More Vulnerable / Less Vulnerable	44420	826	436	1262	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSWSA9	Former Copland School	Residential / Mixed Use / Community	More Vulnerable / Less Vulnerable	8401	250	0	250	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSWSA8	Wembley High Road	Mixed-use	More Vulnerable	30088	423	227	650	Minor Positive	Minor Positive	Minor Positive	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSWSA4	Sunleigh Road	Mixed-use	More Vulnerable	19028	237	158	395	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSSA10	Dudden Hill Community Centre	Residential / Community Use	More Vulnerable / Less Vulnerable	1974	25	0	25	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSWSA2	Sainsbury's Alperton	Residential / Retail	More Vulnerable / Less Vulnerable	30688	0	200	200	Minor Positive	Neutral	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSWSA17	Former Wembley Youth Centre/ Dennis Jackson Centre London Road	Residential / Community Use	More Vulnerable / Less Vulnerable	9619	170	0	170	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSWSA15	Employment Land on Heather Park Drive	Residential / Employment	More Vulnerable / Less Vulnerable	5477	36	14	50	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BCSA12	Land to South of South Way	Residential / General Industry / Storage and Distribution	More Vulnerable / Less Vulnerable	16520	0	500	500	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSESA21	Willesden Green Sainsbury's and garages	Residential / Retail / Employment	More Vulnerable / Less Vulnerable	12472	25	25	50	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSESA26	Park Avenue North Substation	Residential	More Vulnerable	3434	2	0	2	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	2%	No	Yes	Yes	No
BSSA9	Barry's Garage	Residential / Employment / Community space	More Vulnerable / Less Vulnerable	5558	40	0	40	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	3%	No	Yes	Yes	No
BSWSA12	Keelers Service Centre, Harrow Road, Wembley	Residential / Commercial / Employment (business use class)	More Vulnerable / Less Vulnerable	733	22	0	22	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	3%	No	Yes	Yes	No
BNWGA1	Northwick Park Growth Area	Residential / Hospital and medical facilities / Educational Establishment / Sports pavilion / Commercial /	More Vulnerable / Less Vulnerable	305159	1300	1300	2600	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	3%	No	Yes	Yes	No
BCSA5	Olympic Office Centre	Main town centre uses / Educational Institution / Residential	More Vulnerable / Less Vulnerable	4467	0	0	0	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	3%	Yes	Yes	Yes	No
BSSA2	B&M Home Store & Cobbold Industrial Estate	Mixed-use	More Vulnerable	29997	0	160	160	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	3%	No	Yes	Yes	No
BCSA7	Wembley Park Station (North & South)	Residential / Office	More Vulnerable / Less Vulnerable	14013	375	100	475	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	3%	No	Yes	Yes	No

BSESA6	Crone & Zangwill	Residential	More Vulnerable	5151	50	0	50	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	4%	No	Yes	Yes	No
BSWSA10	Elm Road	Residential / Hotel / Community facilities / Main town centre uses	More Vulnerable / Less Vulnerable	29818	400	0	400	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	5%	No	Yes	Yes	No
BSESA29	Willesden Telephone Exchange	Residential / Employment	More Vulnerable / Less Vulnerable	2832	0	20	20	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	5%	No	Yes	Yes	No
BESA2	Cricklewood Bus Garage	Residential / replacement bus depot / offices	More Vulnerable / Less Vulnerable	15131	0	202	202	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	5%	No	Yes	Yes	No
BSESA34	Kilburn Park Underground Station	Station / Commercial / Residential	More Vulnerable / Less Vulnerable	947	20	0	20	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	5%	No	Yes	Yes	No
BSSA17	Harlesden Railway Generating Station	Employment	Less Vulnerable	1601	0	0	0	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	6%	No	Yes	No	No
BCSA1	ASDA Wembley	Retail / Residential / Pub or Community Use	More Vulnerable / Less Vulnerable	34616	78	407	485	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	6%	No	Yes	Yes	No
BSESA4	Carlton Infant School	Residential	More Vulnerable	4144	62	0	62	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	6%	No	Yes	Yes	No
BNSA1	Capitol Way Valley	Residential / Retail / Employment	More Vulnerable / Less Vulnerable	126121	414	686	1100	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	6%	No	Yes	Yes	No
BSWSA3	Atlip Road	Residential / Assembly and Leisure / Town Centre uses	More Vulnerable / Less Vulnerable	12374	294	41	335	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	7%	No	Yes	Yes	No
BSESA11	Old Granville Open Space	Residential / Open Space	More Vulnerable	2247	20	0	20	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	8%	No	Yes	Yes	No
BSWSA6	Beresford Avenue	Residential / Employment	More Vulnerable / Less Vulnerable	9585	137	0	137	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	8%	No	Yes	Yes	No
BSSA18	Harlesden Telephone Exchange	Residential / Commercial	More Vulnerable / Less Vulnerable	3958	26	26	52	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	10%	No	Yes	Yes	No
BSSA19	Chancel House	School	More Vulnerable	7998	0	0	0	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	11%	No	Yes	Yes	No
BSESA7	Dickens	Residential	More Vulnerable	4161	-38	0	-38	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	12%	No	Yes	Yes	No
BSESA2	Blake	Residential	More Vulnerable	6806	51	0	51	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	12%	No	Yes	Yes	No
BNSA2	Colindale Retail Park, Multi-Storey Car Park, Car Showroom and Southon House	Residential / Retail / Employment	More Vulnerable / Less Vulnerable	40285	200	300	500	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	12%	No	Yes	Yes	No
BSESA17	Cricklewood Broadway Retail Park	Residential / Commercial	More Vulnerable / Less Vulnerable	23198	200	180	380	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	13%	No	Yes	Yes	No
BSSA15	Harlesden Station junction	Residential / Commercial	More Vulnerable / Less Vulnerable	665	3	0	3	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	13%	No	Yes	Yes	No
BSSA11	Euro car rental	Residential	More Vulnerable	4518	10	15	25	Minor Positive	Minor Negative	Minor Negative	100%	0%	0%	0%	16%	No	Yes	Yes	No
BSSA4	Chapman's and Sapcote Industrial Estate	Residential / Employment / Community use	More Vulnerable / Less Vulnerable	31425	200	100	300	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	16%	No	Yes	Yes	No

BSESA1	Austen	Residential / Community Use / Leisure and Assembly	More Vulnerable / Less Vulnerable	2605	99	0	99	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	19%	No	Yes	Yes	No
Total					**7790**	**5793**	**13583**												

Sites with Small Proportions (under 20%) of Fluvial Zone 3

Policy No.	Site Name	Proposed Use	Vulnerability Classification	Site Area (sqm)	Anticipated Delivery 19/20-28/29	Anticipated Delivery 29/30-40/41	Indicative Site Capacity	IIA Rating EN12A: Flood Risk from Rivers	IIA Rating EN12B: Flood Risk from Ground Water	IIA Rating EN12C: Flood Risk from Surface Water	FZ1%	FZ2 (% of site area)	FZ3a (Fluvial & Tidal - % of site area)	FZ3b (Fluvial & Tidal - % of site area)	FZ3a (Surface Water - % of site area)	Reservoir Breach Risk?	Sequential Test Required?	Exception Test Required?	Level 2 SFRA Recommended?
BCSA4	Fifth Way/ Euro Car Parts	Residential / Hotel / Student Accommodation / Business / General Industrial / Storage and Distribution	More Vulnerable / Less Vulnerable	12909	500	0	500	Neutral	Minor Positive	Minor Negative	99%	1%	0%	0%	2%	Yes	Yes	Yes	No
BCSA8	Wembley Retail Park	Mixed Use Residential Led Development	More Vulnerable / Less Vulnerable	50698	2180	0	2180	Minor Positive	Minor Positive	Minor Negative	99%	1%	0%	0%	11%	Yes	Yes	Yes	No
BEGA2	Staples Corner Growth Area	Residential / Business / General Industrial / Storage and Distribution	More Vulnerable / Less Vulnerable	427236	0	2400	2400	Neutral	Neutral	Minor Negative	99%	1%	0%	1%	2%	Yes	Yes	Yes	No
BNSA3	Queensbury LSIS and Morrisons	Residential / Retail / Employment	More Vulnerable / Less Vulnerable	82380	194	189	383	Neutral	Minor Positive	Minor Negative	85%	15%	0%	0%	14%	No	Yes	Yes	No
BSWSA7	Northfields	Mixed Use Residential Led Scheme	More Vulnerable / Less Vulnerable	91644	1374	1656	3030	Minor Negative	Minor Negative	Minor Negative	78%	22%	14%	1%	6%	Yes	Yes	Yes	No
Total					**4248**	**4245**	**8493**												

Sites with Over 20% Surface Water Zone 3 subject to SFRA Level 2

Policy No.	Site Name	Proposed Use	Vulnerability Classification	Site Area (sqm)	Anticipated Delivery 19/20-28/29	Anticipated Delivery 29/30-40/41	Indicative Site Capacity	IIA Rating EN12A: Flood Risk from Rivers	IIA Rating EN12B: Flood Risk from Ground Water	IIA Rating EN12C: Flood Risk from Surface Water	FZ1%	FZ2 (% of site area)	FZ3a (Fluvial & Tidal - % of site area)	FZ3b (Fluvial & Tidal - % of site area)	FZ3a (Surface Water - % of site area)	Reservoir Breach Risk?	Sequential Test Required?	Exception Test Required?	Level 2 SFRA Recommended?
BEGA1	Neasden Stations Growth Area	Residential / Business / General Industrial / Storage and Distribution / New passenger railway line infrastructure	More Vulnerable / Less Vulnerable	117904	900	1100	2000	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	15%	Yes	Yes	Yes	Yes
BSESA31	Turpin's Yard	Residential / Employment	More Vulnerable / Less Vulnerable	3773	8	0	8	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	25%	No	Yes	Yes	Yes
BSESA25	Park Avenue Garage	Residential	More Vulnerable	2347	70	0	70	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	25%	No	Yes	Yes	Yes

BCSA16	Site NW04 Wembley Masterplan	Retail / Financial and Professional Services / Café and Restaurant / Hot Food Takeaway/ Hotel / Assembly and Leisure / Non Residential Institutions	More Vulnerable / Less Vulnerable	3542	0	0	0	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	27%	No	Yes	Yes	Yes
BSESA8	Hereford House & Exeter	Residential / Open Space	More Vulnerable	8974	96	0	96	Minor Positive	Minor Positive	Minor Negative	100%	0%	0%	0%	36%	No	Yes	Yes	Yes
BNSA8	Queensbury Underground Station Car Park	Residentia / Car Park	More Vulnerable / Less Vulnerable	2000	36	0	36	Minor positive	Minor Positive	Major Negative	100%	0%	0%	0%	71%	No	Yes	Yes	Yes
Total					**1110**	**1100**	**2210**												

Sites with Over 20% Fluvial one 3 (including +70% climate change) subject to SFRA Level 2

Policy No.	Site Name	Proposed Use	Vulnerability Classification	Site Area (sqm)	Anticipated Delivery 19/20-28/29	Anticipated Delivery 29/30-40/41	Indicative Site Capacity	IIA Rating EN12A: Flood Risk from Rivers	IIA Rating EN12B: Flood Risk from Ground Water	IIA Rating EN12C: Flood Risk from Surface Water	FZ1%	FZ2 (% of site area)	FZ3a (Fluvial & Tidal - % of site area)	FZ3b (Fluvial & Tidal - % of site area)	FZ3a (Surface Water - % of site area)	Reservoir Breach Risk?	Sequential Test Required?	Exception Test Required?	Level 2 SFRA Recommended?
BCSA2	Stadium Retail Park (Fulton Quarter)	Residential-Led Mixed Use Development	More Vulnerable / Less Vulnerable	16771	644	322	966	Neutral	Minor Positive	Minor Negative	51%	49%	0%	0%	37%	Yes	Yes	Yes	Yes
BCSA6	Watkin Road	Residential / Commercial	More Vulnerable / Less Vulnerable	14098	692	138	830	Minor Negative	Minor Positive	Minor Negative	12%	88%	17%	0%	18%	Yes	Yes	Yes	Yes
BESA1	Coombe Road	Residential / Business / General Industrial / Storage and Distribution / Main town centre uses	More Vulnerable / Less Vulnerable	13546	79	117	196	Minor Negative	Minor Negative	Minor Positive	0%	100%	26%	0%	0%	Yes	Yes	Yes	Yes
BSSA7	Bridge Park & Unisys	Assembly and Leisure / Residential / Commercial / Community use	More Vulnerable / Less Vulnerable	27199	275	230	505	Major Negative	Minor Negative	Minor Negative	0%	100%	100%	0%	15%	Yes	Yes	Yes	Yes
BCSA3	Brook Avenue	Residential / Hotel / Retail & Other Town Centre Uses	More Vulnerable / Less Vulnerable	19017	80	370	450	Major Negative	Minor Positive	Major Negative	42%	58%	55%	2%	65%	Yes	Yes	Yes	Yes
BCSA11	College of North West London Wembley	Residential-Led Mixed Use Development	More Vulnerable / Less Vulnerable	3740	155	0	155	Minor Negative	Minor Positive	Major Negative	22%	78%	17%	16%	68%	Yes	Yes	Yes	Yes
BSSA6	Argenta House & Wembley Point	Residential / Employment / Commercial / Retail	More Vulnerable	12203	569	0	569	Major Negative	Minor Negative	Minor Negative	0%	100%	99%	72%	36%	Yes	Yes	Yes	Yes
Total					**2494**	**1177**	**3671**												

Intensification Corridors within Flood Zone 1 and outside Surface Water Flood Zone 3

Policy No.	Corridor Name	Proposed Use	Vulnerability Classification	Site Area (sqm)	Rating in IIA	FZ1?	FZ2 (% of site area)	FZ3a (Fluvial & Tidal - % of site area)	FZ3b (Fluvial & Tidal - % of site area)	FZ3a (Surface Water - % of site area)	Reservoir Breach Risk?	Sequential Test Required?	Exception Test Required?	Level 2 SFRA Recommended?
BD2	41-685 Kenton Road Corridor - except 327-383	Residential	More Vulnerable	45176	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
BD2	Edgware Road (South) Corridor	Residential/ Commercial / Assembly and Leisure	More Vulnerable / Less Vulnerable	7676	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
BD2	High Road, Willesden Corridor	Residential	More Vulnerable	2956	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
BD2	Neasden Lane, Crispin Close, Berkeley Court Corridor	Residential	More Vulnerable	15505	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
BD2	Foxholt Gardens and Hillside Corridor	Residential	More Vulnerable	5129	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	Yes	No	No	No
BD2	Cromwell Court and 412 Ealing Road Corridor	Residential	More Vulnerable	81379	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
BD2	70 - 167 Harrow Road and 92 - 176 Harrow Road Corridor	Residential	More Vulnerable	77973	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
BD2	50 Forty Avenue	Residential / Non-Residential institution	More Vulnerable / Less Vulnerable	3407	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	0%	No	No	No	No
Intensification Corridors with a small element of surface water (under 20%) within Flood Zone 3														
BD2	Fryent Way Corridor	Residential	More Vulnerable	26464	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	1%	No	Yes	Yes	No
BD2	Forty Lane, Blackbird Hill and Neasden Lane North Corridor excluding area near River Brent and Brent Feeder	Residential/Commercial	More Vulnerable/Less Vulnerable	26653	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	1%	No	Yes	Yes	No
BD2	Dudden Hill Lane, Willesden High Road Corridor	Residential / Commercial	More Vulnerable / Less Vulnerable	21449	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	1%	No	Yes	Yes	No

BD2	Bridgewater Road Corridor	Residential	More Vulnerable	27962	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	1%	No	Yes	Yes	No
BD2	Dudden Hill Lane Corridor	Residential / Storage and distribution / Commercial / Non-Residential institution / Assembly and Leisure	More Vulnerable / Less Vulnerable	41006	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	1%	No	Yes	Yes	No
BD2	Craven Park Corridor	Residential	More Vulnerable	6878	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	1%	No	Yes	Yes	No
BD2	Kingsbury Road Corridor	Residential	More Vulnerable	14009	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	2%	No	Yes	Yes	No
BD2	Harrow Road Sudbury Corridor	Residential	More Vulnerable	24569	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	2%	No	Yes	Yes	No
BD2	Kenbrook Forty Avenue	Residential	More Vulnerable	12610	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	2%	No	Yes	Yes	No
BD2	Honeypot Lane Corridor	Residential	More Vulnerable	11899	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	3%	No	Yes	Yes	No
BD2	Colindale Edgware Road Corridor	Residential	More Vulnerable	5794	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	3%	No	Yes	Yes	No
BD2	Wembley Park Drive Corridor	Residential	More Vulnerable	80915	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	3%	No	Yes	Yes	No
BD2	Ealing Road (North) Corridor	Residential / Commercial / Non-Residential institution/ Assembly and Leisure	More Vulnerable / Less Vulnerable	38631	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	3%	No	Yes	Yes	No
BD2	Bridgewater Court, Fernwood Avenue, Barnham Close, Harrow Road Corridor	Residential / Commercial	More Vulnerable / Less Vulnerable	38522	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	3%	No	Yes	Yes	No
BD2	231-255 and 248-298 Harrow Road Corridor	Residential/ Non-Residential institution / Commercial	More Vulnerable / Less Vulnerable	10884	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	4%	No	Yes	Yes	No
BD2	82-140 The Mall Corridor	Residential	More Vulnerable	8787	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	5%	No	Yes	Yes	No

BD2	Empire Way Corridor	Residential	More Vulnerable	26653	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	5%	No	Yes	Yes	No
BD2	Harrow Road (East) Corridor	Residential / Restaurant and Café / Drinking Establishment / Sui Generis (police station and post office sorting office)	More Vulnerable / Less Vulnerable	50864	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	5%	No	Yes	Yes	No
BD2	Willesden Lane (North)	Residential / Assembly and Leisure / Commercial	More Vulnerable / Less Vulnerable	42402	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	5%	No	Yes	Yes	No
BD2	Site at The Mall & Kenton Road Corridor	Residential / Commercial	More Vulnerable/Less Vulnerable	12677	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	7%	No	Yes	Yes	No
BD2	Willesden Lane (South)	Residential	More Vulnerable	10135	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	8%	No	Yes	Yes	No
BD2	56 Watford Road Corridor	Residential	More Vulnerable	5807	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	10%	No	Yes	Yes	No
BD2	Sattavis Gam Patidar Centre, Forty Avenue	Residential / Commercial	More Vulnerable / Less Vulnerable	3449	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	16%	No	Yes	Yes	No
BD2	Brunel Court High Street Harlesden	Residential	More Vulnerable	6496	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	18%	No	Yes	Yes	No
Intensification Corridors with Small Proportions (under 20%) of Fluvial Zone 3														
BD2	57 Harrow Road	Residential	More Vulnerable	3837	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	99%	1%	0%	0%	0%	Yes	Yes	Yes	No
BD2	76 Harrow Road	Residential / Commercial	More Vulnerable / Less Vulnerable	5749	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	95%	5%	1%	0%	0%	Yes	Yes	Yes	No
BD2	Ainslie Court Ealing Road Corridor	Residential	More Vulnerable	6507	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	94%	6%	0%	0%	5%	Yes	Yes	Yes	No

BD2	327-383 Kenton Road Corridor	Residential / Bar and Restaurant / Commercial	More Vulnerable	15985	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	85%	15%	0%	0%	7%	No	Yes	Yes	No
Intensification Corridors with Over 20% Surface Water Zone 3 subject to SFRA Level 2														
BD2	Springhill House, Willesden Lane	Residential	More Vulnerable	2459	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	21%	No	Yes	Yes	Yes
BD2	84-98 Wembley Park Drive Corridor	Residential	More Vulnerable	5302	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	0%	0%	0%	30%	No	Yes	Yes	Yes
BD2	438-444 Neasden Lane and Pitt House	Residential	More Vulnerable	4589	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	0%	0%	0%	40%	Yes	Yes	Yes	Yes
BD2	1 Forty Close & meeting room	Residential/place of worship	More Vulnerable/ Less Vulnerable	1552	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	100%	99%	3%	3%	71%	Yes	Yes	Yes	Yes
Intensification Corridors with over 20% Fluvial Zone 3 (including +70% climate change) subject to SFRA Level 2														
BD2	53-63 Forty Avenue, Perrin Grange, the City Learning Centre and Brook House and 58-64 Forty Avenue	Residential / Educational Establishment	More Vulnerable	11873	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	69%	31%	0%	0%	12%	Yes	Yes	Yes	Yes
BD2	Pargraves Court Forty Avenue	Residential	More Vulnerable	2336	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	3%	97%	0%	0%	50%	Yes	Yes	Yes	Yes
BD2	Esso Filling Station Ealing Road	Industrial	Less Vulnerable	1614	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	52%	48%	2%	0%	0%	Yes	Yes	No	Yes
BD2	Century House Forty Avenue	Residential	More Vulnerable	3948	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	40%	60%	2%	0%	15%	Yes	Yes	Yes	Yes
BD2	460-492 Neasden Lane	Residential/Commercial	More Vulnerable/Less Vulnerable	4258	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	18%	82%	3%	0%	27%	Yes	Yes	Yes	Yes
BD2	Sylvia Court Harrow Road	Residential	More Vulnerable	2997	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	100%	60%	0%	0%	Yes	Yes	Yes	Yes

BD2	494-502 Neasden Lane	Residential/Commercial	More Vulnerable/Less Vulnerable	909	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	100%	96%	0%	0%	Yes	Yes	Yes	Yes
BD2	26 Harrow Road	Residential / Commercial	More Vulnerable / Less Vulnerable	3559	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	100%	100%	0%	0%	Yes	Yes	Yes	Yes
BD2	32 Brentfield	Residential	More Vulnerable	1178	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	100%	100%	0%	1%	Yes	Yes	Yes	Yes
BD2	14 Brentfield	Residential	More Vulnerable	3599	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	100%	100%	0%	75%	Yes	Yes	Yes	Yes
BD2	Blackbird Court, Blackbird Hill	Residential/Commercial	More Vulnerable/Less Vulnerable	1454	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	10%	90%	54%	1%	1%	Yes	Yes	Yes	Yes
BD2	Talbot Court to English Martyrs RC Church Blackbird Hill	Residential/Commercial	More Vulnerable/Less Vulnerable	21520	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	70%	30%	4%	2%	0%	Yes	Yes	Yes	Yes
BD2	Richmond Court Forty Avenue	Residential	More Vulnerable	2536	Policy BD2: Tall Buildings Rating against EN12 (Flood Risk): Neutral	0%	100%	70%	16%	71%	Yes	Yes	Yes	Yes