5. THE PROPOSED DEVELOPMENT SCENARIOS

INTRODUCTION

5.1 This chapter describes the content of the three applications according to the four possible Development Scenarios (refer to Chapter 1: Introduction) with reference to the planning application descriptions, drawings and the Design and Access Statements produced by Kohn Pedersen Fox (KPF), Benson and Forsyth, and Lynch Architects. A selection of detailed planning application drawings are presented in Volume 2 of this Environmental Statement (ES).

5.2 A description of the anticipated demolition and construction sequence, together with the anticipated programme of works for each of the Development Scenarios, is outlined separately within Chapter 6: Demolition and Construction.

5.3 In order to avoid unnecessary repetition, this chapter focuses on describing the individual elements of all applications, i.e. each building and area of public realm together with basement proposals for the VTI2 development. However, where relevant and necessary, for clarity, reference is made to the individual Development Scenarios.

OVERVIEW OF VTI2

5.4 As described in Chapter 1: Introduction, three separate applications have been submitted for approval by Westminster City Council (WCC). The application boundaries are shown on planning application drawings 201-MA-A-DR-M0100, 201-MA-A-DR-M0101 and 201-MA-A-DR-M0102. Chapter 1: Introduction provides the description of the applications as set out within the three planning application forms.

5.5 By virtue of the three applications, the Applicant is seeking full planning permission for the demolition of all existing buildings within the application sites together with their comprehensive mixed-use redevelopment.

5.6 The three applications include five buildings, known as Buildings 5, 6a, 6b, 7a and 7b&c, located between Victoria Street, Bressenden Place and Buckingham Palace Road.

5.7 As described in Chapter 1: Introduction, in principle, the permissions resulting from the three applications could be developed in their own right as self-standing developments, or in combination with one another to form the larger VTI2 development. However, it is envisaged that only one of four possible Development Scenarios would be implemented, and that this would be enforced through the use of suitable planning conditions and obligations. These Development Scenarios are set out below and shown on Figure 1.4.

- Development Scenario 1 – Applications 1, 2 and 3 together, i.e. Buildings 5, 6a, 6b, 7a and 7b&c, public realm, pedestrian routes and basement levels;
- Development Scenario 2 – Applications 1 and 2 together, i.e. Buildings 5, 6b, 7a and 7b&c, public realm, pedestrian routes and basement levels;
- Development Scenario 3 – Applications 1 and 3 together, i.e. Buildings 5, 6a, 6b, and 7a, public realm , pedestrian routes and basement levels; and
- Development Scenario 4 – Application 1 only, i.e. Buildings 5, 6b, and 7a, public realm, pedestrian routes and basement levels.

5.8 All four Development Scenarios would accommodate the current known plans for future planned transport improvements associated with the District and Circle London Underground Limited (LUL) line station and Transport for London's (TfL's) and LUL's Victoria Station Upgrade (VSU) (subject to LUL obtaining necessary orders in an appropriate form), together with separate proposals for the Chelsea-Hackney Line (Crossrail 2).

5.9 In addition, any of the four Development Scenarios would improve pedestrian permeability within, through, to and from the three application sites and would provide a significant amount of new public realm.

5.10 The overall proposals for VTI2 have been designed by a team of three architectural firms:

- Kohn Pedersen Fox Architects (KPF) (Masterplan architect, Buildings 6a, 6b and 7a and basement);
- Benson and Forsyth (Building 5); and
- Lynch Architects (Building 7b&c).

5.11 The total amount of floorspace proposed within each application and Development Scenario is set out within Tables 5.1 and 5.2.

Table 5.1: Proposed Total Floorspace by Land Use for each Application

Land Use and Class	Gross External Area (GEA) m^2 per Development Application		
	1	**2**	**3**
Office (B1).	65,653	2,829	13,844
Retail (Class A1 to A5).	11,497	935	302
Residential (Class C3).	31,006	4,228	0
Flexible Space (B1/D1).	0	1,525	0
Flexible Space (A1 to A5/D1).	0	127	0
Total	**108,156**	**9,644**	**14,146**

Table 5.2: Proposed Total Floorspace by Land Use for each Development Scenario

Land Use and Class	Gross External Area (GEA) m^2 per Development Scenario			
	1	**2**	**3**	**4**
Office (B1).	82,326	68,482	79,497	65,653
Retail (Class A1 to A5).	12,734	12,432	11,799	11,497
Residential (Class C3).	35,234	35,234	31,006	31,006
Flexible Space (B1/D1).	1,525	1,525	0	0
Flexible Space (A1t o A5/D1).	127	127	0	0
Total	**131,946**	**117,800**	**122,302**	**108,156**

PLANNING APPLICATION DRAWINGS

5.12 A series of planning application drawings have been submitted to Westminster City Council (WCC) for approval and have formed the basis of the Environmental Impact Assessment (EIA). A selection of planning application drawings are presented in Volume 2 of this ES. These are listed in Table 5.3.

Table 5.3: Planning Application Drawings Included in this ES

Planning Application Drawing Reference	Title
201-MA-A-DR-M0100	VTI2 Masterplan Planning Application 1 Boundary.
201-MA-A-DR-M0101	VTI2 Masterplan Planning Application 2 Boundary.
201-MA-A-DR-M0102	VTI2 Masterplan Planning Application 3 Boundary.
201A-5G-A-DR-5100	Building 5 Ground Floor Plan.
201-6AG-A-DR-60100	Building 6a Ground Floor Plan.
201-6BG-A-DR-60100	Building 6b Ground Floor Plan.
201-7G-A-DR-70100	Building 7a Ground Floor Plan.
201C-7b&7cBG-A-DR-201	Building 7b&7c Basement and Ground Floor Plan.
201-MB-A-DR-M0094	Basement 2 Level (Independent of re-routed VSU PAL).
201-MB-A-DR-M0095	Basement 1 Level (Independent of re-routed VSU PAL).
201-MB-A-DR-M0096	Basement 2 Level (Independent of VSU PAL).
201-MB-A-DR-M0097	Basement 1 Level (Independent of VSU PAL).
201-MB-A-DR-M0098	Basement 2 Level.
201-MB-A-DR-M0099	Basement 1 Level .
201-MG-A-DR-M0100	Masterplan Ground Floor Level.
201-MR-A-DR-M0199	Masterplan Roof Level.
201-ME-A-DR0M0200	Buckingham Palace Road West Elevation.
201-ME-A-DR0M0201	Bressenden Place North Elevation.
201-ME-A-DR0M0202	Victoria Street South Elevation.
201-ME-A-DR0M0203	Bressenden Place East Elevation.
201-ML-A-DR-M0100	Masterplan Landscape Ground Floor Level.

ARRANGEMENT OF BUILDINGS

5.13 Planning application drawings 201A-5G-A-DR-5100, 201-6AG-A-DR-60100, 201-6BG-A-60100 and 201C-7b&7cBG-A-DR-201 show the ground floor layout of the five buildings proposed by all three applications. Drawings 201-MG-A-DR-M0100 and 201MR-A-DR-M0199 are indicative Masterplan drawings of the overall VTI2 development from which the layout and siting of the five buildings across the application sites at ground floor and roof level can be identified.

5.14 The siting of the buildings has been influenced by the need to ensure that pedestrian routes and desire lines are respected and well defined in order to improve orientation and legibility. In addition, the new buildings would be situated to enable physical and visual connections with the wider neighbourhood, including Cardinal Place and Westminster Cathedral to the east and Victoria Square and Grosvenor Gardens to the west.

5.15 Accordingly, the buildings would be located as follows:

- Building 5 would be located north of Victoria Street and to the east of Buckingham Palace Road (within application 1 and all four Development Scenarios);
- Building 6a would be located adjacent to the south of the curving element of Bressenden Place (within application 3 and the northeast of Development Scenarios 1 and 3);
- Building 6b would be located to the northwest of Allington Street and to the south of the northern part of Bressenden Place, between Buildings 5 and 6a (within application 1 and all four Development Scenarios);
- Building 7a would be located to the north of Victoria Street, to the west of the Grade II listed Victoria Palace Theatre and the non-listed Duke of York Public House (within application 1 and all four Development Scenarios); and
- Building 7b&c would be located to the north and east of the Grade II listed Victoria Place Theatre (within application 2 and Development Scenarios 1 and 3).

5.16 Details of basements, public realm and associated pedestrian access and circulation are provided later in this chapter.

ABOVE GROUND MASSING

5.17 The height and massing of the proposed buildings have responded to site constraints, planning guidance and the resolution of the 6 December 2007 Planning and City Development Committee (Refer to Chapter 4: Alternatives). Such factors have resulted in the formulation of a variety of forms and building heights ranging from 33.1m Above Ordnance Datum (AOD) for Building 7b to 90.72m AOD for Building 7a. The height and number of storeys for each of the proposed buildings is set out in Table 5.4. Figure 5.1 presents a 3D image of the proposed buildings, and planning application drawings 201-ME-A-DR0M0200, 201-ME-A-DR0M0201, 201-ME-A-DR0M0202 and 201-ME-A-DR0M0203 present north, south, east and west elevations of the proposed buildings.

Table 5.4: Indicative Building Heights

Building	Relevant Application/ Development Scenario	Maximum Height (Above Ordnance Datum (AOD))	Maximum Number of Storeys
Building 5.	1/ 1, 2, 3 and 4	59.491	13
Building 6a.	3/ 1 and 3	73.3	12 + 2 levels of plant
Building 6b.	1/ 1, 2, 3 and 4	73.3	10 + 4 levels of plant
Building 7a.	1/ 1, 2, 3 and 4	90.72	16 + 3 levels of plant.
Building 7b.	2/ 1 and 2	33.1	12
Building 7c.	2/ 1 and 2	44.1	6

Building 5

5.18 Building 5 would be located along the full length of the Buckingham Palace Road boundary of application 1 (in all four Development Scenarios). The plan-form of lower levels of Building 5 would be defined by the following elements:

- Buckingham Palace Road to the west;
- Victoria Street to the south;
- Bressenden Place to the north; and
- The pedestrianised north-south route proposed through application 1 (in all four Development Scenarios) to the east.

5.19 Building 5 would comprise retail land uses at ground and first floor level with residential land uses above.

5.20 The building would have an inset base addressing Buckingham Palace Road. A 'diagonal' footprint to the retail base at ground and first floors would be formed from the Buckingham Palace Road/Bressenden Place junction.

5.21 The lower levels of Building 5 would conclude in a roof garden and inset terrace at level 9, above which the upper block would be set back between levels 9 and 13, on the southern half of the building.

Building 6a

5.22 Building 6a would be located in the northeast corner of application 3 (in Development Scenarios 1 and 3), adjacent to Bressenden Place with Allington Street to the south. It would be triangular in plan, following the curve of Bressenden Place at this point. This triangular form would be extended upwards and be cut by an incline plane at roof level. As such, the highest element of Building 6a would be at the southwestern corner of building (refer to Figure 5.1).

5.23 At ground level Building 6a forms a bridge to maintain access to the King's Scholars' Pond Sewer (KSPS) cruciform (the access point for the valve which connects the King's Scholar's Pond Sewer to the Western Deep Sewer) (refer to Chapter 3: Existing Land Use and Activities). Therefore, only the core to the west, incorporating some retail and office entrance uses, and the supporting structure in the three corners would come to ground, through a cross-braced system. The full extent of the building would commence at second floor level.

5.24 Building 6a would comprise office entrance at ground level and retail land uses at ground and first floor level at the western edge, and office uses above which would be accessed through a double storey lobby on Bressenden Place. The covered area created below the raised 'base' of Building 6a along Bressenden Place would front the lobby of Building 6a.

5.25 The west façade of Building 6a would include a green wall with creepers being encouraged to grow up the side of the building.

Building 6b

5.26 Building 6b would be located at the northern edge of application 1 (in all four Development Scenarios). It would be largely square in form and lie to the south of Bressenden Place and to the east of the pedestrianised north-south route proposed through application 1 (in all four Development Scenarios).

5.27 The square form of Building 6b would be divided into two triangular forms by a 6m wide diagonal slice running from the northwest corner to the southeast corner. The building mass would ascend in height from the lowest point along the Bressenden Place façade to the highest point at the southeast corner (refer to Figure 5.1).

5.28 Building 6b would comprise office entrance at ground level and retail land uses at ground and first floor levels along its western and southern sides with office use above. At the southeast corner of the building there would be a seating area for the associated retail unit and a waterwall feature.

5.29 On the northern and eastern edges of Building 6b office use would begin at first floor level (part of the entrance sequences with office floors starting at second floor), with an entrance at ground floor level on Bressenden Place to the west of the basement access ramp. There would be a secondary office entrance at the southeast corner of the building adjacent to the water wall. An office terrace would be provided at first floor level above the basement access ramp.

Building 7a

5.30 Building 7a would be located at the southern edge of application 1 (all four Development Scenarios). It would be largely square in form and would lie to the north of Victoria Street and to the east of the pedestrianised north-south route proposed through application 1 (all four Development Scenarios).

5.31 Similar to Building 6b, the square form of Building 7a would be divided into two triangular forms by a 6m wide diagonal slice running from the northwest corner to the southeast corner. The building mass would ascend in height from the lowest point along Victoria Street at the eastern edge of the western triangle, to the highest point at the southeast corner of Building 7a, also on Victoria Street (refer to Figure 5.1).

5.32 Building 7a would comprise retail land uses on ground and first floor levels, with office uses above. In addition, an office entrance would be located at ground floor level on Victoria Street, to the northwest corner.

Building 7b&c

5.33 Building 7b&c would be located within an L-shaped area adjacent to the west of Bressenden Place within application 2 (at the eastern edges of Development Scenarios 1 and 2).

5.34 Building 7c would be located at the junction of Victoria Street and Bressenden Place, and Building 7b would be located to the north wrapping around the Victoria Palace Theatre. Building 7b would comprise three elements: 7b West, 7b North and 7b South.

5.35 Building 7b&c would comprise a single storey of retail land use at ground floor, along with library or office and residential entrances.

5.36 Above ground floor, Building 7b would be split into three main building elements. 7b West would have one storey of retail at ground floor with four storeys of library/office space above. 7b North and 7b South would both house residential accommodation from first floor upwards. Family units with private gardens would be situated on first floor level with a range of family and smaller units in the upper stories of 7b North and 7b South).

5.37 As shown in Table 5.1, Building 7b (7b West) would include an element of flexible use. It is anticipated that Building 7b would accommodate a new library. However, the flexible land use provision of application 2 allows this space to be retail at ground floor, and office above, should the library use not come forward.

5.38 Building 7c would contain office space from first floor and above. The rooftop of Building 7c would be a play space for the residential flats.

5.39 A green wall is proposed for the western elevation of Building 7b (South) and the southern elevation of Building 7b (West). The installation of the proposed green walls would be taken forward subject to works proposed for the adjoining Victoria Palace Theatre.

BELOW GROUND STRUCTURES

Main Basement (Application 1, Development Scenarios 1, 2, 3 and 4)

5.40 As shown on planning application drawing 201-MB-A-DR-M0096, 201-MB-A-DR-M0097, 201-MB-A-DR-M0098 and 201-MB-A-DR-M0099, a main basement would be located beneath Buildings 5, 6b and 7a (included within application 1 and therefore all four Development Scenarios). This would include two levels:

- A basement 1 (upper) level would comprise a loading bay for Buildings 5, 6a, 6b and 7a and an energy centre that would serve all of each of the four Development Scenarios; and
- A basement 2 (lower) level which would contain other plant rooms, a new substation, car, motorcycle and cycle parking and a gymnasium facility for the residential occupiers of Building 5.

5.41 The main basement would be excavated to -8.250m AOD. It would be accessed from a ramp located mid way along Bressenden Place, adjacent to the east of Building 6b.

5.42 Part of application sites 1, 2 and 3 are shared with the proposed VSU site. As such the proposals for application 1 (all four Development Scenarios) have been prepared with alternative basement layouts which would allow the Paid Area Link (PAL) proposals of VSU to be built either within or external to the proposed main basement.

5.43 Three options are proposed for both the Basement 1 and Basement 2 levels. Basement option 1 would provide the structural shell for the PAL proposals within the retaining walls of Basement 1 and Basement 2 levels. This would facilitate underground pedestrian access to VSU in the event that the PAL should be provided within the VTI2 basement, as advocated by the Applicant in one of the two alternatives forming part of its objection to the VSU TWAO (refer to planning application drawing 201-MB-A-DR-M0098 and drawing 201-MB-A-DR-M0099 for the PAL option).

5.44 Basement option 2 has been designed on the assumption that the PAL is provided by LUL as applied for in the TWAO. In this option the retaining walls would be independent of VSU (and thus the PAL would sit outside of the main basement (refer to planning application drawings 201-MB-A-DR-M0096 and 201-MB-A-DR-M0097 for the Independent of VSU PAL option).

5.45 Basement option 3 is what would be delivered if the PAL were moved further away from the VTI2 basement, whether to accommodate the other alternative design solution advocated by Land Securities in its objection to VSU or (conceivably) by LUL of its motion (refer to planning application drawings 201-MB-A-DR-M0094 and 201-MB-A-DR-M0095 for the independent of re-routed VSU PAL basement option).

5.46 The reason for applying for three alternative basement designs is that three alternative design solutions for the PAL part of VSU are contemplated. Basement option 2 shows the basement design that would be necessary to accommodate VSU if it is approved as applied for by LUL. The other two basement options cater for alternatives in the event that either the VSU Order is modified or LUL elect to construct the PAL in a different way. It is unlikely that the decision as to which design solution should be implemented would be known before determination of the planning application 1. As a consequence, the above options for the main basement have been applied for so that any of the three eventualities is catered for.

Building 7b Basement (Application 3, Development Scenarios 1 and 2)

5.47 As shown on planning application drawing 201C-7b&7cBG-A-DR-201, a basement would be associated with Building 7b (application 3, Development Scenarios 1 and 2). This would be excavated to 0.8m AOD, and is designated for library/office use.

LAND USES

5.48 The three applications would provide a diverse mix of land uses including residential, offices, retail and library. The amount and composition of floor space for residential and non-residential land uses is described as follows.

Residential Land Uses

5.49 The provision of residential units according to unit size, per application, building and Development Scenario, is provided within Table 5.5:

Table 5.5: Provision of Residential Units in Buildings 5 and 7b&c

Relevant Application / Development Scenario	Studio	1-bedroom	2-bedroom	3-bedroom	4-bedroom	Total
Application 1 (Building 5)	16	49	66	36	3	**170**
Application 2 (Building 7b&c)	0	9	14	10	2	**35**
Development Scenario 1	16	58	80	46	5	**205**
Development Scenario 2	16	58	80	46	5	**205**
Development Scenario 3	16	49	66	36	3	**170**
Development Scenario 4	16	49	66	36	3	**170**

5.50 Building 5 would comprise private residential units. Building 7b&c would comprise nine intermediate tenure residential units (1-bed) and the remainder (26) social rented tenure residential units. Therefore, Development Scenarios 1 and 2 would provide affordable housing at a rate of 24.5% of the net change in housing on-site. In the case of either Development Scenario 3 or 4, the Applicant proposes that affordable housing would be delivered wither through off-site provision or financial contribution.

Non-Residential Land Use:

Business, Retail and Library Uses (Class B1, A1-A5 and D1)

5.51 Table 5.6 demonstrates the allocation of non-residential land uses between each of the buildings, applications and Development Scenarios.

Table 5.6: Allocation of Non-residential Land Uses

Land Use (GEA) m^2	Basement	Building 5	Building 6a	Building 6b	Building 7a	Building 7b&c
B1.	7,960	0	13,844	22,033	35,660	2,829
A1/A2/A3/A4/A5.	1,840	3,132	302	1,845	4,680	935
Flexible B1/D1.	0	0	0	0	0	1,525
Flexible A1-A5/D1.	0	0	0	0	0	127
Relevant Application / Development Scenario.	**1/ 1, 2, 3 & 4**	**1/ 1 ,2, 3**	**3/ 1 and 3**	**1/ 1, 2, 3 and 4**	**1/ 1, 2, 3 and 4**	**2/ 1 and 2**

5.52 Pedestrian Access and Circulation. As previously described, the siting of all buildings has responded to key pedestrian desire lines within the locality of the application sites. As such, all four Development Scenarios aim to improve pedestrian permeability within, through, to and from their respective sites, including connections to Victoria Mainline Station should future redevelopment take place to the south of Victoria Street. In addition, all four Development Scenarios provide a significant area of public realm which is intended to accommodate the pedestrian flows associated with the redevelopment.

5.53 Primary pedestrian routes would be provided by application 1. They would therefore be common to all four Development Scenarios. Accordingly, at ground floor level all four Development Scenarios would articulate the public realm as an area of pedestrian priority. The primary pedestrian circulation routes would be as follows:

The North-South Route

5.54 This would be the primary north-south route within all four Development Scenarios and would run parallel to Buckingham Palace Road, between Building 5 and Buildings 6b and 7a. It would be 17m wide and 150m long. The north-south route would be lined with two levels of retail on both sides for its entire length, within Buildings 5, 6b and 7a providing activity to the route. The route would be covered by a 17m wide glass canopy at 10m above ground level to shelter the area from inclement weather.

The East-West Route

5.55 This would extend from Buckingham Palace Road in the west to the pedestrian crossing of Bressenden Place to the east leading to the adjacent development of Cardinal Place. It would split Building 5 in two at ground and first floor level and thus connect north-south route to Victoria Square, located to the west of Buckingham Palace Road. The route would continue between Buildings 6b and 7a where it would be lined with retail. It would skirt the northern edge of Allington Street, where a public space supports a water feature and café located adjacent to Building 6b. The eastern portion of this route would run parallel to the east-west arm of Allington Street.

Allington Street

5.56 The pavements of Allington Street would almost be doubled in width from its present form. It would remain an active street and would accommodate a service bay for the existing Grade II listed Victoria Palace Theatre and the Duke of York pub and Buildings 7b & 7c. The east side of Allington Street, north of the Duke of York pub would be fronted by the Grade II Listed Victoria Palace Theatre. The west side of Allington Street would be fronted by retail units provided within Building 7a.

5.57 In addition to the primary pedestrian routes described above where possible, all footways within the application sites on Buckingham Palace Road, Bressenden Place and Victoria Street would be upgraded and widened which would be used to facilitate some pedestrian movement (within application 1, 2 and 3, all Development Scenarios).

PUBLIC REALM AND HIGHWAYS IMPROVEMENTS

5.58 As detailed in Chapter 1: Introduction, the Applicant fully intends to deliver comprehensive development under Development Scenario 1 inclusive of applications 1, 2 and 3. Figure 5.2 identifies the extent of the public realm, including highway improvements, which are proposed as part of the aspiration for the comprehensive VTI2 proposals (Development Scenario 1). Therefore, the proposed area of public realm, including highways improvements, under Development Scenario 1 is 7,830m^2. This includes an area of public realm under Building 6a.

5.59 However, it is recognised that if the necessary orders for VSU as applied for are made then this has the potential to affect the timing and delivery of parts of the comprehensive VTI2 proposals (Development Scenario 1). As such, Development Scenarios 2, 3 and 4 are proposed in the event that application 2 and/or application 3 (and consequently Development Scenario 1) cannot be implemented due to VSU either at all, or within an uncertain timescale.

5.60 Notwithstanding the above, as noted above, the Applicant fully intends to deliver the overall public realm and highway improvements for the comprehensive VTI2 proposals (Development Scenario 1) as shown on Figure 5.2, including those under Building 6a (in Development Scenarios 1 and 3 i.e. where this building exists).

5.61 Therefore, whilst the approximate area of proposed public realm including highway improvements under Development Scenarios 2, 3 and 4 would be 6,004m^2, it is anticipated that the public realm and highways improvements that would be inherent to Development Scenario 1, (including those under Building 6a in Development Scenarios 1 and 3 i.e. where this building exists), would be delivered through appropriate section 278 highway works agreements on land that is adopted highway or within the Applicant's ownership at the relevant time. These additional areas amount to approximately 1,507m^2 for Development Scenarios 2 and 4 and 1,827m^2 for Development Scenario 3 (which includes the area under Building 6a).

Public Realm

5.62 Public realm spaces would be provided by all four Development Scenarios. These are described as follows:

The North-South Route

5.63 As previously noted, the north-south route would be a covered pedestrian route, 17m wide, 150m long and 10m high to the underside of its canopy roof. Both sides would support active retail frontages at ground and first floor levels. Street furniture would be concentrated along the central seven metres of the north-south route where benches, kiosks, a water feature and lighting would be located, so as not to interfere with pedestrian traffic. At both the north and south ends of The Arcade, sculptural landscape features would help to define the space, at the same time as providing public seating.

5.64 The proposals are part of application 1, and therefore the north-south route would be common to all four Development Scenarios.

Foyer of Building 6a

5.65 This space would be created under the raised soffit of Building 6a along Bressenden Place which fronts the lobby for Building 6a. This area would also accommodate seating. The aforementioned east-west route would traverse the space as it leads to the pedestrian crossing to the adjacent Cardinal Place. Cycle parking would be located on the southeast corner of the space.

5.66 The proposals are part of application 3. Therefore, this public realm space would be an inherent part of Development Scenarios 1 and 3.

The East-West Route

5.67 The mid-portion of the aforementioned east-west route would be 9m in width. Bench seating and trees would line the centre, allowing people to pass shop fronts on either side. Buildings 6b and 7a's secondary office entrances would be off this route.

5.68 The proposals are part of application 1. Therefore the east-west route would be common to all four Development Scenarios.

Highway Improvements

5.69 A summary of the proposed highway improvements is provided below. Full details can be obtained within Chapter 9: Transportation and Access and also within the Transport Assessment (TA) submitted in support of the three applications (refer to Technical Appendix 9a).

- Buckingham Palace Road would be widened between Victoria Street and Bressenden Place to accommodate a two-lane bus lane in the southbound direction;
- Bressenden Place would be realigned to permit the development and accommodation of new bus and coach layover bays, with the western kerb moved over by approximately 5m between Victoria Street and Allington Street, The roadway would be narrowed with two lanes of traffic being maintained to accommodate demand
- Allington Street would be partially stopped-up to the west of its north-south element.

- Warwick Row would be stopped-up to the south of Bressenden Place;
- The pavements of the element of Allington Street that would remain would be widened and its capacity to accommodate all traffic that currently use this route would be retained;
- Allington Street would be re-surfaced with new widened footways installed along its entire length, with proposed Building 7a on the west side of the street pulled back from the existing building line. The resurfaced Allington Street would be shared with traffic, removing drop kerbs along the streets length;
- Space allocated for future bus stops and stands that could be utilised if TfL progress their Terminus Place proposals (i.e. closure of the bus station and redistribution of the bus stops and stands on-streets) would be provided on Buckingham Palace Road, Victoria Street and Bressenden Place and Victoria Street; and
- Where possible, all footways within the application sites on Buckingham Palace Road, Bressenden Place and Victoria Street would be widened and upgraded with new kerbs and hard surfacing. Such footways would be fully integrated into all other proposed pedestrian routes and public realm spaces as previously described.

VEHICULAR ACCESS, CIRCULATION, PARKING AND SERVICING

5.70 A summary of the proposed vehicular access, circulation, parking and servicing is provided below. Full details can be obtained within Technical Appendix 9a.

Vehicular Access and Circulation

5.71 Vehicular access and egress would be provided a two-way access ramp located off Bressenden Place to the east of Building 6b. Forming part of application 1, this would be common to all four Development Scenarios. The two-way access point would provide direct access to the basement parking and servicing levels for all four Development Scenarios.

Parking

5.72 40 car parking spaces would be provided within Basement 2 (lower) level proposed as part of application 1. All four Development Scenarios would therefore benefit from this provision. In addition, 100 car parking spaces would also be provided within the main basement of the adjacent Cardinal Place development for all four Development Scenarios.

5.73 25 of the car parking spaces would be allocated to office use (five of which would be disabled spaces), four spaces would be allocated to retail use (one of which would be a disabled space) and 111 spaces would be allocated to residential use, including two car club spaces, (22 of which would be disabled spaces). All of the disabled spaces would be within the main basement of application 1 and therefore all four Development Scenarios.

5.74 20 motorcycle parking spaces are also proposed within Basement 2 (lower level) within application 1 (all four Development Scenarios).

Cycling Facilities

5.75 837 off-street cycle parking spaces would be provided; 37 for retail uses, 205 for residential uses and 595 for office uses

5.76 The cycle spaces for Buildings 5, 6a, 6b, 7a, 7b/7c would be provided within Basement 2 (lower level) proposed by application 1, and therefore would be inherent to all four Development Scenarios**.**

5.77 In addition, the four Development Scenarios would include 48 proposed new on-street cycle parking spaces for use by visitors.

Servicing

5.78 Servicing would be achieved via the following arrangements:

- Buildings 5, 6a, 6b and 7a would be serviced via the Basement 1 (upper level). The servicing area would be accessed off Bressenden Place adjacent to Building 6b via a ramp; and
- Building 7b&c would be serviced on-street from Allington Street and Bressenden Place.

5.79 Therefore, applications 1 and 3 would be serviced off-street through Basement 1 (upper level) and application 2 would be serviced on-street.

PUBLIC TRANSPORT

5.80 Full details of proposals in relation to public transport are provided in Technical Appendix 9a. However, a summary is provided as follows:

- As previously noted, the roads and pavements around the four Development Scenarios have been designed to accommodate bus stops and layover spaces, should TfL progress their proposals to disperse buses from Terminus Place;
- The four Development Scenarios would not jeopardise VSU currently proposed by Transport for London;
- The four Development Scenarios safeguard appropriate areas required for the implementation of the longstanding Chelsea Hackney Line (also referred to as the Crossrail 2) proposals; and
- As previously noted, one of the options for Basement 2 level provides the structural shell only for the Paid Area Link (PAL) proposals for the LUL's future planned VSU (included within application 1 and therefore all four Development Scenarios).

PRIVATE OPEN SPACE

5.81 The following private open spaces would be provided by the three applications:

- Balconies within Building 5 residential units (application 1 and all four Development Scenarios);
- Residential amenity space and 179m^2 of play space on the 9th floor terrace of Building 5 and roof terrace at 13th floor level for the penthouses within Building. These terraces would be characterised by highly articulated rooftop pavilions which echo the mansards, cupolas, and chimneys of the surrounding urban landscape (application 1 and all four Development Scenarios);
- A terrace at first floor level within Building 6b, between Bressenden Place and the widened Allington Street, above the access ramp to the basement levels, which would be accessible by office workers. The terrace would be planted to provide horizontal greening (application 1 and all four Development Scenarios);
- Balconies within every residential unit of Building 7b and south facing balconies for the office uses of Building 7c that help to shade the workspaces and to reduce the energy consumption of the building (application 2, Development Scenarios 1 and 2);
- Communal play space, of 270m^2, on the roof of Building 7c accessible by the adjacent residential units (application 2, Development Scenarios 1 and 2);
- Private amenity space at first floor level subdivided between the four units proposed at this level (application 2, Development Scenarios 1 and 2); and
- A terrace adjacent to library/office use (application 2, Development Scenarios 1 and 2).

LANDSCAPING AND ECOLOGICAL ENHANCEMENT

Hard Landscaping

5.82 High quality hard landscaping would carry across all aspects of the public realm proposed within the three applications and therefore all four Development Scenarios.

Soft Landscaping and Ecological Enhancement

Tree Planting

5.83 A total of 27 trees are proposed; four would be located to the north of Bressenden Place, six to the east of Bressenden Place, 12 on the east side of Buckingham Palace Road and five would be located within the aforementioned east-west route. A variety of planters would be located beneath the canopy.

Brown and Green Roofs

5.84 Sedum roofs would be provided on the roofs of level 10 and level 14 of Building 5 (application 1, all four Development Scenarios). These would encourage biodiversity and reduce the rate of rainwater run-off;

5.85 A green roof (including grass and amenity plantings) would be provided on Building 7b west and around the playspace of Building 7c. A 'sedum' roof would be provided under the photovoltaic (PV) panels of Building 7b north and south (application 2, Development Scenarios 1 and 2).

Green Wall

5.86 The west façade of Building 6a would include a green wall with creepers being encouraged to grow up the side of the building. In addition, a green wall is proposed for the western elevation of Building 7b (South) and the southern elevation of Building 7b (West).

Bird Nesting Boxes

5.87 The applications would provide a variety of bird nesting boxes within the fabric of the proposed buildings. These would include 60 swift boxes constructed in six groups of 10 boxes, and 20 open fronted and hole boxes suitable for house sparrow (*Passer domesticus*). All boxes would be located at appropriate height and location to maximise their effectiveness. They would be located on the following buildings:

- Building 5: 20 swift boxes and 4 sparrow boxes (application 1, all Development Scenarios);
- Building 6a: 10 swift boxes and 4 sparrow boxes (application 3, Development Scenarios 1 and 3);
- Building 6b: 10 swift boxes and 4 sparrow boxes (application 1, all four Development Scenarios);
- Building 7a: 10 swift boxes and 4 sparrow boxes (application 1, all four Development Scenarios); and
- Building 7b&c: 10 swift boxes and 4 sparrow boxes (application 2, Development Scenarios 1 and 2).

MATERIALS AND CLADDING

5.88 Proposed materials and cladding for each of the proposed buildings are summarised detailed in Table 5.7.

Table 5.7: Summary of Materials and Cladding

Building	Applications/ Development Scenario	Details
Building 5	1/ 1, 2, 3 and 4	• Lower retail levels would comprise double glazed glass units. • East elevation would be rendered in glass and metal. • Balconies would be guarded with frameless vertically cantilevered glass balustrades. • Buckingham Palace Road façade including the north and south elevations would include: - Masonry screen between levels 1 and 4; and - Upper elevations between levels 5 and 8 would be a combination of stone, glass and metal. • Penthouse block would comprise a combination of the stone and metal / glass curtain wall.
Building 6a	3/ 1 and 3	• West façade would be clad with continuous vertical metal fins. These would commence at ground level (first level above car park ramp) on the west façade and 'bend over' the inclined roof plane. The west façade would include a green wall made up of a cable structure which would support climbing vegetation. • North and south façades would comprise a glass structure with vertical, storey high fins of dichroic glass. This would create a serrated façade.
Building 6b	1/ 1, 2, 3 and 4	• All façades would comprise vertical metal fins 300mm wide and 600mm deep spaced 1.5m apart. These would be extended over the inclined roof surface. The fins are cut to form a larger scale diamond pattern.
Building 7a	1/ 1, 2, 3 and 4	• All façades would comprise vertical metal fins 300mm wide and 600mm deep. These would be extended over the inclined roof surface.
Building 7b&c	2/ 1 and 2	• Ground floor of Building 7b&c would comprise cast masonry with a high mica content on a black terrazzo base with metal glazed shopfronts. • Building 7b west would comprise timber structure with glazed ceramic and metal capping pieces to the glazing. • Building 7b north and south would comprise timber structures with timber mullions and external timber fins to the glazed internal elevations. There would be mosaic tiles to the core of Building 7b north and glazed ceramic tiles and ceramic mullions on the translucent glazing facing Allington Street and Bressenden Place. • Building 7c would comprise mainly glazed tiles with intermittent matt ceramic tiles and metal framed glazing.

SUBSTRUCTURE AND SUPERSTRUCTURE

5.89 The numbers of existing underground constraints require that various buildings would rely upon several types of foundations. Further details are provided within Chapter 6: Demolition and Construction.

INCLUSIVE DESIGN

5.90 The three applications have considered the needs of the mobility impaired. As such, 28 disabled car parking spaces would be provided within the Basement 2 (lower) level (application 1, all four Development Scenarios). The car parking provision would be available on a valet collect and delivery managed service. There would be step free access between the basement car parking area and the ground floor level via lifts to ensure that the proposed buildings would be fully accessible to the mobility impaired. Vertical changes in level in buildings within all four Development Scenarios would be achieved by stairs, escalators or by lifts.

5.91 With respect to ground floor public realm, minimal level changes would exist within the proposed ground floor public spaces and pedestrian routes, which would be step free with no ramps.

5.92 The choice of surface materials of all public realm areas would be influenced by their suitability for walking and wheeled carriers. Rest points with seating would be provided at regular intervals to enable those people who are unable to walk long distances to rest. Street furniture, paving and landscape features in circulation routes would not create barriers or hazards to the mobility impaired.

5.93 Shared routes would be defined with tactile surface treatments to allow sensory impaired people to use public space in safety. Where there would be kerbed roads, dropped kerbs would be applied at convenient places for wheelchair users and family buggies and integrated with the primary access routes.

5.94 The Applicant has committed to ensuring that all apartments would achieve the Lifetime Home Standard. These standards contain 16 criteria to ensure homes are suitable for a range of occupants including children and the elderly, and therefore would be suitable for occupants' changing circumstances. In addition, 10% of residential units have been designed to enable adaptation of apartments for wheelchair users on request of the first purchaser.

UTILITIES AND SERVICES

5.95 Modification and/or relocation of selected existing utilities would be required to implement any of the four possible Development Scenarios. Accordingly, where appropriate, the existing infrastructure networks would be diverted, remodelled and reinforced to suit the demands of the consented Development Scenario.

DRAINAGE STRATEGY

5.96 The four Development Scenarios would include works to the existing sewer network. These would include the following:

- **Bressenden Place**: Diversion of the sewer from Buckingham Palace Road to the north, to enable the abandonment of the sewers in Allington Street and Warwick Row which conflicts with new basement area.
- **Allington Street**: Abandonment and partial replacement of existing brick-egg sewer with smaller diameter sewer to maintain existing connectivity from the Victoria Theatre and new discharges from the four Development Scenarios.
- **Victoria Street**: Construction of new section of sewer, interconnecting into the existing sewerage system, to accommodate lost volume from sewers to be

abandoned in Warwick Row and Allington Street. This new sewer would also take drainage discharge from the four Development Scenarios, generally being the buildings proposed to the south of the application sites.

5.97 Further details regarding the existing and proposed sewer network is available by reference to Technical Appendix 14a.

WASTE STRATEGY

5.98 Full details pertaining to the waste generation and management of the four Development Scenarios are available with reference to the standalone Waste and Servicing Strategy submitted as part of the application and Chapter 13: Waste Management.

5.99 The three applications would incorporate specified waste storage areas. The main waste storage facilities would be located within the main basement of application 1 (all four Development Scenarios). This would serve Buildings 5, 6a, 6b and 7a. In addition, waste storage facilities would be available separately for Building 7b&c application 2, Development Scenario 1 and 2).

Residential Waste (Building 5 and 7b&c)

5.100 Sufficient storage space would be provided within each unit for household waste and recyclable materials, and within communal waste storage areas to facilitate recycling. Each unit would be designed to include sufficient storage space to allow for a bin for general waste, and a separate bin for at least three types of mixed recyclables (for example, paper, plastic, glass, cans or cardboard).

5.101 For the convenience of residents, temporary waste rooms would be provided at each residential level within Building 5 adjacent to each core. Residents of Building 5 would dispose of their waste into the temporary waste rooms. Residents of Building 7b&c would make use of the ground floor central residential waste room. The site management team would empty bins contained within temporary on-floor waste rooms of Buildings 5 on a daily basis and transport the waste into the central waste storage facilities.

5.102 Residential waste generated from Building 5 would be stored in two dedicated waste rooms; one for refuse and one for segregated recyclables. Residential waste generated from Building 7b&c would be stored within a central waste room located adjacent to the core of Building 7b&c. In accordance with WCC requirements, both buildings would be provided with bulky household waste storage areas.

5.103 Residential waste and recyclables would be collected by WCC or a private contractor.

Commercial Waste (Buildings 5, 6a, 6b, 7a and 7b&c)

5.104 All retail units would be provided with sufficient space for separate receptacles for general waste and key recyclable waste streams. At the end of each day waste would be moved to central waste storage areas.

5.105 At the end of each day, waste associated with restaurant and cafe uses would be moved to a central waste storage area. Secure bunded areas would also be provided for waste oils from café, restaurant and bar A3 facilities. It is envisaged that the site management team would be responsible for moving bins to service areas for collection.

5.106 Recycling and general waste bins would be provided on each office floor and within the library in strategic locations. It is anticipated that office waste would be moved by cleaners to the temporary waste storage areas. The facilities management team would then transfer bins from these rooms to either the balers, compactor, or to the main segregated waste store on a daily basis. With regard to Building 7b&c, waste from the office/library would be moved by cleaners to the separate commercial waste room provided within Building 7b&c.

ENERGY AND SUSTAINABILITY

Energy Strategy

5.107 Energy strategies have been prepared for each of the four Development Scenarios and are presented within Technical Appendix 5a to 5d. To reduce carbon dioxide (CO_2) emissions from the Development Scenarios, consideration has been given to a range of energy technologies and these energy conservation measures have been applied to all buildings.

5.108 An Energy Centre, incorporating gas-fired Combined Cooling, Heating and Power (CCHP), is proposed to meet the majority of the energy demands for the Development Scenarios, and to supply heat to a nearby residential building, The View ("TV"), and the Pimlico District Heating Undertaking (PDHU).

5.109 The use of these would achieve a total reduction in base case site carbon dioxide emissions as detailed in Table 5.8.

Table 5.8: CO_2 Reduction and Technologies Proposed for each Development Ccenario (assuming connection to PDHU and The View)

Development Scenario	CO_2 Reduction	Technologies Propose
1	33%	On-site heating and cooling networks fed from an energy centre comprising: • 2 x 1415 kWe gas fired combined heat and power (CHP) unit; • 1 x 1655 kW absorption chiller; • 400m^3 thermal store; and • Backed up by gas fired boilers and high efficiency electric compression chillers; Roof mounted PV panels, total area of around 140m^2
2	34%	On-site heating and cooling networks fed from an energy centre comprising: • 2 x 1415 kWe gas fired CHP unit; • 1 x 1655 kW an absorption chiller; and • Backed up by gas fired boilers and high efficiency electric compression chillers; Roof mounted PV panels, total area of around 140m^2, supplying
3	33%	On-site heating and cooling networks fed from an energy centre comprising: • 2 x 1415 kWe gas fired CHP unit; • 1 x 1655 kW absorption chiller; • 400m^3 thermal store; and • Backed up by gas fired boilers and high efficiency electric compression chillers; Roof mounted PV panels, total area of around 40m^2
4	35%	On-site heating and cooling networks fed from an energy centre comprising: • 2 x 1415 kWe gas fired CHP unit; • 1 x 1655 kW absorption chiller; • 400m^3 thermal store; and • Backed up by gas fired boilers and high efficiency electric compression chillers; Roof mounted PV panels, total area of around 40m^2

Sustainability

5.110 The four Development Scenarios incorporate a number of features to ensure high environmental performance. These features constitute the following (refer to the Sustainability Statement that covers all four Development Scenarios in Technical Appendix 5e):

- 100% reuse of previously developed, brownfield, land and the remediation of any potentially contaminated land;
- The provision of high density redevelopment including an improved mix of land uses, including residential units, office, retail and leisure (application 2, Development Scenarios 1 and 2);
- The creation of construction related and long term jobs;
- The provision of improved safe and legible pedestrian routes, and public realm;
- Provision of suitable access for all including the mobility impaired;
- Commitment to implement the principles of inclusive design to ensure that the accessibility needs of all building user would be met;
- Minimal provision of car parking spaces in order to discourage car use and encourage more sustainable transport modes including walking and cycling;
- Provision of extensive facilities for cyclists;
- The four Development Scenarios incorporate a range of energy efficiency measures including natural ventilation and passive design, high levels of insulation and solar shading devises (refer to Technical Appendix 5a to 5d);
- A centralised energy centre which is proposed to supply heat to a nearby residential building, and the PDHU (refer to Technical Appendix 5a to 5d);
- Commitment to achieve BREEAM Retail 'very good' and Office 'excellent' standards, together with a minimum Code for Sustainable Homes (CSH) rating of 3, with an aspiration to achieve Code 4 within Building 5 (refer to Technical Appendix 5f to 5i for the BREEAM and CSH assessments for all four Development Scenarios);
- Improvement of biodiversity on the application sites through the provision of sedum and green roofs, a green wall, trees and bird nesting boxes;
- 100% use of sustainable timber sources;
- Commitment to reuse demolition materials on the application sites, reuse at least 80% of remaining materials off-site and to source construction materials with a recycled content where feasible;
- Commitment to install rainwater harvesting, to reduce water consumption, for landscaping and for toilet flushing;
- Commitment to comply with WCC's Code of Construction Practice and the use of a site-specific Environmental Management Plan (EMP) to manage construction related environmental effects;
- The provision of facilities to encourage recycling of both commercial and household waste; and
- Improved servicing facilities allowing off-street servicing for application 1 and 3.