Paddington Green Police Station

2 – 4 Harrow Road, London, W2 1XJ

Environmental Statement Volume 3: Technical Appendices

Ramboll

March 2021

Berkeley
Designed for life

VOLUME 3: TECHNICAL APPENDICES

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Technical Appendix 1.1: IEMA Quality Mark Checklist

Table 1.1: IEMA Quality Mark Check	
EIA Commitment and ES Review Criteria	
EIA Commitment 1: Regulatory Compliance[1]	
a) Does the ES, in the light of the project being assessed, identify, describe and assess effects on:	√
- Human Beings	√
- Fauna & Flora	√
- Soil	√
- Water	√
- Air	√
- Climate	√
- Landscape	√
- Cultural Heritage	√
- Material Assets	√
b) Does the ES attempt to set out the interaction between the factors set out under criteria 1.a)?	√
c) Does the ES contain a clear section, or sections, providing a description of the project comprising information on the site, design and size of the project?	√
d) Does the ES contain a section, or sections, that describe the likely significant effects of the proposed project on the environment?	√
e) Does the ES contain a clear section, or sections, that provide a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects?	√
f) Does the ES contain a clear section, or sections, that provides the data required to identify and assess the main effects which the project is likely to have on the environment?	√
g) Does the ES contain a section, or sections, that outline the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects?	√
h) Has a Non-Technical Summary been produced containing an outline of the information mentioned in 1c) to 1h)?	√
EIA Commitment 4: EIA Context	
A) Scoping	
i) Has the ES clearly stated what effects will be addressed and how this decision was reached?	√
ii) Are the main environmental concerns and their locations, where relevant, clearly identified with an explanation of the risks posed from the project? Including relevant environmental issues beyond the boundary of the proposal?	√
iii) Does the ES identify the environmental issues that will not be assessed and explain why they are not being considered further?	√

[1] A number of the criteria under this Commitment cover similar issues to criteria set out in the other three Commitments, below. Where this occurs IEMA recognise that there will inevitably be some overlap between the criteria. However, the assessment of the criteria under this Commitment is focussed on the presence or absence of the issue, whereas the assessment of similar criteria, within the other three Commitments, will focus on the quality of the consideration of the issue in question.

Table 1.1: IEMA Quality Mark Check	
EIA Commitment and ES Review Criteria	
iv) Is the sub-topic scope undertaken in relation to each of the topics included in the EIA appropriate and focussed	√
B) Alternatives, including iterative design	
i) Does the ES set out the main alternatives that were considered at different points during the development of the proposal?	√
ii) Are the main reasons for the selection of the proposal over distinct alternatives and design iterations easily identifiable?	√
iii) Does the ES clearly indicate how the EIA process, environmental issues and consultee responses influenced the iterative design process that led to the proposed project?	√
EIA Commitment 5: EIA Content	
A) Baseline	
i) Does the ES describe the current condition of those aspects of the environment that are likely to be significantly affected by the development?	√
ii) Is the sensitivity / importance of the baseline environment clearly evaluated?	√
iii) Are limitations in the baseline information identified and clearly set out?	√
B) Assessment	
i) Are the methods for establishing the magnitude of impacts on the receiving environment clearly defined?	√
ii) Does the ES set out a generic methodology for the assessment and evaluation of significance OR clearly explain and justify a specific method for each environmental issue?	√
iii) Does the assessment of significance consider the impact's deviation from the established baseline condition? (e.g. the sensitivity of the environment, the extent to which the impact is reversible, etc.).	√
iv) Does the ES identify the significance of impacts that would be anticipated to remain following the successful implementation of any mitigation set out in the ES?	√
vii) Does the ES give appropriate prominence to both positive and negative effects relative to their significance?	√
C) Environmental Management	
i) Does the ES describe the measures proposed to be implemented to avoid, reduce, and if possible, remedy significant adverse impacts of the proposed development?	√
ii) Is an indication of the effectiveness of the stated mitigation measures provided?	√
iii) Are details provided related to any management plans that the ES indicates should be implemented to deliver the mitigation measures and/or monitor the environmental impact of the project?	√
iv) Does the ES identify the general groups who will be responsible for the follow-up programme?	√

Table 1.1: IEMA Quality Mark Check	
EIA Commitment and ES Review Criteria	
EIA Commitment 6: EIA Communication	
A) Consultation	
i) Does the description of any consultation include details of those who were contacted, including statutory and non-statutory consultees, and the public?	√
ii) Does the main text of the ES provide a summary of the main issues raised by consultees?	√
iii) Does the ES set out if any of the issues raised by consultees will not be dealt with in the ES?	√
If so is clear justification set out as to why the issue has been scoped out?	√
B) ES Quality	
i) Does the ES provide appropriate illustrations through the use of maps and/or diagrams? In particular this should cover:	
- the location of the site, site layout and boundary,	√
- operational appearance,	√
- main environmental receptors and	√
- impacts displayed in a visual format where appropriate.	√
ii) Is the area of proposed land clearly described and indicated on an appropriate map or diagram?	√
iii) Are the anticipated timescales of construction, operation and (where appropriate) decommissioning of the proposal clearly set out in the main text?	√
iv) Is the information in the ES presented in a manner in which a non-specialist would be able to logically identify information they were seeking?	√
v) Are technical terms kept to a minimum, with a glossary provided?	√
C) Non-Technical Summary (NTS)	
i) Does the NTS provide sufficient information for the non-specialist reader to understand the main environmental impacts of the proposal without reference to the main ES?	√
ii) Are maps and diagrams included in the NTS that, at a minimum, illustrate the location of the application site, the footprint of the proposed development, and the location of relevant key features?	√
iii) Is it clear that the NTS was made available as a separate, stand-alone document to facilitate a wider readership?	√

Technical Appendix 1.2: Regulation 18(5) Statement

Regulation 18(5)(b) Statement

Regulation 18(5)(a) of the EIA Regulations requires a developer to ensure than an environmental statement is prepared by competent experts and Regulation 18(5)(b) provides that the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts. This statement has therefore been prepared and included within this ES pursuant to these regulatory requirements and the table below sets out the competent experts appointed by the Applicant to prepare this ES and their respective expertise and qualifications.

Company	Contribution to ES	EIA Team Member	Qualifications	Relevant Memberships	Relevant Experience and Accreditation
RAMBOLL	Project Coordination and Management	Michelle Wheeler	BLArch (Hons) *Cum Laude* (Pretoria, South Africa)	Associate Member IEMA	• Ramboll UK (who acquired Environ in 2015) was a founding member of the Institute of Environmental Management and Assessment (IEMA). • Ramboll UK has been an EIA Practitioner since 1989. • Ramboll UK has been IEMA Quality Mark Registered since 2011. • Michelle Wheeler has over 13 years' environmental consultancy experience in the UK. • Michelle specialises in EIA project management, direction and review, as well as landscape/townscape and visual assessment. She has been involved in over 50 projects in the UK, including urban regeneration and masterplan schemes. • Ben Seward has six years of experience in environmental planning and consultancy.
		Ben Seward	BSc (Hons) Environmental Science (University of Plymouth) MSc Environmental Assessment and Management (Oxford Brookes)	Associate Member IEMA	
	Flood Risk	Christopher Day	BSc (Hons) Marine Geography MSc Flood Risk	Graduate Member Chartered Institute of Water and Environmental Management	• Chris has 12 years' experience in environmental consultancy with particular expertise in FRA and hydraulic modelling and conceptual drainage design; working on numerous industrial, commercial and residential redevelopment scheme across the UK. • He is also experienced in the use of GIS and remote sensing, statistics, river and coastal hydraulics, river and coastal engineering and project management. • Sarah has several years' experience of working for the Environment Agency, the Met Office and the National Trust. At Ramboll, Sarah has worked on numerous FRA projects for urban redevelopment schemes as well as EIA for a broad range of developments around the UK.
	Air Quality	Lesley Vining	BSc (Hons) Environmental Science	Institute of Air Quality Management (MIAQM) Institute of Environmental Management and Assessment (IEMA) Institute of Environmental Scientists	• Lesley has over 20 years' environmental consultancy experience. As one of Ramboll's principal air quality scientists within the UK she manages a team of air quality practitioners. • Lesley is extensively involved in carrying out ambient air quality assessments, either as standalone studies or as part of environmental statements and permit applications. • Ana has over eight years' environmental consultancy experience. • Ana has produced several air quality assessments, including EIA and non-EIA, for a wide variety of large residential, mixed-use, commercial and industrial development across the UK.
		Ana Gomes	MSc in Environmental Engineering (Technical University of Madrid, Spain) MSc in Environmental Sciences and Technology (University of Porto, Portugal) BSc (Hons) in Environmental Sciences and Technology (University of Porto, Portugal)	Member of the Institution of Environmental Sciences (MIAQM). Member of the Institute of Air Quality Management (MIEnvSc)	
	Ecology Biodiversity Net Gain	Laura Sanderson	MSc Wildlife Management and Conservation (Reading, UK) BSc Zoology (Reading, UK)	CEnv Licensed to survey for bats, barn owls and great crested newts in England, Wales and Scotland.	• Laura has worked as an ecological consultant for over 10 years. She has worked as ecologist on many EIA and non-EIA developments; including urban regeneration schemes, urban extensions, industrial developments, large on-shore wind and solar farms and highways and pipeline projects; and

Company	Contribution to ES	EIA Team Member	Qualifications	Relevant Memberships	Relevant Experience and Accreditation
		Jon Molesworth	BSc Biological Sciences (University of Liverpool)	Associate Member CIEEM	• Laura is highly experienced in all parts of project ecology work, from extended Phase 1 habitat surveys, detailed further surveys, Ecological Impact Assessment (EcIA) production, Ecological Clerk of Works during construction and post-construction planning support. • John has over five years experience working in ecological consultancy.
	Land Contamination	Matthew Pannett	BSc (Hons) Geochemistry MSc Hydrogeology and groundwater chemistry	Chartered Geologist (CGeol)	• Matthew has more than 25 years' experience in environmental consultancy. He advises clients on environmental risks and liabilities associated with property transactions and redevelopment, day-to-day operations and regulatory compliance. He has managed numerous environmental assessments; advised on a number of Part IIA contaminated land sites and undertaken remediation projects at industrial and manufacturing facilities. • Matthew's technical responsibilities include the management and direction of Ramboll's Site Solutions team, and specialist contamination, hydrogeological and geological studies, including preliminary risk assessments either as standalone reports or as part of environmental statements. • Jessica Gregory specialises in environmental due diligence and environmental risk assessment and has over 7 years of experience in environmental consultancy. • Since joining Ramboll, Jessica has worked on high-profile consultancy projects, including both private and public sector clients across a diverse range of commercial and industrial sectors. Her role has included environmental site inspections, compliance and EMS auditing, in addition to contaminated land assessment, coordination of technical disciplines and authoring of factual and interpretive reports, as well as general environmental project support and project management.
		Jessica Gregory	MSci Environmental Geoscience (University College London)	N/A	
	Noise and Vibration Assessment	Camilla Fletcher	MA Music (University of Cambridge) MSc Acoustic Engineering (University of Southampton, ISVR) CEng IoA	Member of Institute of Acoustics (IoA)	• Camilla has over 6 years' acoustic consultancy experience. • Camilla undertakes both noise assessment for environmental projects (EIA / NIA); as well as buildings acoustics for a wide variety of sectors such as residential, schools and heritage projects.
CBRE	Socio-Economics	Helen Newman	BSc (Hons) Biology (University of Plymouth) MSc in Environmental Management (DIC) (Imperial College London)	Associate Member IEMA Associate Member CIEEM	• CBRE Ltd is IEMA Quality Mark Registered. • As Head of Sustainability, Helen has over 18 years' experience in environmental assessment and sustainable development, including sustainability statements in support of planning, EIA project management and technical assessment, social value and green building certification. With regards EIA, Helen has experience in socio-economic impact assessments, developing the technical methodology, including additionality assessment, population and child yield calculations, and the professional assessment of the impact on local services and open space and playspace demand. • Ceara has eight years' experience in EIA and socio-economic impact assessments working on a range of projects in the residential, commercial, retail and industrial sectors. Her socio-economic experience includes calculating population and child yield, assessing housing demand, the impact on local social infrastructure including schools, healthcare facilities and open space and playspace, employment generation and additionality.
		Ceara Shields	BA Geography (Hons) (University of Leicester)	Affiliate Member of IEMA	
ARUP	Traffic Flow Data	Andy Ford	BA (Hons) Geography (University of Exeter)	MCIHT	• Ove Arup and Partners Limited ("Arup") is an independent firm of designers, planners, engineers, architects, consultants and technical specialists, working across every aspect of today's built environment. • The Transport Consulting South team has over 100 transport professionals in London with extensive experience in development planning projects and supporting EIAs. • Andy Ford has 20 years' experience and Katherine Wong has 12 years' experience in providing transport planning advice for a wide range of projects in London and across the UK.
		Katherine Wong	BSc (Hons) Geography with Economics (London School of Economics)	MCIHT, CMILT	

Company	Contribution to ES	EIA Team Member	Qualifications	Relevant Memberships	Relevant Experience and Accreditation
MOLA	Archaeology desk based assessment	Harry Smith	BA (Hons) Archaeology	Chartered Institute for Archaeologists (CIfA)	• MOLA is one of the largest archaeological and built heritage practices in Britain, providing independent heritage advice and services for 43 years. MOLA is a Registered Organisation with CIfA (Chartered Institute for Archaeologists) and an Independent Research Organisation recognised by AHRC. MOLA are also a member of FAME (Federation of Archaeological Managers & Employers). • MOLA's specialist pre-planning team is involved in over 200 projects each year, assisting clients with planning applications on sites including complex urban developments, large rural schemes and infrastructure projects, producing Historic Environment Assessments, Risk Assessments and Environmental Statements. • Rupert has over 25 years' experience as a professional archaeologist and has specialised in archaeological assessments and EIAs for 12 years. • Harry has 3 years' experience in professional archaeology and has specialised in archaeological assessments and EIAS for 1½ years.
		Rupert Featherby	BA; MA; MPhil		
gia	Daylight, Sunlight and Overshadowing	Daniel Maddox	BSc Hons		• Daniel Maddox is a partner at GIA with over 7 years' experience, overseeing strategic and input relating to daylight and sunlight impacts for urban development in London • Simone Pagani is a senior partner at GIA with over 13 years' experience in daylight, sunlight and overshadowing matters. • Lotte Tobermann is the EIA coordinator at GIA with 3 years' experience in the built environment industry
		Simone Pagani	MSc	Society of Light and Lighting	
		Lotte Tobermann	BA, MSc		
MONTAGU EVANS	Townscape, Visual and Heritage Assessment	Lucy Markham	BA Modern History (University of Oxford) MSc Historic Conservation (Oxford Brookes) PGDip Spatial Planning (Oxford Brookes) PGCert Urban Design (University of Westminster)	Chartered Member of the Royal Town Planning Institute Member of the Institute of Historic Building Conservation	• Ms Markham is a Chartered member of the RTPI and IHBC, and has over 17 years' experience as a heritage consultant. • Ms Rowley has an MA in Buildings Archaeology and over four years' experience in the field of heritage, townscape and visual impact assessment. • Ms Nicholson has an MA in urban design and has worked on a range of projects relating to development on or within the setting of sensitive land, and in particular those with heritage and urban design considerations.
		Alex Rowley	MA in Buildings Archaeology	Affiliate of the Institute of Historic Building Conservation	
		Lucy Nicholson	MA Urban Design PG Cert Spatial Planning	Licentiate Member of the Royal Town Planning Institute	
millerhare	Accurate Visual Representations	Nigel Lang	Dundee University School of Architecture Bachelor of Architecture (RIBA Part II) Post Graduate Computer Aided Architectural Design		• Nigel works on all scales of projects from early conception through to the submission of a planning application. Supported by fellow directors Toby, Chris and 7 of Millerhare's Associates he co-ordinates a team of 20 visualisers who focus primarily on the creation of the accurate visualisations, design and access statement and funding imagery required to support major development projects in the UK. Nigel developed his own expertise on several projects in the City of London, at Canary Wharf and on the World Trade Center, New York. Recently his team have prepared visualisations for a large number of London's major planning approvals including in the past year: Imperial College, 22 Bishopsgate, 1-2 Finsbury Avenue and Canada Water. • Nigel graduated from Dundee University School of Architecture in 1994 as Bachelor of Architecture (RIBA Part II) and went on to post graduate studies in Computer Aided Architectural Design. Prior to joining Millerhare as an Associate in 1998, he worked in both architectural and visualisation practices. He became a director of Millerhare in 2001 and has since helped guide the company's evolution into London's leading multi-disciplinary architectural visualisation practice. • Working closely with fellow director Nigel, Toby manages a studio team of 20 staff delivering 100-200 major planning applications per year, the great majority of which are located in London. He liaises with architects, clients and the wider design team, ensuring images are
		Toby Ritchie	BSc (Hons) Engineering Design MA Industrial Design		

Company	Contribution to ES	EIA Team Member	Qualifications	Relevant Memberships	Relevant Experience and Accreditation
					delivered to the highest standard and meeting critical deadlines. Staying involved in projects from tendering through to completion, reacting quickly to design revisions. • During his time at Millerhare, Toby has worked on significant developments across London, including Canary Wharf Crossrail Station, Southbank Centre redevelopment, US Embassy, Shell Centre, 20 Blackfriars and multiple masterplan schemes. • Toby has a BSc in Engineering Design and an MA in Industrial Design, both of these courses heavily utilised 3D modelling and visualisation. Having worked for Millerhare since 2007 he was made a Director in 2016. He is well versed in all of the essential visualisation tools and techniques.
gia CHARTERED SURVEYORS	Daylight, Sunlight, Overshadowing, and Solar Glare	Jessica Rawlings	LLB		• Jessica joined GIA in 2016, having completed a graduate scheme in project management at a construction and consultancy firm. She now works as an Associate Partner in our Daylight/Sunlight and Rights of Light department advising clients on all aspects relating to impacts on neighbours at planning and beyond. • Lotte joined GIA in 2019, having previously had experience in EIA consultancy. Lotte is responsible for coordinating EIA deliverables in terms of daylight, sunlight, overshadowing, solar glare and light pollution assessments for large scale projects. Her experience includes Elephant Park, Whitechapel Estate and Blackwall Yard. • Gabriella has a master's degree from the Federal Fluminense University (Rio de Janeiro, Brazil) in Architecture and Urban Planning, and a specialization title in Thermal Comfort and Energy Efficiency from the University of Sao Paulo (USP). Having joined GIA's Daylight and Solar Design department in 2013 Gabriella has since driven her green buildings expertise to support developers and architects to optimise daylight and sunlight amenity within proposed buildings.
		Lotte Tobermann	BA, MSc		
		Gabriella Lessa	BA, MSc Architecture and Urban Planning Specialisation in Energy Efficiency and Thermal Comfort		
RWDI	Wind Microclimate	Andy Gypps	HNC Mechanical Engineering	Member of the Institution of Mechanical Engineers	• RWDI is a specialty engineering consulting firm of approximately 500 employees in 17 offices worldwide involved in the science of buildings, structures and the environment. We help project teams overcome challenges of a wide range of environmental and integrated sustainability issues. Our expert consultants provide clients with the services necessary to make ecologically, economically and equitably sound decisions. Our approach is built on a foundation of innovative thinking, advanced modelling technologies and collaboration with clients that assists in achieving high performance while reducing cost, time and risk. • Krishan Jayyaratnam is a senior engineer and engineering team leader at RWDI. He has 6 years' experience in wind microclimate consultancy and mitigation design guidance for several high-rise developments and masterplans specifically in London and throughout the UK. • Aimee obtained a Prince2 certificate in Project Management in January 2019. Aimee has been working at RWDI since 2011 and has assisted and managed a wide range of projects since then, dealing with a global client list including the UK, Middle East and Europe. • Andy is a Senior Project Manager, Associate and Leader of the Project Management team in RWDI's UK office. He has worked in Project Management for the last 25 years and joined RWDI in 2007. He has managed a wide range of projects since then, dealing with a global client list including the UK, Middle East, India and the Far East and with a particular experience of wind engineering projects.
		Aimee Crook	Prince2 Certified	N/A	
		Krishan Jayyaratnam	C.Eng MIMechE M.Eng Aeronautics and Astronautics	Member of the Institution of Mechanical Engineers	
GTECH SURVEYS	Telecommunications	Gareth Phillips	BEng (Hons) MIET	Member of The Institution of Engineering and Technology	• Gareth has over 20 years' experience in the telecommunications and broadcast sector, including extensive experience of related matters in London. In addition to ES work, he also assists developers discharge telecommunications and broadcast related planning conditions and S106 agreements. • He has experience with complex and large schemes in most London boroughs.

Technical Appendix 2.1: EIA Scoping Opinion Request Report

Intended for
Berkeley Homes (Central London) Limited

Date
September 2020

Project Number
1620009008

PADDINGTON GREEN POLICE STATION
EIA SCOPING OPINION REQUEST REPORT

RAMBOLL

PADDINGTON GREEN POLICE STATION
EIA SCOPING OPINION REQUEST REPORT

Project No.	**1620009008**
Issue No.	**4**
Date	**16/09/2020**
Made by	**Ben Seward, Callum Mackenzie**
Checked by	**Michelle Wheeler**
Approved by	**Michelle Wheeler**

Made by: Callum mackenzie

Checked/Approved by:

Version Control Log

Revision	Date	Made by	Checked by	Approved by	Description
1	09/09/2020	BS/CM	MW	MW	Issue for Client Review
2	14/09/2020	CM	MW	MW	Second Issue for Client Review
3	15/09/2020	BS/CM	MW	MW	For Planning Submission
4	16/09/2020	BS/CM	MW	MW	For Planning Submission

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1. INTRODUCTION

1.1 Background

Ramboll UK Limited ('Ramboll') has been commissioned by Berkeley Homes (Central London) Limited (hereinafter referred to as the 'Applicant') to prepare a formal Environmental Impact Assessment (EIA) Scoping Opinion Request for the proposed redevelopment of a site at 4 Harrow Road, Paddington, London W2 1XJ (hereinafter referred to as the 'site'). The site is located within the administrative boundary of the Westminster City Council (WCC).

The redevelopment proposals comprise a residential-led scheme (hereinafter referred to as the 'proposed development') for which the Applicant intends to submit a planning application for full planning permission (hereafter referred to as the 'application').

The proposed development falls within Schedule 2 (10(b)) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (hereinafter referred to as the 'EIA Regulations') and, by virtue of factors such as its size, nature or location, is likely to have a significant effect on the environment. On this basis, an EIA for the proposed development will be undertaken.

The findings of the EIA will be reported in an Environmental Statement (ES), which will accompany the application. Ramboll and a team of technical specialists have been commissioned by the Applicant to undertake the EIA and to prepare the ES to accompany the application.

1.2 Purpose of EIA Scoping Report

Regulation 15 of the EIA Regulations allows for the Applicant to ask the local planning authority to state in writing their opinion as to the scope of the EIA. This report constitutes a formal request for an EIA Scoping Opinion from the WCC.

The purpose of this EIA Scoping Report is to agree with the WCC the proposed scope of the EIA and the approach to be adopted for the technical assessments to be scoped within the EIA and ES, as well as to facilitate wider consultation with statutory consultees and key stakeholders who may have an interest in the likely significant environmental effects of the proposed development.

This EIA Scoping Report:

- outlines the planning context in Section 2;
- summarises the key considerations of the EIA process in Section 3 and the approach that will be adopted for the EIA of the proposed development;
- describes the key characteristics and the surrounding context of the site in Section 4, providing a plan sufficient to identify the land;
- briefly describes the emerging proposed development for the site including its technical capacity, as appropriate, in Section 5;
- identifies the likely significant environmental effects for the proposed development that are proposed to be scoped in the ES as discrete technical assessment chapters in Section 6, together with the associated proposed scope and assessment methodologies that will be adopted to predict the magnitude of potential impacts, the scale of likely effects, and the significance of the effects; and
- identifies the likely non-significant environmental effects for the proposed development that are proposed to be scoped out of the ES as discrete technical assessment chapters in Section 7.

This EIA Scoping Report has been developed in accordance to the provisions of Regulation 15 of the EIA Regulations, as well as good practice methods.

During the EIA Scoping process, it is anticipated that the WCC will provide an EIA Scoping Opinion which will further inform the scope and methodology of the EIA to be undertaken. When adopting a formal EIA Scoping Opinion, the WCC will take into account the views of statutory consultees and other interested parties.

1.3 Consultation Strategy

The process of consultation is a key requirement of EIA and the views of statutory consultees and stakeholders serve to help identify specific issues, as well as highlighting the existence of any information in their possession, or of which they have knowledge, which may be of assistance in progressing the EIA. The key consultees that should be provided the opportunity to contribute to the formal EIA Scoping process include, but are not limited to, those set out in Table 1.1.

Table 1.1: Consultees

Statutory Consultees	Non-Statutory Consultees
Westminster City Council (WCC)	Thames Water
Environment Agency (EA)	National Grid and other service providers
Natural England (NE)	Metropolitan Police Force and other emergency services.
Historic England (HE)	London Wildlife Trust
Transport for London (TfL)	Canal and River Trust (previously British Waterways)
Greater London Authority (GLA)	Local Ward Councillors
	Local amenity societies and community groups including the Paddington West Partnership, Paddington Development Trust and Local Area Renewal Partnerships (LARP)

Each technical assessment chapter of the ES will include a summary of the relevant consultations undertaken as part of the EIA process.

As part of the design and EIA process, measures will be developed and discussed with relevant consultees (i.e. NE, HE, EA) and other stakeholders where necessary to avoid, reduce, remediate likely adverse effects, or provide enhancements.

2. PLANNING CONTEXT

2.1 Planning History

This section summarises the key planning history of most relevance to the site and provides background to the existing and consented land uses at the site.

The on-site building was originally consented in the late 1960's (ref. A.174.66) as a 'Divisional Police Station, district headquarters, and section house.' It is understood that construction on the building was completed in 1971.

The most recent planning history of the site is summarised in Table 2.1 and relates mainly to operational works at the site. There are further advertising applications for a public call box, applications for the temporary installation of public art, and for the installation of telecommunications and CCTV equipment on the building.

Table 2.1: Site Planning History

Reference	Description
01/06109/FULL	Erection of a replacement covered walkways between police station and office annex at first floor level
95/04667/1884	Panel and glazed infill to external covered way
94/00394/1884	Proposed replacement of two security huts
91/04645/1884	Repositioning of observation post
91/03630/1884	Single storey extension to provide cloakroom/baggage store
91/00634/1884	Access ramp for the disabled at main entrance to Paddington Green Police Station on Harrow Road

2.2 Legislation, Planning Policy and Guidance

Legislation, planning policy and guidance will inform the scope of technical assessments within the EIA and the identification of sensitive receptors.

The proposed development's compliance to and performance against legislation, planning policy and guidance (together with associated planning standards/targets) will be appraised within the Planning Statement and Design and Access Statement for the application, and not within the EIA. Accordingly, the ES will not provide an exhaustive discussion of legislation, policies and guidance. Instead, a list of legislation and policies that have been considered in preparing the EIA as a whole, will be appended to the ES.

Section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that any determination under the Planning Act should be made in accordance with the development plan unless material considerations indicate otherwise. The development plan for Westminster consists of:

- The London Plan (March 2016), consolidated with alterations since 2011;
- Westminster City Plan – Strategic Policies, consolidated version adopted November 2016;
- Westminster Policies and Proposals Map – adopted November 2016; and
- Westminster's Unitary Development Plan saved policies, adopted January 2007 (saved policies 2010).

2.2.1 National Policy and Guidance

National Planning Policy Framework, 2019

The 2019 National Planning Policy Framework (NPPF)[1] was published and became immediately effective on 19 February 2019, superseding the July 2018 revision of the 2012 NPPF. It sets out the Government's planning policies for England. It provides within a single document, the greater part of national planning policy advice and articulates the Government's vision for delivering sustainable development. The NPPF is a material planning consideration.

Planning Practice Guidance

The national Planning Practice Guidance (PPG)[2] is an online resource that provides more detailed, continuously updated information in support of the NPPF. The PPG aims to make planning guidance more accessible, and to ensure that guidance is kept up-to-date. Of note is the EIA guidance presented in the PPG.

2.2.2 Regional Policy and Guidance

The EIA will have regard to The London Plan (2016): Spatial Development Strategy for Greater London Consolidated with Alterations Since 2011 (including January 2017 typesetting correction)[3], and The Intend to Publish London Plan 2019 (December 2019)[4].

In addition, the following regional supplementary planning guidance (SPG) and strategies will be considered:

- London Environment Strategy (2018)[5];
- Mayor's Transport Strategy (2018)[6];
- Affordable Housing and Viability SPG (2017)[7];
- Culture and Night-Time Economy SPG (2017)[8];
- Housing SPG (2016)[9];
- Social Infrastructure SPG (2015)[10];
- Accessible London: Achieving an Inclusive Environment SPG (2014)[11];
- Control of Dust and Emissions During Construction and Demolition SPG (2014)[12];
- Character and Context SPG (2014)[13];
- London Planning Statement SPG (2014)[14];

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[1] Ministry of Housing, Communities and Local Government, 2019. National Planning Policy Framework. London. HMSO.
[2] Ministry of Housing, Communities and Local Government, 2019. Planning Practice Guidance [online]. Available from: https://www.gov.uk/government/collections/planning-practice-guidance
[3] Greater London Authority, 2016 (Updated 2017). The London Plan: The Spatial Development Strategy for London Consolidation with Alterations since 2011. London. GLA.
[4] Greater London Authority, 2019. Intend to Publish London Plan 2019. London. GLA.
[5] Greater London Authority, 2018. London Environment Strategy. London. GLA.
[6] Greater London Authority, 2018. Mayor's Transport Strategy, London. GLA.
[7] Greater London Authority, 2017. Homes for Londoners: Affordable Housing and Viability Supplementary Planning Guidance. London. GLA.
[8] Greater London Authority, 2017. Culture & the Night-Time Economy, Supplementary Planning Guidance. London. GLA.
[9] Greater London Authority, 2016 (Updated 2017). Housing, Supplementary Planning Guidance. Implementation Framework. London. GLA.
[10] Greater London Authority, 2015. Social Infrastructure, Supplementary Planning Guidance. London. GLA.
[11] Greater London Authority, 2014. Accessible London: Achieving an Inclusive Environment, Supplementary Planning Guidance. Implementation Framework. London. GLA.
[12] Greater London Authority, 2014. The Control of Dust and Emissions During Construction and Demolition, Supplementary Planning Guidance. London. GLA.
[13] Greater London Authority, 2014. Character and Context, Supplementary Planning Guidance. London. GLA.
[14] Greater London Authority, 2014. London Planning Statement, Supplementary Planning Guidance. Implementation Framework. London.

- Sustainable Design and Construction SPG (2014)[15];
- Play and Informal Recreation SPG (2012)[16];
- All London Green Grid Supplementary Planning Documents (2012)[17];
- London View Management Framework SPG (2012)[18];
- London's World Heritage Sites (2012)[19];
- Planning for Equality and Diversity in London (2007)[20];
- London's Housing SPG (2016)[21];
- Affordable Housing and Development Viability SPG (2017)[22];
- London Central Activities Zone SPG (2016)[23];
- Accessible London SPG (2014)[24]; and
- Social Infrastructure SPG (2015)[25].

2.2.3 Local Policy and Guidance

The EIA will have regard to the Westminster City Plan (2016)[26] which provides spatial policies, development management policies and site allocations to guide and manage developments in the borough up to and beyond 2027.

The following WCC SPG documents will also be considered:

- WCC Code of Construction Practice (2008);
- City of Westminster Open Space Strategy (2007);
- Development and Demolition in Conservation Areas (1996);
- City of Westminster Inclusive Design and Access (2007);
- Public Realm Credits - Operating a System in Westminster (2011);
- Basement Development in Westminster (2014);
- City of Westminster Trees and Public Realm Strategy (2011);
- Planning Obligations (2008 and new consultation version 2015);
- WCC Air Quality Strategy and Action Plan (2001);
- Paddington Green Conservation Area Audit;
- Designing Out Crime in Westminster (1997);
- Westminster Way: Public Realm Strategy SPD (2011); and
- Trees and the Public Realm: A strategy for Westminster SPD (2011).

15 Greater London Authority, 2014. Sustainable Design and Construction, Supplementary Planning Guidance. London.
16 Greater London Authority, 2012. Play and Informal Recreation, Supplementary Planning Guidance. London.
17 Greater London Authority, 2012. Green Infrastructure and Open Environments: The All London Green Grid, Supplementary Planning Guidance. Implementation Framework. London.
18 Greater London Authority, 2012. London View Management Framework, Supplementary Planning Guidance. London.
19 Greater London Authority, 2012. London's World Heritage Sites: Guidance on Settings, Supplementary Planning Guidance. Implementation Framework. London.
20 Greater London Authority, 2007. Planning for Equality and Diversity in London, Supplementary Planning Guidance to the London Plan. London.
21 Greater London Authority, 2016. Housing Supplementary Planning Guidance. London. GLA.
22 Greater London Authority, 2017. Affordable Housing and Development Viability Supplementary Planning Guidance. London. GLA.
23 Greater London Authority, 2016. Central Activities Zone Supplementary Planning Guidance. London. GLA.
24 Greater London Authority, 2014. Accessible London Supplementary Planning Guidance. London. GLA.
25 Greater London Authority, 2015, Social Infrastructure Supplementary Planning Guidance. London. GLA.
26 Westminster City Council, 2016. Westminster City Plan, London.

2.2.4 Emerging Local Policy and Guidance

Both the London Plan and Westminster City Plan are undergoing revision at present, which are at the following stages of revision:

London Plan – Intend to Publish Version (2019) ***(and subsequent letters/correspondence with the Secretary of State).***

The London Plan has gone through Examination in Public, and the Secretary of State (SoS) subsequently directed further revisions to the plan. The Plan therefore holds material weight in decision making as it nears adoption.

A number of Mayoral SPG's are currently in draft form following consultation in 2020, including:

- Good Quality Homes for all Londoners;
- Circular Economy Guidance;
- Whole life-cycle carbon assessments;
- Energy Monitoring Guidance;
- Energy Planning Guidance; and
- Fire Safety.

Westminster City Plan 2019-2040

The Westminster City Plan 2019-2040[27] has been submitted to the SoS for Examination in Public, which is due to take place in Autumn 2020. Several sets of minor modifications have been submitted to the SoS following submission, and many matters remain un-resolved. The draft plan therefore has limited weight in decision making.

Westminster has also set out its intention to publish and develop a number of supplementary guidance and development plan documents (SPD's and DPD's), including a Site Allocations DPD, Planning Obligations and Affordable Housing DPD and others in 2021.

There are no other emerging policies or guidance currently identified.

2.3 Application Documents

Whilst subject to ongoing discussion with the WCC, it is anticipated that the following documents will be required to accompany the application:

- Covering Letter and Application form;
- Relevant Certificates and Notices;
- Community Infrastructure Levy (CIL) Additional Information form;
- Site Plan and Site Location Plan 1:1250;
- Existing Site and Demolition Drawings;
- Development Plans (including area schedule and planning drawings);
- Planning Statement;
- Draft Planning Obligations Heads of Terms
- Draft Planning Performance Agreement (PPA)
- Statement of Community Involvement;
- Site Survey (Levels);
- Design and Access Statement (including but not limited to the lighting strategy, landscape strategy, parking and access details);
- Environmental Statement, including:

27 Westminster City Council, 2019. The Westminster City Plan 2019-2040. London.

  - ES Chapters for Socio-Economics; Air Quality; Noise and Vibration; Daylight, Sunlight and Overshadowing; Wind Microclimate; Townscape, Visual and Built Heritage (including Heritage Statement);
  - Stand-alone reports presented as Technical Appendices for the following environmental topics to be scoped out as ES chapters: Ecology; Flood Risk; Contamination; Archaeology);
- Internal Daylight and Sunlight Assessment;
- Energy Statement;
- Landscaping Strategy and associated plans;
- Sustainability Statement (including BREEAM Pre-Assessment);
- Transport Assessment including Framework Servicing and Deliveries Management Plan, Travel Plan Construction Logistics Plan; and
- Fire Statement.

3. EIA PROCESS

3.1 Need for Environmental Impact Assessment

EIA is a formal process by which the effects of certain types of development projects on the environment are identified, assessed and reported upon and mitigation identified in order for the effects to be taken into account by the relevant competent authority when considering whether to grant planning permission.

The EIA Regulations set out in general terms the content of an ES and allow an Applicant to obtain a formal EIA Scoping Opinion from the relevant planning authority regarding the issues to be considered within the EIA for a specific development proposal; what information should be contained in the ES; and what effects are likely to be more significant than others. EIA best practice encourages applicants to consult other organisations likely to have an interest in a development proposal.

3.2 Content and Format of Environmental Impact Assessment

The specified information to be included in the ES of the proposed development will comply with Regulations 18(3) – 18(5) and Schedule 4 of the EIA Regulations. In summary, the ES will present the following:

- A description of the site, its location and surrounding context and associated environmental sensitivities – baseline conditions;
- A description of the proposed development containing information on:
  - the physical characteristics and land use requirements of the proposed development during the demolition and construction works and of the operational, completed development;
  - the main characteristics of the operational stage of the proposed development including energy demand, nature and quantity of the materials and natural resources used (water, land, soil and biodiversity);
  - the expected residues and emissions (water, air, soil, sub-soil pollution, noise, vibration, light, heat, waste) resulting from the construction and operation of the proposed development;
- A description of the reasonable alternatives studied by the Applicant, as relevant to the proposed development, and the reasons for the selection of the chosen option, including a comparison of the environmental effects;
- A description of the relevant aspects of the baseline and an outline of the likely evolution thereof without the implementation of the proposed development (see 'Do-Nothing scenario' in section 2.5) as far as natural changes from the baseline can be assessed;
- A description of the factors of the environment likely to be significantly affected by the proposed development, including:
  - population;
  - human health;
  - biodiversity (fauna and flora);
  - land (land take);
  - soil;
  - water (quantity and quality);
  - air;
  - climate (greenhouse gas emissions, adaptation to climate change);
  - material assets, including the architectural, archaeological and landscape assets; and
  - the interaction between the above factors.

- A description of the likely significant effects of the proposed development on the environment, which should indicate the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, beneficial and adverse effects of the proposed development resulting from:
  - the construction and existence of the development, including demolition works;
  - the use of natural resources, in particular land, soil, water, biodiversity and the sustainability of resources where possible;
  - the emission of pollutants such as noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;
  - the risk to human health, cultural heritage or the environment (due to accidents or disasters);
  - the accumulation of effects with other existing and/or approved projects, taking into account existing environmental problems or the use of natural resources;
  - impacts on climate (nature and magnitude of greenhouse gas emissions) and the vulnerability of the proposed development to climate change; and
  - the technologies and substances used.
- A description of the forecasting methods used to assess the effects on the environment including details of difficulties encountered and the main uncertainties;
- A description of mitigation measures to avoid, prevent, reduce or where possible, offset any significant adverse effects on the environment and, where appropriate, any proposed monitoring arrangements for both the demolition and construction stage and the completed development stage;
- A non-technical summary of the information provided above;
- A list of references detailing sources used for the descriptions and assessments included in the ES; and
- A statement outlining the relevant experience and/or qualifications of the technical experts who have prepared the ES.

The ES will comprise three volumes:

- Non-Technical Summary
  - Individual volumes of the ES will be summarised within a Non-Technical Summary (NTS), which will outline the key findings of the EIA, presented in non-technical language to assist the reader;
- Volume 1: Main ES Report comprising:
  - Five introductory chapters (Introduction; EIA Process and Methodology; Alternatives and Design Evolution; Proposed Development Description; and Demolition and Construction Description);
  - Technical assessment chapters which will report on the EIA of the proposed development as described in the introductory chapters, as well as in documents that will accompany the application, as explained in Section 2; and
  - Two concluding chapters (Intra-Cumulative Effects; and Summary of Residual Effects).
- Volume 2: Townscape, Visual and Built Heritage Assessment (TVBHA);
- Volume 3: Technical Appendices including amongst others:
  - EIA Scoping Request; Ecological Impact Assessment (EcIA); Flood Risk Assessment (FRA); Ground Conditions Risk Assessment (GCRA), Archaeological Desk Based Assessment (DBA).

3.3 Basis of Environmental Impact Assessment

As noted earlier, the EIA will be undertaken based on the proposed development as described in the introductory chapters of ES Volume 1. This is based on the proposed development being designed to a full (detailed) application.

The proposed development will principally be defined by means of the following:

- Demolition and construction methods and control measures;
- Detailed planning application drawings;
- Detailed 3D model;
- Detailed area schedule; and
- Detailed residential unit and tenure mix.

The following supporting documents will accompany the application and will be considered during the EIA:

- Design and Access Statement;
- Energy Statement;
- Sustainability Statement; and
- Application Drawings.

3.4 Baseline Conditions

Consideration will be given, as appropriate (and subject to programmed implementation), within the EIA to existing and future site conditions:

- as existing, identified during site surveys, desk-based data collection and/or modelling (Existing Baseline);
- at the time the proposed development is completed, established by means of desk-based prediction, calculation and/or modelling (Future Baseline); and
- in combination with other existing and/or approved development in the cumulative study area of the site, established by means of desk-based prediction, calculation and/or modelling (Cumulative Future Baseline).

In addition, the Alternatives and Design Evolution chapter will consider the 'Do Nothing' scenario (if the proposed development was not to proceed).

3.4.1 Existing and Future Baseline

The EIA will predict the likely scale of change in environmental conditions as a result of the proposed development. The assessment of the scale and significance of a predicted change will be undertaken against a reference condition, known as the baseline. In most cases, the baseline represents the environmental condition of the site and the surrounding study area at the time of the assessment, although it may also include a projected environmental condition at some point in the future, referred to as the future baseline.

The existing baseline for the EIA will be taken as the existing site and its immediate surrounds, with the exception of transport and accessibility; air quality; and noise and vibration where the following future baselines will be considered:

- the year of the most intensive demolition and construction works, in terms of the number of vehicle movements; and
- the year of the proposed development's completion.

Various baseline surveys will be undertaken at the site to inform the emerging development proposals. These surveys will characterise the existing baseline conditions at the site.

Desk-based collection, prediction, calculation and modelling undertaken during the course of the EIA process will utilise information already available, as well as new information provided in response to this EIA Scoping Report. Collectively the information will establish existing and future baselines against which changes introduced by the proposed development will be assessed.

3.4.2 Do Nothing

The EIA Regulations stipulate that the ES should consider the likely evolution of the existing site conditions in the absence of the proposed development (i.e. the 'Do Nothing Scenario'). The evolution of site conditions will be qualitatively reviewed within ES Chapter 3: Alternatives and Design Evolution.

3.5 Alternatives

The EIA Regulations require that the ES provides an outline of the reasonable alternatives to the proposed development considered by the Applicant and the reasons for the selection of the preferred option. The alternatives considered in the course of the design process, such as site location, land uses, layouts and design evolution, will be presented. The environmental factors that informed each of the options would be presented as relevant.

3.6 Assessment Methodology

3.6.1 Approach

The EIA will be undertaken in line with best practice guidance, which includes the following publications:

- Institute of Environmental Management and Assessment (IEMA):
  - IEMA Guide to Materials and Waste in Environmental Impact Assessment[28]
  - IEMA: Delivering Proportionate EIA[29];
  - IEMA: Health in Environmental Impact Assessment[30];
  - IEMA: IEMA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance[31]
  - IEMA: Shaping Quality Development[32].
  - IEMA: Special Report into the State Environmental Impact Assessment Practice in the UK[33];
  - IEMA: Guidelines for Environmental Impact Assessment[34];
- Department for Transport: Design Manual for Roads and Bridges (DMRB) – LA series (2019)[35];
- National Planning Policy Framework (NPPF)[36];
- Planning Practice Guidance[37];
- European Commission (EC): EIA of Projects: Guidance on Scoping[38];

[28] Institute of Environmental Management and Assessment (IEMA), 2020. IEMA Guide to Materials and Waste in Environmental Impact Assessment. IEMA.
[29] IEMA, 2017. Delivering Proportionate EIA. IEMA.
[30] IEMA, 2017. Health in Environmental Impact Assessment. IEMA.
[31] IEMA, 2017. IEMA Guide to Assessing Greenhouse Gas Emissions and Evaluating their Significance. IEMA.
[32] IEMA, 2015. Shaping Quality Development, November 2015. IEMA.
[33] IEMA, 2011. Special Report into the State Environmental Impact Assessment Practice in the UK. IEMA.
[34] IEMA, 2004. Guidelines for Environmental Impact Assessment. IEMA.
[35] Department for Transport, 2019. Design Manual for Roads and Bridges - LA series, July 2019. Department for Transport.
[36] Ministry of Housing, Communities and Local Government, 2019. National Planning Policy Framework. London. HMSO.
[37] Ministry of Housing, Communities and Local Government (Live Document) Planning Practice Guidance [online]. Available: http://planningguidance.communities.gov.uk/.
[38] European Commission, 2017. EIA of Projects: Guidance on Scoping, 2017.

- Ministry of Housing, Communities and Local Government Online Resource: Guidance for Environmental Impact Assessment[39];
- Department for Communities and Local Government (DCLG) [now Ministry of Housing, Communities and Local Government]: Amended Circular on Environmental Impact Assessment (consultation paper)[40];
- DCLG: Environmental Impact Assessment: A guide to good practice and procedures (consultation paper)[41]; and
- Institute of Environmental Assessment [now IEMA]: Guidelines for Environmental Assessment of Road Traffic[42].

The EIA will employ a range of tools and approaches aimed at predicting the likely nature and extent of environmental effects. Some technical assessments will rely on mathematical models which provide a numerical estimate of the size of an environmental change or impact, such as the levels of noise or air pollutants likely to arise from net additional traffic, or from heating plant emissions. Other technical assessments will rely on map-based techniques to plot the extent of land use change or habitat loss or use illustrative methods to communicate how the proposed development might appear from a particular viewpoint.

The predictions in the EIA will indicate the nature and scale of the proposed development's likely effects, to enable informed planning decisions about the likely environmental outcomes of the proposed development; however, these predictions may be subject to a degree of uncertainty. As such, the tools employed, and the assumptions made in each case will be developed accordingly and set out clearly.

As a general rule, the EIA will assess the outcome of potential environmental effects that are likely to arise as a consequence of the proposed development. Any in-built mitigation and enhancement measures developed through the proposed development's design evolution will be considered within this assessment, and a level of significance would be applied to the likely effects.

Consideration will be given to any additional mitigation measures that would need to be incorporated/adopted/secured to reduce or off-set adverse effects. In addition, consideration will be given to enhancement measures. The assessment will then be undertaken again as necessary to incorporate the additional identified measures to report on the residual effects. Where significant residual effects are identified, consideration will be given for the need for any proposed monitoring arrangements.

The EIA will consider the proposed development's likely effects during the demolition and construction stage, upon completion and operation (the completed development stage), as well as cumulatively.

The assessment of environmental effects will be undertaken using specific methods of prediction including established guidelines and techniques.

Methods of prediction to be applied within this EIA will be either quantitative or qualitative or, in certain instances, both. Quantitative methods predict measurable changes because of the proposed development and rely on accurately measuring baseline conditions of the site to make accurate predictions with the completed proposed development.

Qualitative assessment techniques will rely on expert judgment and are exercised within a structured framework to ensure consistency of conclusions drawn. Clear distinctions will be made

[39] Ministry of Housing, Communities and Local Government, 2014. Guidance for Environmental Impact Assessment. DCLG.
[40] Department for Communities and Local Government, 2006. Amended Circular on Environmental Impact Assessment: A consultation paper. DCLG.
[41] Department for Communities and Local Government, 2006. Environmental Impact Assessment: A guide to good practice and procedures – a consultation paper. DCLG.
[42] Institute for Environmental Assessment, 1994. Guidelines for Environmental Assessment of Road Traffic. IEA.

between matters of fact, judgement and opinions with all sources identified. Assumptions, degrees of confidence and areas of uncertainty will be clearly stated.

It is anticipated that the demolition and construction programme of the proposed development would be sequenced (phased) over an approximate 5-year period. The EIA will assess and report on the completed development as a whole and not a phased development. This is because no significant delay (i.e. of more than 12 months) is anticipated between the development phases. In addition, a phased assessment is not proposed to be undertaken for the following reasons:

- A robust phasing strategy will be prepared by the Applicant based on detailed consideration of receptors within the immediate surroundings of the site, as well as newly introduced receptors (e.g. residents of completed residential units); and
- The impacts and effects that are likely to arise during the demolition and construction stage would not materially differ on a phase-by-phase basis and therefore robust assessments would be presented in each technical chapter.

The EIA will consider the phased delivery of the proposed development including the introduction of on-site sensitive receptors in completed buildings.

3.6.2 Demolition and Construction Stage Effects

ES Volume 1 will contain an introductory chapter (Chapter 5: Demolition and Construction Description) which will describe the proposed development's anticipated redevelopment programme and the key activities that are expected to be undertaken during demolition and construction works. This will form the basis for the assessment of demolition and construction effects.

Understanding of demolition and construction works (methods, techniques, equipment and phasing) is rarely available at the planning application stage. Where this is the case, 'realistic' scenarios will be adopted, with assumptions clearly identified in the relevant technical chapters of the ES. This will be based on demolition and construction methodologies for the site which can be used as a benchmark that would not be exceeded. Outputs will be identified that can be the subject of controls. It should be noted that in using this approach, actual construction methods may be more benign.

The chapter will also outline the measures that would be adopted/incorporated as part of the development proposals to avoid, reduce and mitigate typical environmental impacts and effects during the demolition and construction stage.

Standard measures that will be explored by the Applicant will include:

- re-use and recycling of demolition materials and excavated waste materials;
- appropriate selection and sourcing of construction materials;
- appropriate on-site management and siting of activities in relation to sensitive receptors;
- public safety;
- amenity and site security;
- operating hours;
- noise and vibration controls;
- air and dust management;
- noise and air emissions monitoring;
- hazardous substances storage and control;
- stormwater and sediment control; and
- public liaison.

It is important to note that this chapter of the ES will not assess the significance of likely effects during the demolition and construction works, as this will be addressed within subsequent individual technical assessment chapters of the ES, where relevant.

Chapter 5 will form a framework CEMP and will be a key form of embedded mitigation for the proposed development. It is anticipated that the CEMP will to be secured by means of a suitably worded planning condition imposed by the WCC.

3.6.3 Completed Development Stage Effects

ES Volume 1 will contain an introductory Chapter 4: Proposed Development Description which will describe the proposed development's physical characteristics, proposed access arrangements, landscaping strategy, utility requirements, estimated emissions and arisings. The description will include mitigation measures embedded within the development proposals.

Assessment of impacts once the proposed development is complete and operational will be based upon the scheme submitted as part of the application, as shown in the drawings and documents submitted to support the application.

3.6.4 Cumulative Effects

The EIA Regulations require that, in assessing the effects of a particular development proposal, consideration is also given to the cumulative effects which might arise from the proposal in conjunction with other existing and/or approved development proposals in the vicinity. The following two types of cumulative effects will be considered within the EIA:

- Intra-Project: The effects of different types of impact from the proposed development on receptors at or surrounding the site. Potential impact interactions include the combined effects of noise, dust and visual impacts during demolition and construction of the proposed development on a sensitive receptor; and
- Inter-Project: The effects which are the combined effects generated from the proposed development with other existing and/or approved developments in the vicinity. These other developments may generate their own individually insignificant effects, but when considered together with the proposed development, could amount to a significant cumulative effect, for example, combined townscape and visual impacts from two or more (existing and/or approved) developments.

Intra-Project Cumulative Effects

Impact interactions from the proposed development itself on receptors at or surrounding the site will be considered during the demolition and construction works, and once the proposed development is completed.

A qualitative assessment approach will be adopted, comprising the following steps:

- First, a review of the likely residual effects (and in particular the likely significant environmental effects) of each technical assessment within the EIA;
- Second, the likely receptors or receptor groups will be identified;
- Third, the individual effects which may impact a singular receptor or receptor group will be listed in a tabular/matrix format;
- Fourth, the potential for individual effects to interact will be identified; and
- Fifth, the scale of the combined intra-project cumulative effects will be assessed.

Dependent on the relevant sensitive receptors, the assessment will focus either on key individual receptors or on groups considered to be most sensitive to potential interacting effects. The criteria for identifying those receptors which are potentially sensitive will include existing land uses,

proximity to the demolition and construction works and the site, and likely duration of exposure to effects.

Only residual effects that are minor, moderate or major in scale will be considered within the assessment, as negligible effects are, by definition, imperceptible in their nature.

Due to the 'cross-boundary' and 'overlapping' nature of these effects across various environmental topics, and the assessment approach adopted, the results of intra-project cumulative effects will be holistically presented within a discrete assessment chapter (Intra Cumulative Effects) and not within each of the technical assessment chapters. This avoids unnecessary duplication and repetition and presents a proportionate approach.

Inter-Project Cumulative Effects

To ensure the proportionate assessment of Inter-Project (in-combination) cumulative effects, the EIA will focus on the consideration of "*existing and/or approved projects*" as defined in the EIA Regulations. Ramboll has devised the following criteria for the selection of these existing and/or approved projects to ensure a proportional assessment:

- Either: are consented/approved or have resolution to grant or are currently at early stage of demolition/construction; and
- Have a total floor space area of 10,000 m^2 GEA and/or comprise >150 residential units; and
- Either:
  - Within 1 km of the redline boundary/site; or
  - Spatially linked to the site by means of the local road network; or
  - Visible in protected/important views to and from the site.

The criteria has been widely accepted across London boroughs for EIAs of a similar nature and scale.

For those cumulative schemes which have had subsequent amendments, the latest known iteration will be assessed with the EIA. Where reserved matters applications have been consented, consideration would be given to the original consented outline application as this presents the worst case and is the most reasonable approach.

It is proposed that schemes that fall within the spatial and quantum parameters defined above, and which are likely to lead to significant cumulative effects, are quantitatively assessed on a topic by topic basis, subject to the availability of scheme information in the public domain.

Appendix 1 lists all of the cumulative schemes for consideration within the EIA. It is requested that the WCC review this list and provide any amendments or comments.

Following feedback from the WCC on this list and before submission of the application for the proposed development, if any additional cumulative schemes have been consented during this period, they will be assessed qualitatively through narrative text within the ES.

Further information on the schemes will be drawn from the WCC's planning application register at the time of undertaking the assessments. Where detailed information on schemes are not available to enable quantitative assessment, qualitative assessments would be undertaken.

Inter-project cumulative effects will be addressed within each of the individual technical assessment chapters, in ES Volume 1 and ES Volume 2. Each technical chapter will clearly state which cumulative schemes have been included within the assessment.

3.6.5 Significance

Significance is usually a function of the sensitivity (vulnerability/value/ importance) of the resource affected (receptor) and the magnitude of the potential impact.

The value or importance of a receptor could be a function of designation, whereas the vulnerability could be a function of carrying capacity and/or ability to respond to change. Receptor sensitivity will be defined based on a rating of high, medium or low.

The magnitude of impact of impact refers to the degree of change and will be defined based on a rating of high, medium and low/small (or unknown where relevant).

In assessing the magnitude of the impact, the scale and significance of resulting effects, regard will be had to the following:

- The likelihood of the impact/effect occurring, based on a scale of certain, likely or unlikely;
- The duration of the impact/effect, based on a scale of long, medium and short term (temporary);
- The geographical extent of the impacts/effect at local, borough, regional, national and international levels; and
- The reversibility of the impact/effect, being either reversible or irreversible.

Scale of effects will be determined by means of published guidance, matrices and/or application of professional judgement and defined based on a rating of major, moderate, minor, negligible.

Where published industry guidance and terminology do not exist and to provide a consistent approach to the presentation of likely effects, the following terminology will be used throughout the ES:

- Nature/Type of Effects -
  - Adverse: detrimental or negative effect to an environmental resource or receptor;
  - Neutral: effect that on balance, is both beneficial and adverse to an environmental resource or receptor; and
  - Beneficial: advantageous or positive effect to an environmental resource or receptor.
- Scale of Effects -
  - Negligible: effects which are beneath levels of perception;
  - Minor: slight, very short or highly localised effects;
  - Moderate: limited effects (by magnitude, duration, reversibility, value and sensitivity of receptor) which may be considered significant; and
  - Major: considerable effect (by magnitude, duration, reversibility, value and sensitivity of receptor, which may be more than of a local significance or lead to a breach of a recognised environmental threshold, policy, legislation or standard).

Where a particular absolute value, target criteria or threshold is achieved, negligible will be used to describe the effect.

Residual effects will be defined as either 'significant' or 'not significant'. Significant effects would be considered material to the planning decision making process. Based on the above, residual effects of moderate and major scale may be considered significant, but would be dependent on the relevant technical assessment, as well as the existence of published assessment guidance.

Where published assessment guidance is not definitive in respect of categorising/determining significant environmental effects, or where no published guidance is available, professional judgement will be applied, considering the duration, extent and context of the effect, to determine significant effects.

Where there are any deviations to the terminology set out above (e.g. due to published industry guidance or professional judgement), this will be clearly identified and explained within the relevant technical assessment of the EIA.

4. SITE

4.1 Site Location

The site is located at 4 Harrow Road, Paddington, London W2 1XJ to the immediate north of the A40 Westway as shown in Figure 4.1.

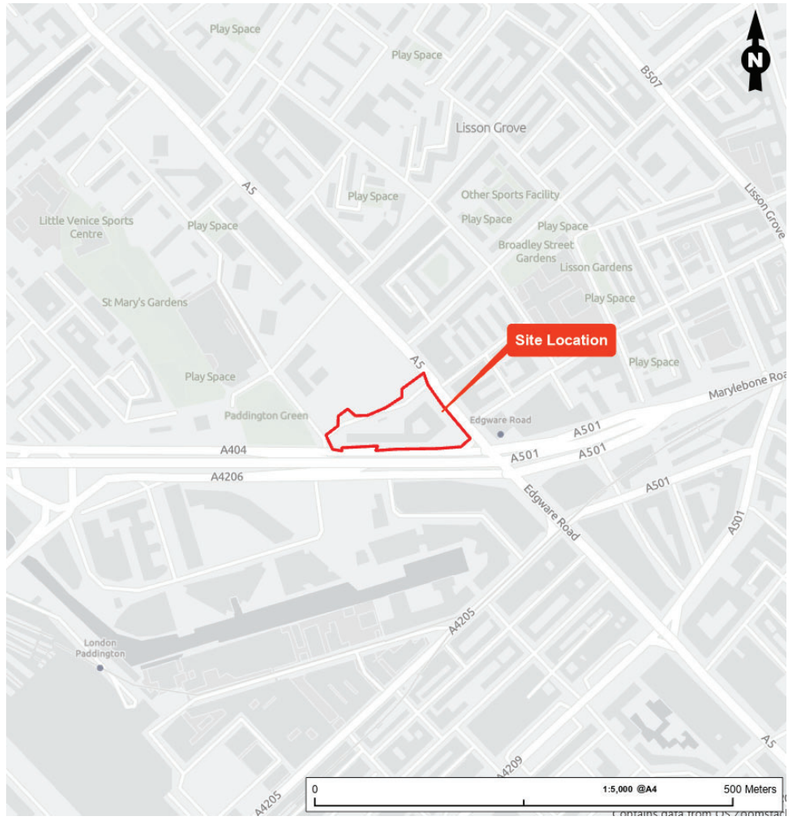

Figure 4.1: Site Location

The site is bound by:

- Newcastle Place road and the West End Gate (WEG) development (ref: 16/12162/FULL under construction to be completed 2025) to the north;
- Edgware Road to the east;
- Harrow Road and the A40 to the south; and
- Paddington Green road and open space to the west; and
- 14-17 Paddington Green recently been cleared by demolition works prior to the implementation of the WEG application.

As shown in Figure 4.2, the site's surrounding context is of a mixed nature with residential use predominant to the north, north-west and north-east within public open space in the form of Paddington Green to the west; small scale commercial along Edgware Road as part of the Edgware Road/Church Street district shopping centre which includes a popular street market; larger scale mixed-use to the south of the A40 in the Paddington Basin (including hotels; the Saint Mary's

Hospital; offices; and residential uses); and educational facilities (including the City of Westminster College Paddington Green campus) to the north-west.

The Edgware Road London Underground Station (which is served by the Bakerloo Line) is located approximately 50 m to the east of the site. Paddington Mainline Station is located approximately 400 m to the south-west.

Figure 4.2: Surrounding Context

The site is surrounded by a number of tall buildings located in the Hall Place Estate (Hall Tower and Braithwaite Tower, Parsons House) and West End Gate to the north; and the Hilton London Metropole Hotel, Burne House, Capital House and Merchant Square development to the south. There are further tall buildings with planning permission in the Paddington basin which are partially or yet to be implemented.

4.2 Site Description

As shown in Figure 4.3, the site redline boundary is approximately triangular in shape and occupies much of the street frontage of the street block on which it sits, covering a total site area of approximately 0.83 ha.

The site is currently occupied by the Paddington Green Police Station, which has been in this location since the 1970's. The building was acquired by the Applicant in 2020 following the relocation of the police station to Church Street in 2018.

The ground surface of the site is generally level, at approximately 32.000 m AOD.

The building is underlain be a one level of basement used for on-site parking.

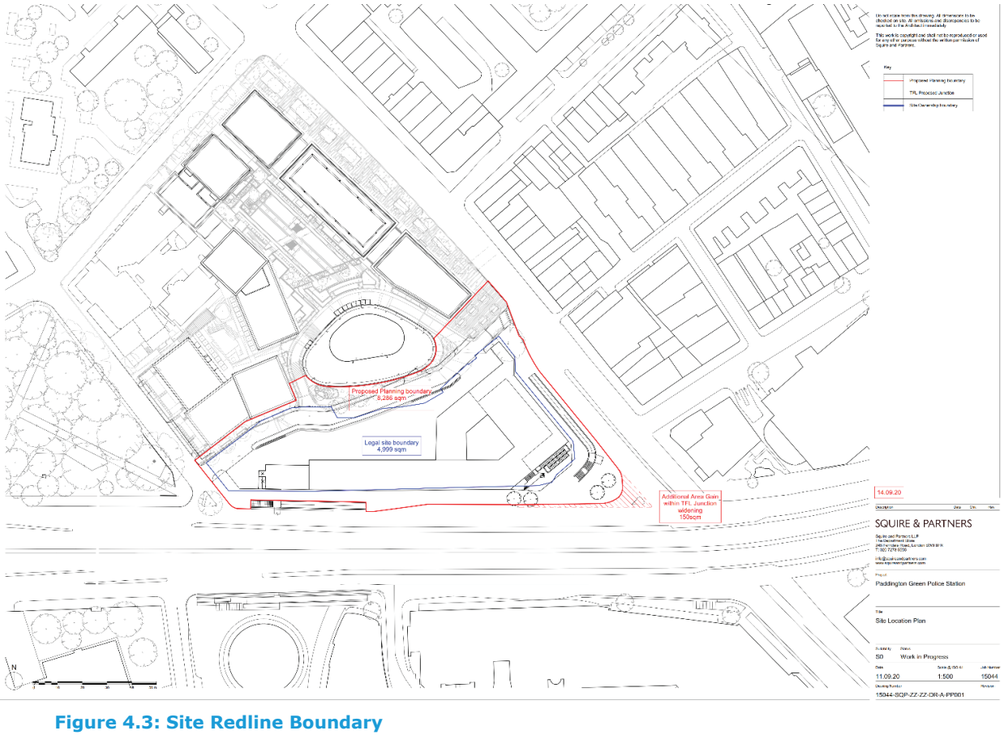

Figure 4.3: Site Redline Boundary

4.3 On-site and Surrounding Environment and Environmental Considerations

Geological maps for the area indicate that the geology beneath the site is underlain by Langley Silt Member (Clay and Silt), Lynch Hill Gravels and London Clay Formation.

Historic[43] and recent[44] ground investigations undertaken at the site indicates the following ground stratigraphy at the site:

- Rubbly Made Ground (typically 1-2 m thickness);
- Langley Silt Member (clays, silts and sands, typically 2-3 m thickness);
- Lynch Hill Gravels (gravelly sands and flint gravel with uppermost 1-2 m thick layer of laminated clay, typically 6 m thickness in total); and
- London Clay (silty clay typically from 12 m below ground level (mbgl) to depth (anticipated approximately 50 mbgl).

The superficial Langley Silt Member and London Clay at depth are classified by the EA as Unproductive Strata. The intermediate Lynch Hill Gravel is classified as a 'Secondary A' aquifer, described as '*permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers*'. The site is not located within a groundwater Source Protection Zone.

There are no surface water features on the site and no main rivers located within a 1 km radius. The closest surface water features are the Grand Union Canal, located approximately 150 m to the

[43] Soil Mechanics 1995
[44] LEAP Environmental 2015

south and the Boating Lake at Regent's Park approximately 1 km to the north-east. No additional surface water features have been identified within 1 km of the site.

A review of EA data indicates that the site is located in Flood Zone 1 (low probability) where the annual probability of flooding from rivers or the sea is less than 1 in 1,000 (0.1%). The site is also shown by the EA to be at Very Low or Low risk of surface water (pluvial) flooding, associated with potential surcharging of the drainage network during extreme rainfall events.

The site is not shown to be within a Critical Drainage Area (CDA) as shown in the WCC 2010 Strategic Flood Risk Assessment (SFRA).

A Phase 1 Habitat Survey of the site undertaken on 4 September categorised the existing habitats on-site as negligible to site level importance for wildlife. Limited vegetation is present, with street trees of site level importance and scattered ephemeral vegetation of negligible importance. The street trees are suitable for use by common bird species. No potential roost features were recorded on the buildings or trees, and the site is considered to be of negligible potential for use by bats.

The nearest Local Nature reserve (LNR) is the St John's Wood Church Grounds LNR approximately 1 km north-east of the site.

The site is located within Little Venice ward.

The site is located within the Paddington and Lillestone Village Area of Special Archaeological Priority (ASAP). This designation exists on the basis of the possibility for Saxon, Anglo-Saxon and Medieval remains.

The northern half of Newcastle Place, which is within the redline boundary, is located within Paddington Green Conservation Area, but otherwise the site is not within a CA.

The Paddington Green Children's Hospital (a three storey, red terracotta Grade II listed building dating back to approximately 1895) and 17 and 18 Paddington Green (residential terrace houses Grade II listed dating back to approximately 1800) are located to the north-west.

There are also several Grade II listed structures within the adjacent Paddington Green public open space, including telephone kiosks (corner of Harrow Road and Paddington Green) and a statue, in addition to the Grade II* Church of St Mary's, which is located further west within Paddington Green.

The site is not located within one of the designated views under the London View Management Framework, nor in a locally designated view.

The prevailing townscape character comprises the following:

- To the north-west of the site, the area is dominated by the Hall Place Estate which features a mixture of medium scale residential blocks and tower blocks;
- To the north, north-east and east of the site beyond Edgware Road, the area is densely built up, generally characterised by three to five storey terraces and small post-war blocks with ground floor retail lining Edgware Road;
- To the south of the site, beyond the A40, the area is dominated by Paddington Basin, mainly comprising large scale commercial buildings, generally of recent construction, arranged in relatively coherent groupings; and
- To the west of the site, the area features a mix of smaller scale historic buildings, open space, low rise post-war housing, stuccoed villas, mansion blocks and educational uses (The City of Westminster College). Parts of this area lies within the Paddington Green and Maida Vale CAs.

The site is situated in a highly accessible location with a public transport accessibility level (PTAL) rating of 6b. Edgware Road Underground Station is approximately 50 m to the east of the site and Paddington Station approximately 400 m to the south-west of the site. There are also good bus,

pedestrian and cycle routes in the vicinity of the site, with the following three London Cycle Network (LCN) routes in the locality of the site:

- Route 50 which provides a link between Marylebone and Hendon;
- Route 5 links Edgware and Battersea; and
- Route 36 provides links to Twickenham and Hammersmith.

Due to the site's urban location it is affected by road traffic noise.

The site is located within an Air Quality Management Area (AQMA) declared under the Environment Act 1995, which incorporates the whole City of Westminster (CoW). The AQMA has been designated due to the high traffic flows within the CoW which give rise to concentrations of pollutants nitrogen dioxide (NO_2) and fine particulates (PM_{10}) that exceed the current National Air Quality Standard objectives.

The site falls outside the designated London Congestion Charging Zone.

The prevailing wind direction is south-westerly with a secondary north-easterly wind.

With respect to telecommunications users and sensitive receptors (primarily terrestrial and satellite television users) it is expected that due to the nature of building use around the site, there will be a high number of different radio networks and services in use for communications and remote monitoring needs. A number of different wireless and radio technologies will be in use for both public and private requirements.

Figure 4.4 presents the publicly available environmental sensitivity data sets for the site and surrounding study area.

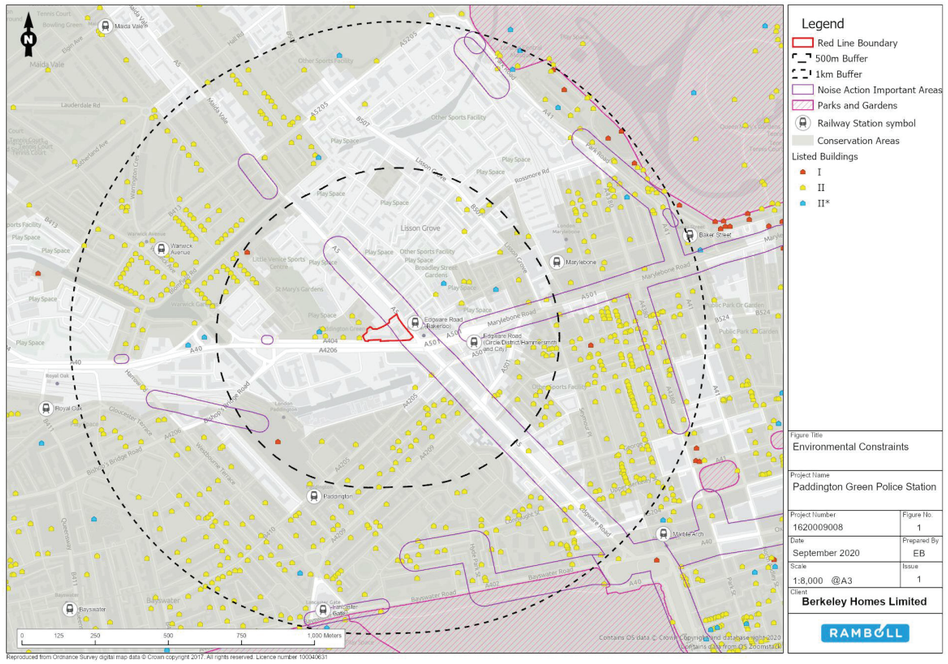

Figure 4.4: Environmental Sensitivities

5. PROPOSED DEVELOPMENT

The development proposals, which are currently being refined through the on-going pre-application design and planning process, are envisaged to comprise the:

- demolition of the Paddington Green Police Station;
- excavation of a basement connection to the West End Gate development basement;
- erection of three blocks along, set back from, Harrow Road and Edgware Road;
- delivery of ground floor commercial uses and residential at upper floors, with associated landscaped residential gardens; and
- stopping up of Newcastle Place with associated landscaping and cycle parking.

The proposed land uses are likely to comprise:

- approximately 650 homes, including 260 affordable housing units (Class C3);
- approximately 8,250 m^2 gross external area (GEA) flexible commercial space (Class E);
- servicing and disabled parking at basement level; and
- connection to the West End Gate (WEG) basement and energy centre with combined heat and power (CHP) plant.

Building heights would range from approximately Ground plus 13 to Ground plus 24 storeys with the taller element up to Ground plus 38 storeys.

The proposed development would be car free with the exception of minimal disabled parking provision.

An indicative layout plan is shown at Figure 5.1.

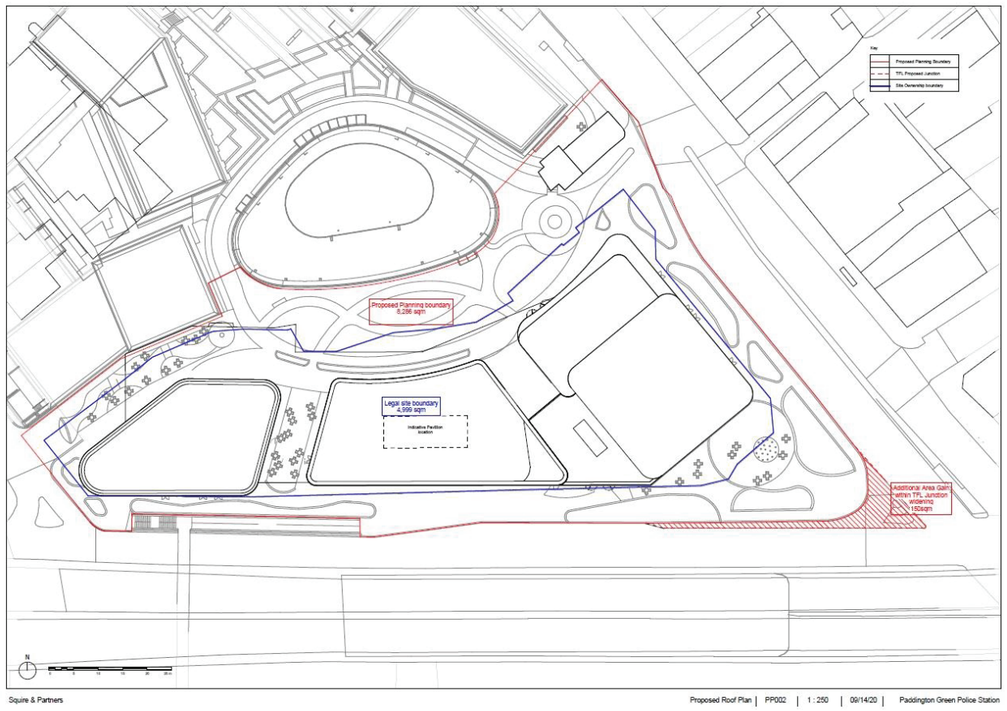

Figure 5.1: Indicative Proposed Block Layout

The three blocks would be arranged on the southern frontage of the site enclosing a proposed landscaped area to the north along Newcastle Place.

Commercial uses would be located at the ground floor level, along the main frontages of Edgware Road and Harrow Road, and at the first floor and part second floor, with residential uses above.

Ancillary residential amenities are currently envisaged to comprise residents' gardens at roof and terrace levels with additional resident facilities provided at ground floor. Residents would also have access to a residents' lounge and use of the facilities at the WEG development.

Children's and young person's play space would be provided as appropriate.

The emerging landscape proposals would aim to deliver considerable public realm, biodiversity and amenity enhancement especially along Harrow Road and Edgware Road.

The Applicant would seek to achieve a number of sustainable design initiatives. It is envisaged that these will be in line with Government and, in particular, the Mayor of London's 'Energy Hierarchy' and sustainability targets, as well as requirements set out by WCC. The proposed development would therefore aim to:

- minimise overall energy demand and consumption through practicable energy efficient design;
- minimise carbon dioxide emissions arising from the operation of the proposed development as far as practicably possible through the use of efficient plant, fittings and fixtures; and
- reduce carbon dioxide emissions arising from the operation of the proposed development as a result of on-site low carbon technology

6. POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS AND LIKELY EFFECTS SCOPED IN

This section summarises the potential significant environmental impacts and likely effects that are at this stage anticipated to arise in connection with all stages of the proposed development and will therefore be addressed in the EIA. It sets out the approach to be adopted in each instance, the scope of technical assessments to be undertaken and the assessment methods proposed.

6.1 Socio-Economics

A socio-economics technical assessment will be presented in ES Volume 1. The assessment will be undertaken by CBRE and will consider the potential socio-economic impacts of the proposed development; particularly the impact on employment, spending in the local economy, housing demand, population and community infrastructure. The assessment will be undertaken in the context of the existing site conditions, prevailing socio-economic baseline conditions and the relevant policy framework.

6.1.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and likely effects:

- Creation of demolition and construction employment and the anticipated direct and indirect effects within the local economy;
- Creation of operational employment, considering the gross employment as well as net additional above any existing employment levels on-site;
- Spending arising from on-site occupants (employees and residential population);
- Provision of new housing (residential units);
- Introduction of a new population accommodated within the residential units and resulting demand for community facilities (primary healthcare, schools, open space and playspace); and
- Change in the site conditions with regard to surveillance, activity and lighting.

6.1.2 Approach and Methodology

There is no published specific assessment guidance or technical significance criteria to assess socio-economic effects. Accordingly, the assessment will be undertaken based on professional experience and judgement. For transparency, the approach adopted in applying professional judgement will be confirmed by providing the sensitivity of receptor criteria, magnitude of impact criteria and scale of effect matrix.

Consultation

No specific consultation over and above this scoping exercise is considered necessary.

Study Area

This assessment will be considered at the neighbourhood level (Little Venice ward); the local authority level (CoW); and the regional level (Greater London), or where applicable within a certain distance of the site boundary, as summarised in Table 6.1.

Table 6.1: Socio-Economic Study Area

Assessment	Study Area
Demolition and Construction Employment	Local Authority
Completed Development Employment	Local Authority
Additional Spending	Local Authority
Housing Delivery	Neighbourhood and Local Authority
Primary Education Demand	Neighbourhood (1.6 km from site boundary)[45]
Secondary Education Demand	Local Authority (3.2 km from site boundary)[46]
Primary Healthcare (GP practices) Demand	Neighbourhood (1.6 km from site boundary)[47]
Open Space	Neighbourhood and Local Authority (800 m from site boundary)[48]
Playspace Demand	Neighbourhood (Under 5s: 100 m, 5-11 years: 400 m and 12+: 800 m)[48]
Crime	Neighbourhood

Baseline Characterisation

A desktop study will be undertaken, which will include a review of available information to determine the existing baseline conditions at neighbourhood, local authority and regional levels. This will focus on demographic, economic and employment data and location/capacity (where possible) of community facilities (including education, healthcare and open space/playspace). The existing baseline will be established using a combination of data sources including nationally published statistics from the Office for National Statistics (ONS)[49], Ministry of Housing, Communities and Local Government (MHCLG)[50] and GLA[51] where relevant. This includes the Business Register and Employment Survey[52], Annual Business Survey[53] and Census 2011[54]. The baseline and capacity of the social infrastructure will be established based on data from NHS Choices and NHS Digital[55] and the Annual School Census[56]. Relevant policy and supplementary planning guidance produced by the GLA and the WCC will also be considered.

Demolition and Construction

- Demolition and construction-related employment effects will be assessed using the latest published results in the Annual Business Survey[53].

Completed Development

- Completed development direct operational employment will be calculated by using land use specific employment densities from the Homes and Communities Agency (HCA) Employment Density Guide (2015)[57], which will be applied to the non-residential floorspace schedule.

45 Department for Education, 2014. New Home to School Travel and Transport Guidance.
46 Secondary School Planning occurs at borough level given secondary school aged children tend to travel further to school.
47 1.6 km is a 1520 minute walking distance (TfL, 2016) which is considered to be a reasonable walking distance to access GP services based on professional judgement.
48 Based on Greater London Authority (GLA) Supplementary Planning Guidance (2012) on Play and Informal Recreation.
49 Office for National Statistics (ONS), various data sets and years.
50 Ministry of Housing, Communities and Local Government (MHCLG), various data sets and years.
51 Greater London Authority (GLA), various data sets and years.
52 Business Register and Employment Survey, various years.
53 Annual Business Survey, various years.
54 Office for National Statistics (ONS), 2011. Census.
55 National Health Service, NHS Choices and NHS Digital data, 2020.
56 Department for Education, 2020. Annual Schools Census data.
57 Homes and Communities Agency (HCA), 2015. Employment Density Guide (3rd edition).

- An estimate of spending generated as a result of the completed proposed development will be calculated using average household spending figures and an average figure for daily worker spending[58,59].
- Delivery of housing will be evaluated by using the quantum of proposed residential units against the identified housing targets set out in WCC policy and the London Plan.
- Residential population and child yield will be modelled by entering the residential accommodation schedule into the GLA's Population Yield Calculator[60].
- Current capacity in primary schools and secondary schools will be established using the Annual School Census[56]. This information will be compared to the expected demand for school places from the new population of the proposed development.
- The Healthy Urban Development Unit (HUDU) benchmark of 1,800 registered patients per NHS General Practitioner (GP) will be used to assess existing GP capacity against demand arising from the proposed development. This will be assessed against the currently capacity of GP surgeries within 1.6 km of the site.
- Open Space and playspace will be assessed in line with local policy requirements.

The evaluation of proposed development's effects will be based on an assessment of the magnitude of the impact and the sensitivity of the identified receptor. The scale of effects will be identified on a matrix basis.

Mitigation measures integral to the development proposals (i.e. embedded mitigation) will be considered, whilst any additional mitigation measures will be identified, where necessary, to reduce likely adverse effects.

Cumulative Effects

Consideration will be given to cumulative effects where quantitative information is available within the public domain.

6.2 Air Quality

An air quality technical assessment will be presented in ES Volume 1. The air quality assessment will be undertaken by Ramboll and will consider the implications of current and future ambient air quality at the site for the proposed residential use, as well as the implications of emissions from the proposed development on local air quality.

Potential new sources of air pollution arising from the proposed development during its demolition and construction stage, and once completed (i.e. any heating plant) will be considered.

The proposed development will be car-free, with the exception of minimal disabled parking provision and subject to scoping with WCC. Together with servicing trips, the total vehicle trip generation for the site would be minimal and therefore the effects of the proposed development traffic emissions would be not significant and have been scoped out of the assessment.

6.2.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and likely effects:

- Demolition and construction dust and the associated effects on off-site human health and amenity, as well as early occupied units on-site;
- Demolition and construction HGV/Heavy Duty Vehicles (HDV) traffic and the associated emission effects on on-site and off-site human health receptors; and

[58] Office for National Statistics (ONS), Family Spending in the UK Statistical Bulletin.
[59] Visa Europe, 2015. UK Working Day Spend Report.
[60] Greater London Authority (GLA), 2019. Population Yield Calculator. London: GLA.

- Predicted air quality with the proposed development completed and operational to determine the suitability of the site for residential development and to identify the need for mitigation.

Effects on local air quality and sensitive receptors from a centralised energy plant emissions (NO_X) have been scoped out on the basis that the proposed development would not introduce significant gas fired energy plant (e.g. combined heat and power (CHP) and boilers). However, consideration will be given to the CHP emissions arising from the adjacent WEG development as the proposed development will connect to the existing energy centre located in the basement.

The proposed development would not give rise to any odour impacts and associated effects; accordingly, odour effects have been scoped out of the EIA.

6.2.2 Approach and Methodology

The suite of air quality assessments will be undertaken in accordance with the Mayor of London's 'Control of Dust and Emissions during Construction and Demolition SPG'[61] and the most recent Environmental Protection UK (EPUK) and Institute of Air Quality Management (IAQM) air quality planning guidance[62].

Consultation

Consultation with WCC Environmental Health Officer (EHO) will be undertaken during the EIA process to agree the scope of the assessment.

Study Area

The following sensitive receptors have been identified:

- Nearby existing and proposed areas where the public might reasonably be expected to spend extended periods of time, for example residential properties, hotels, public amenity areas / open spaces;
- Residential units introduced by the proposed development, as well as short term outdoor amenity areas if applicable; and
- Outdoor restaurant/bar seating where included in the proposed development.

No statutory designated ecological sensitive receptors have been identified that are likely to be impacted by changes in air quality as a result of the proposed development.

In respect of off-site impacts, the demolition and construction study area will be limited to within 350 m of the boundary of the site/50 m of the route(s) used by demolition and construction vehicles on the public highway, up to 500 m from the site entrance(s).

Baseline Characterisation

Existing baseline will be established by means of desk base review of WCC monitoring location data. Future baseline will be established by the use of air dispersion modelling and the Defra tools for predicting future air quality.

Demolition and Construction

A qualitative assessment of the potential impact on local air quality from demolition and construction activities will be undertaken. The latest guidance on the assessment of demolition and construction impacts on air quality published by the IAQM and the Mayor of London will be used to

[61] Greater London Authority, 2014. The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance. London. GLA. Available: https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/control-dust-and
[62] EPUK & IAQM, May 2015. Land-Use Planning & Development Control: Planning for Air Quality. Guidance from Environmental Protection UK and the Institute of Air Quality Management for the consideration of air quality within the land-use planning and development control processes.

assess the magnitude and significance of these impacts during the demolition and construction stage.

The risk of dust arising in sufficient quantities to cause annoyance and/or health impacts will be determined using four risk categories: negligible, low, medium and high risk. A development is allocated to a risk category based on the following two factors:

- The scale and nature of the works, which determines the potential dust emission magnitude as small, medium or large; and
- The sensitivity of the area to dust impacts, which is defined as low, medium or high sensitivity.

These two factors will be combined to determine the risk of dust impacts. The risk category assigned to the proposed development can be different for each of the four potential activities (demolition, earthworks, construction and track out). Consideration will be given to off-site receptors as well as on-site receptors (occupied early phases of the proposed development).

Potential impacts from exhaust emissions from construction vehicles using the local road network will be assessed following the methodology set out for operational vehicles given below for the completed proposed development.

Completed Development

To assess potential on-site impacts from road traffic emissions, the assessment will utilise the latest version of the ADMS-Roads modelling software[63] and consider the current and future baseline air quality in the area.

The proposed development would connect into the wider WEG masterplan plant. Emissions from this source would be modelled using the ADMS model and included within the future baseline. No other significant point source emissions of pollutants are anticipated.

The following scenarios will be assessed, as appropriate:

- Scenario 1: Existing Baseline (2019);
- Scenario 2: Future Baseline (year of opening accounting for any background growth excluding cumulative schemes);
- Scenario 3: Future Baseline + proposed development; and
- Scenario 4: Future Baseline + proposed development + cumulative development.

Modelled concentrations in the existing baseline year will be compared against local monitoring data in order to verify the model output.

The suitability of the site for residential development and the need for additional mitigation will be determined from the air quality concentrations predicted for the 'future baseline + proposed development + cumulative development' scenario.

There is no official guidance in the UK on how to assess the significance of local air quality emissions from existing sources on a new development. The assessment of the suitability of the site will be limited to predicting air quality at on-site receptors and the significance of this will be based on whether the national air quality objectives for each pollutant, as set out in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland[64], are exceeded or not.

In addition, an air quality neutral assessment will be carried out following the methodology outlined in the GLA's 'Sustainable Design and Construction SPG' and the 'Air Quality Neutral Planning

[63] Cambridge Environmental Research Consultants, 2019. ADMS-Roads [online]. Available at: http://www.cerc.co.uk/environmental-software/ADMS-Roads-model.html
[64] Department of the Environment, Transport and the Regions (DETR, 2007) in Partnership with the Welsh Office, Scottish Office and Department of the Environment for Northern Ireland, 2007. The Air Quality Strategy for England, Scotland, Wales, Northern Ireland. HMSO, London.

Support Update'[65].

The draft New London Plan introduces the concept that developments should now be demonstrating that they are air quality positive. However, at the current time no guidance has been provided as to how this should be carried out and therefore it is not proposed to include this as part of the assessment.

Cumulative Effects

Consideration will be given to cumulative effects within Scenario 4, where quantitative information is available within the public domain.

6.3 Noise and Vibration

A noise and vibration technical assessment will be presented in ES Volume 1. The assessment will be undertaken by Ramboll and will consider the effects of ambient noise on the proposed development, from local road and rail traffic in addition to other environmental noise and vibration sources, and the site's suitability for new residential dwellings. The assessment will also consider the potential noise impacts from the proposed development upon nearby noise sensitive receptors, including demolition and construction noise and vibration, road traffic noise, and noise from any new plant items.

6.3.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and likely effects:

- Demolition and construction noise and vibration at noise sensitive receptors (NSRs) in close proximity to the proposed development, as well as early occupied units on-site;
- Demolition and construction HGV traffic noise and the associated potential noise level changes on the local road network at NSRs, as well as early occupied units on-site;
- Public transport operational noise – although not a direct effect on the existing noise sensitivities as a result of the development, the operations of TfL (both bus and rail) and surrounding London airports will be taken into consideration to ensure a suitable acoustic environment prevails for any future residential occupants of the developed site;
- Vibration from public transport, in particular from the London Underground tunnels below the site, and an assessment on the likely effects of vibration and associated re-radiated noise on the proposed development;
- Noise effects on future residents of the proposed development from the operation of non-residential components of the proposed development (e.g. commercial); and
- Building services plant noise effects associated with the operation of the proposed development upon existing and future residents and amenity areas introduced by the proposed development.

6.3.2 Approach and Methodology

The noise and vibration assessments will be undertaken in accordance with relevant British Standards as set out below, as well as the Calculation of Road Traffic Noise (CRTN)[66] method and World Health Organisation's (WHO) 'Guidance for Community Noise' (1999)[67].

[65] Air Quality Consultants and ENVIRON (now Ramboll), 2014. Air Quality Neutral Planning Support Update: GLA 80371. Available at: http://www.aqconsultants.co.uk/getattachment/Resources/Download-Reports/GLA-AQ-Neutral-Policy-Final-Report-April-2014.pdf.aspx
[66] The Department for Transport, 1988. Calculation of Road Traffic Noise.
[67] World Health Organization, 1999. Guidelines for Community Noise, Stockholm University & Karolinska Institute.

Consultation

Consultation with the WCC's EHO will be undertaken to agree the proposed assessment survey and assessment methodologies.

Study Area

In respect of on-site impacts, the study area covers the:

- site; and
- nearest NSRs to the site boundaries, namely the WEG development immediately north, houses/apartments on the opposite side of Edgware Road and the Merchant Square development to the south.

In respect of off-site impacts, the:

- demolition and construction study area will be limited to within 350 m of the boundary of the site/50 m of the route(s) used by construction vehicles on the public highway, up to 500 m from the site entrance(s).
- completed development study area will extend to off-site sensitive receptors identified as at risk of impacts from the proposed development.

The study area has been defined based on professional judgement and experience.

Baseline Characterisation

Environmental noise measurements will be undertaken at a selected number of positions around the site (some of which will be identical to those employed on site previously) to establish the existing baseline noise levels. A combination of attended and unattended monitoring of the prevailing noise levels over weekday periods will be required in order to ensure that the noise climate at sensitive times is fully quantified.

Attended vibration measurements will be undertaken on the podium slab and at other relevant positions to allow subsequent assessment of any vibration impact on proposed new dwellings.

Measurements of all relevant noise indices (L_{Aeq}, L_{Amax}, L_{A10}, and L_{A90}) will be made at each position during each hour of the survey and octave band spectra will be recorded as necessary in order to fully quantify the existing noise climate. A noise and vibration survey report will be prepared and included as a Technical Appendix in Volume 3 of the ES.

The future baseline will be predicted by means of traffic data and estimates of development related traffic.

Demolition and Construction

The assessment of demolition and construction noise and vibration on surrounding existing and on-site future NSRs will be considered in accordance with the following standards, guidance and methodologies:

- BS5228-1: 2009 for demolition and construction plant noise and traffic noise + A01:2014 for code of practice for noise and vibration control on construction and open sites[68].;
- BS7385 for vibration in buildings[69]; and
- BS6472-1 for vibration effects on humans[70].

[68] British Standards Institution, 2014. BS 5228-1: 2009 + A01:2014 Code of practice for noise and vibration control on construction and open sites, BSI.
[69] British Standards Institution, 1993. BS 7385 Evaluation and measurement for vibration in buildings, BSI.
[70] British Standards Institution, 2008. BS 6472-1 Guide to evaluation of human exposure to vibration in buildings, BSI.

Completed Development

The results of the noise measurements will be used not only to establish an existing baseline for the local noise climate but also to enable the design of suitable building fabric for proposed dwellings to achieve suitable internal noise levels in line with guidance in BS8233:2014[71] and any planning requirements of WCC.

Using the results of surveys conducted on-site, a full quantitative assessment of the potential noise and vibration effects will be undertaken, and their potential significance rated in accordance with the established standards. The significance of any effects will be determined from the interaction of the impact magnitude, the duration of exposure and the sensitivity of the NSRs. Pre-mitigation effects, as well as post-mitigation (residual) effects will be evaluated.

An assessment of the change in road traffic noise from roads around the proposed development will be conducted by comparing the number of vehicle movements with and without the proposed development. The results of this assessment will be used to establish the acoustic effects of the development on existing dwellings in the area. The assessment would be undertaken for road links subjected to at least a 20 % change in traffic flow.

The assessment of noise on and from the proposed development will be undertaken in accordance with prevailing best practice standards, guidance and methodologies, in particular:

- Noise Policy Statement for England (NPS), March 2010;
- ProPG – Planning and Noise, 2017;
- WHO Environmental Noise Guidelines, 2018;
- Design Manual for Roads and Bridges Volume 11 Section 7 Part 3[72];
- BS8233:2014 and WHO 'Guidance for Community Noise': 1999 for noise break-in, external amenity space (balconies and communal open space) noise; and
- BS4142: 2014 for industrial and commercial noise[73].

The assessment will consider the following four scenarios:

- Scenario 1: Existing Baseline (2020);
- Scenario 2: Future Baseline (year of opening accounting for any background growth excluding cumulative schemes);
- Scenario 3: Future Baseline + proposed development; and
- Scenario 4: Future Baseline + proposed development + cumulative development.

Where the identified impacts indicate a notable change in noise and vibration levels compared to the baseline an assessment, appropriate additional mitigation measures will be recommended.

In order to determine the significance of likely effects, the magnitude of the impact and sensitivity of the NSR will be considered together. On that basis, the scale of identified effects will be determined.

Cumulative Effects

Consideration will be given to cumulative effects within Scenario 4, where quantitative information is available within the public domain.

[71] British Standards Institution, 2014. BS 8233:2014 Guidance on sound insulation and noise reduction for buildings, BSI.
[72] Highways Agency, 2011. Design Manual for Roads and Bridges Volume 11 Section 3 Part 7, HA.
[73] British Standards Institution, 2014. BS 4142: 2014 Methods for rating and assessing industrial and commercial sound, BSI.

6.4 Wind and Microclimate

A wind microclimate technical assessment will be presented in ES Volume 1. The assessment will be undertaken by RWDI and will consider the potential wind impacts of the proposed development; particularly with regard to the suitability of the proposed development for the intended pedestrian and occupier use, as well as unsafe wind conditions as defined by the Lawson Comfort Criteria[74].

6.4.1 Potential Impacts and Likely Effects

Given the proposed scale and geometry of the proposed development, it is important to avoid undesirable wind speeds being generated at ground level and at any other level where pedestrian activity is proposed. The wind microclimate assessment will quantify the potential changes to the local wind environment (both on-site and within the immediate study area) in terms of sensitive pedestrian areas, such as existing and proposed entrances, thoroughfares, amenity and open space, and quantify these in relation to their 'usability' for a range of pedestrian activities defined by the Lawson Comfort Criteria.

The assessment will consider the change in wind conditions as a result of the introduction of new built form and the associated effects on pedestrian comfort and safety with the completed proposed development.

6.4.2 Approach and Methodology

The wind microclimate assessment will be undertaken, by reference to the Lawson Comfort Criteria. For the completed development a fully quantitative wind tunnel modelling exercise will be undertaken.

Consultation

No specific consultation over and above this scoping exercise is considered necessary.

Study Area

The wind tunnel model will comprise a scale representation of the proposed development and its surroundings, to a minimum radius of 360 m from the centre of the site. Accessible areas at ground levels will be considered in and immediately around the proposed development itself, with a focus on off-site areas which pedestrians are able to access such as thoroughfares, entrances, ground level amenity spaces and bus stops. The range relative to the site to which these uses are considered will be established throughout the assessment and based upon experience/professional judgement and the layouts of surrounding buildings, roads, thoroughfares etc.

Baseline Characterisation

The existing baseline will be characterised by means of wind tunnel testing. Due to the advanced construction stage of the WEG development, it will be considered as part of the existing baseline.

Demolition and Construction

As the proposed development is constructed, the wind conditions on-site will alter on a regular basis with the environment expected to gradually transition between that of the existing baseline and completed development scenarios with a period of restricted access throughout the demolition and construction works. The worst-case scenario in terms of wind conditions would be when the proposed development is completed. Therefore, the demolition and construction stage will not be assessed quantitatively withing the wind tunnel, with wind conditions commented on using professional judgement.

[74] Lawson TV, 2001. Building Aerodynamics. London. Imperial College Press.

Completed Development

Quantitative assessment will be undertaken by means of a wind tunnel testing exercise. Scale models (likely 1:300) will be built for the following scenarios:

- Scenario 1: Existing baseline (The buildings currently occupying the site and the existing surrounding buildings/area);
- Scenario 2: Existing baseline + proposed development (The completed proposed development within the context of the existing surrounding buildings/area); and
- Scenario 3: Existing baseline + proposed development + cumulative development (The completed proposed development in the presence of cumulative schemes/future surrounding buildings).

Wind tunnel testing would be undertaken without landscaping to represent a worst-case. Landscaping will only be modelled in the event that mitigation is required. Should uncomfortable or unsafe wind speeds be measured a mitigation workshop will be conducted which will mitigate these conditions through the addition of hard or soft landscaping.

Mean and peak wind speeds will be measured around the base of the buildings forming the proposed development, accessible elevated levels of the development including a select number of balconies, and other surrounding buildings, paths, roads, and areas of open spaces, for all wind directions. Consideration will be given to the sensitive uses associated with these areas, such as entrances, thoroughfares, amenity spaces, pedestrian crossings, pick-up/drop-off points, spill-out seating and so on. These results will be combined with long-term meteorological climate data for the London area (obtained from Heathrow, Gatwick & Stanstead airports combined).

The results of this analysis will be benchmarked against the Lawson Comfort Criteria to determine the suitability of the different pedestrian use areas both within and surrounding the site for sitting, standing, entering a building, strolling or walking, with an additional distress/strong winds criteria applied for areas likely to be unsafe for pedestrians. The following target conditions will be assessed:

- For thoroughfares, strolling or calmer conditions during the windiest season for a mixed-use development in an urban area, similar to the proposed development.
- For main entrances, standing use wind conditions or calmer throughout the year.
- For rarely used service entrances or fire escapes, strolling level wind conditions throughout the year.
- For amenity areas, sitting conditions during the summer season (e.g. cafes & benches).
- For private balcony and communal roof terraces, sitting to standing conditions during the summer season.

Should mitigation measures be required to ensure that wind conditions are suitable for their intended use, the areas requiring mitigation will be identified and mitigation measures will be proposed. The potential for strong winds to occur will also be quantified.

Through the determination of the suitability for use of the pedestrian areas surrounding the site, a direct comparison can then be made with the baseline/existing off-site conditions where applicable, and the effect to these surrounding areas assessed, with the significance of effects identified. However, it should be noted that the focus of discussions will be a comparison of the measured conditions to the desired use of the proposed development. The results of these assessments will be presented within the ES Chapter.

Up to 20 selected balcony locations will be tested within the wind tunnel to determine the suitability of these areas for future residents of the proposed development. Although the assessment of these spaces and other amenity spaces at ground and podium/terrace levels will be completed for all

seasons, the focus will be on the wind microclimate during the summer when these areas are more likely to be frequently used.

The focus of ground level locations such as thoroughfares, entrances and bus stops will be for the windiest season, as these locations are expected to be usable at all times throughout the year.

Where exceedances of the comfort criteria are marginal and can be readily addressed by means of standard mitigation measures such as landscaping and recessed building entrances, it is not proposed to wind tunnel test mitigation measures. Instead professional judgement will be applied in confirming the effectiveness of the mitigation measures. If required for significant or safety exceedances, additional testing will be conducted to develop and evaluate the effectiveness of the mitigation strategy.

Cumulative Effects

Consideration will be given to cumulative effects within Scenario 3, where quantitative information is available within the public domain.

6.5 Daylight, Sunlight, Overshadowing and Solar Glare

A daylight, sunlight, overshadowing and solar glare technical assessment will be undertaken and presented in ES Volume 1. The assessment will be undertaken by GIA and will consider the potential daylight, sunlight, overshadowing and solar glare impacts of the proposed development; particularly to the existing neighbouring residential buildings and emerging developments, as well as existing amenity space and road viewpoints surrounding the site.

Internal daylight and sunlight to the new residential units and overshadowing to new open space created by the proposed development will be assessed separately and the results presented in a stand-alone report accompanying the application. Accordingly, these assessments will not form part of the scope of the EIA and have not been considered further within this EIA Scoping Report.

6.5.1 Potential Likely Effects

Given the scale of the new buildings that would be introduced to the site, the potential for the following effects with respect to daylight, sunlight and overshadowing have been identified:

- Temporary changes to the daylight and sunlight amenity within surrounding receptors having a reasonable expectation to natural light, because of the demolition and construction works;
- Temporary changes to the overshadowing of surrounding outdoor amenity spaces, because of the demolition and construction works;
- Gradually increasing changes to solar reflections at surrounding road viewpoints, because of construction works;
- Changes to the daylight and sunlight amenity to surrounding receptors having a reasonable expectation to natural light because of the completed proposed development;
- Changes to overshadowing of surrounding outdoor amenity spaces because of the completed proposed development; and
- Changes to solar glare occurring at surrounding road viewpoints because of the Proposed Development.

6.5.2 Approach and Methodology

The assessment of daylight, sunlight, overshadowing and solar glare will be based upon the guidance and recommendations set out in the Building Research Establishment's (BRE) Site Layout Planning for Daylight and Sunlight; A Guide to Good Practice (2011)[75], relevant national and

[75] Building Research Establishment, 2011. Site Layout Planning for Daylight and Sunlight: A guide to Good Practice (BRE209)

development plan policies and other related guidance, as well as application of professional judgment.

The initial baseline to be considered as part of the daylight, sunlight and overshadowing assessments will be the existing site conditions at the time of the submission of the application. Due to the advanced construction stage of the WEG development, it will be considered as part of the existing baseline. However, Blocks B and H of the 14-17 Paddington Green scheme, which overlaps with the WEG development, will be considered as a cumulative scheme.

Daylight and sunlight amenity at any surrounding developments which have been granted planning consent, and are in close proximity to the proposed development are considered to be future residential receptors are therefore also assessed.

Therefore, the proposed development will be assessed against both the existing baseline (the baseline conditions at the site and immediate surrounding area at the time of the assessment) and against the future baseline to account for completed cumulative schemes that will introduce sensitive receptors with a reasonable expectation of daylight and sunlight.

Consultations

No additional consultation over and above this EIA scoping exercise is considered necessary to inform the assessment.

Study Area

Existing sensitive receptors, buildings under construction and cumulative schemes with planning permission with windows facing the proposed development, and within close proximity of the site boundary will be assessed. These will be determined using professional judgement based on scale, proximity and planning status.

Additionally, sensitive locations i.e. traffic junctions at surrounding roads from which the proposed development is visible comprise the study area in relation to solar glare.

Baseline Characterisation

Baseline conditions will be established by means of desk study, site visits and modelling.

Demolition and Construction

The level of effect on daylight and sunlight availability to existing and emerging neighbouring receptors would vary throughout the demolition and construction stage and would steadily increase in magnitude as the proposed development is built. Any temporary accommodation or construction equipment such as cranes would only have a temporary effect on the daylight and sunlight levels to the surrounding sensitive receptors.

Similarly, the overshadowing effect to surrounding public and private open areas of amenity would experience varying effects throughout the demolition and construction stage, gradually increasing as the proposed development is built out, with potential temporary overshadowing effects as a result of construction equipment.

In terms of solar glare during the demolition and construction stage, as the superstructure is clad, any reflective elements may give rise to solar reflections at surrounding sensitive road locations.

Those effects that would be perceptible during the demolition and construction stage would be no worse than those of the completed development. A qualitative assessment will be undertaken using professional judgement, with the worst-case scenario represented by the completed development.

Completed Development

Daylight and Sunlight to Surrounding Receptors

The likely significant effects of the completed development will be discussed within the ES chapter. Daylight, sunlight and overshadowing analysis is being undertaken throughout the design stages and as such mitigation measures are incorporated into the design of the proposed development.

The BRE Guidelines state that residential properties have a reasonable expectation of daylight and sunlight. Therefore, the daylight and sunlight assessment will consider impacts to surrounding existing and emerging residential properties identified by a site inspection and a desktop study. In addition, survey information will be used to identify residential properties most likely to experience effects from the proposed development.

Information on the receptors will be gathered using details available on the WCC's planning database, estate agent's property particulars and site inspections. Where analysis is to be undertaken of buildings under construction or emerging developments, information available on WCC's planning portal will be used to determine the position of windows. If information is available to determine the layout of the rooms, the interior layouts will also be applied to the analysis model and additional daylight and sunlight testing will be undertaken. Where information on existing receptors are not available, reasonable room layout assumptions will be made and presented in the assessment.

The studies to be undertaken will use a three-dimensional computer model of the site and the surrounding buildings in the study area for the following scenarios:

- Scenario 1: Baseline (representing the current site conditions);
- Scenario 2: Baseline + proposed development (representing the completed development); and
- Scenario 3: Baseline + proposed development + cumulative development (representing the future baseline).

The effect of the proposed development on the daylight and sunlight amenity received by the neighbouring buildings will be analysed using bespoke software.

The buildings considered in the baseline will be assessed using Vertical Sky Component (VSC), No Sky Line (NSL). Consented future residential properties will be assessed using Average Daylight Factor (ADF) assessments to determine the levels of daylight retained with the proposed development in place.

The sunlight amenity will be considered by reference to the Annual Probable Sunlight Hours (APSH) method for the existing and future baseline and proposed development scenarios for all receptors sensitive to sunlight impacts identified above. With shadows being cast in a northerly direction in the northern hemisphere, this assessment will consider those windows serving rooms which face the site and are located within 90 degrees of due south.

In analysing the resultant daylight and sunlight assessment data, consideration will be given to the criteria set out in the BRE Guidelines. However, since the BRE Guidelines do not specifically relate to metropolitan locations, and as stated in the BRE Guidelines, a degree of flexibility will be applied to the site, as it is located in an urban area. In order to quantify the level of effect as a result of the proposed development, a degree of significance will be assigned to the results for each receptor.

The initial numerical criteria for determining the scale of effect is based on percentage alterations, as follows:

- 0 – 19.9 % alteration = Negligible;
- 20 - 29.9 % alteration = Minor;
- 30 - 39.9 % alteration = Moderate; and

- Greater than 40 % alteration = Major.

The significance of effects, will be determined using professional judgement and by reference to Appendix I of the BRE Guidelines, which state;

"*the assessment of impact will depend on a number of factors, and there is no simple rule of thumb that can be applied*".

The guidelines provided by the BRE for determining the significance of effects on daylight and sunlight amenity are as follows:

"I6 Where the loss of skylight or sunlight does not meet the guidelines in this book, the impact is assessed as minor, moderate or major adverse. Factors tending towards a minor adverse impact include:

- *only a small number of windows or limited area of open space are affected*
- *the loss of light is only marginally outside the guidelines*
- *an affected room has other sources of skylight or sunlight*
- *the affected building or open space only has a low level requirement for skylight or sunlight*
- *there are particular reasons why an alternative, less stringent, guideline should be applied…"*

"I7 Factors tending towards a major adverse impact include:

a large number of windows or large area of open space are affected

- *the loss of light is substantially outside the guidelines*
- *all the windows in a particular property are affected*
- *the affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight, e.g. a living room in a dwelling or a children's playground."*

"*I8 Beneficial impacts occur when there is a significant increase in the amount of skylight or sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space. Beneficial impacts should be worked out using the same principles as adverse impacts*."

According to the BRE Guidelines, surrounding residential buildings have an expectation of natural light in habitable rooms. Therefore, surrounding buildings are considered receptors of high sensitivity to daylight and sunlight levels of equal weighting, and each individual receptor is not assigned a level of sensitivity as per the usual EIA methodology i.e. high, medium or low.

The overall degree to which each receptor is affected is also considered alongside the magnitude of change to each assessed room/window to assess the overall significance of effect.

Based on the above guidance, a set of numerical parameters will be devised for each of the respective BRE Report's recommended assessments methods, in order to determine the significance of effects if and where the target values in the BRE Guidelines are not achieved. This numerically based significance criteria will be detailed in full in the ES.

With regard to the potential significance of any effect, the results will first be considered against the BRE Guidelines criteria "P. Littlefair (2011) Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (BR 209)". It is primarily on this basis that the significance of the effect will be determined. Where the BRE Guidelines criteria are not met, and before an overall significance is concluded for a particular dwelling, house or room, the retained levels of daylight and sunlight will be also considered against alternative target values set for this site. This approach has been accepted by other local authorities in London, where the need for new homes and consequently densification is acknowledged. Evidence for the alternative target values will be produced for discussion at Pre-Application meetings and to accompany the application, in line with that discussed with other local authorities for projects of similar size, nature and urban location.

Overshadowing

With regard to any overshadowing of surrounding areas of amenity space by the proposed development, this will be assessed initially by undertaking transient overshadowing assessments. For this assessment, the path of shadow will be mapped for each of the Scenarios on the following dates as suggested by the BRE Guidelines:

- 21st March (Spring Equinox);
- 21st June (Summer Solstice); and
- 21st December (Winter Solstice).

The nature (beneficial or adverse), scale (negligible, minor, moderate or major) and ultimately the significance of overshadowing effects will be determined using professional judgement.

Solar Glare

Solar reflections off a building are particularly important at road junctions including pedestrian crossings, and traffic signals as glare can cause temporary blinding of drivers. Typically, those elements of a Proposed Development considered reflective are either glazed elements or specular metal cladding.

Therefore, the ES will consider an assessment to determine the time of day, period of year, duration and positioning of potential solar glare in relation to the driver's line of sight.

Solar glare is not a comparative assessment; the fact that it may occur in the baseline does not necessarily justify occurrence as a result of the proposed development. Consequently, the assessments will consider the effect of the proposed development in absolute terms, using professional judgement

Cumulative Effects

Consideration will be given to cumulative effects, where quantitative information is available within the public domain. Additionally, the likely impacts of the proposed development upon the future sensitive receptors will be assessed within this section.

Solar glare is not considered in a cumulative scenario as the worst-case scenario is shown in the proposed development scenario.

6.6 Townscape, Visual and Built Heritage

A Townscape, Visual and Built Heritage Assessment (TVHA) will be presented in ES Volume 2. The assessment will be undertaken by Montagu Evans and will consider the potential impacts of the proposed development on townscape character, views and heritage significance, particularly the:

- effect on the character and appearance of Paddington Green Conservation Area (a small part of which is within the redline boundary) the settings of conservation areas, listed buildings and other heritage assets in the study area;
- effect on townscape character in the study area;
- effect on visual amenity as experienced by people in the study area; and
- cumulative effects in conjunction with other consented schemes.

6.6.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and associated likely effects during the demolition and construction of the proposed development:

- Temporary visibility of development works and associated machinery, cranes and other equipment used in the demolition and construction works; partially completed buildings; hoarding; and site lighting at street level within:
  - local views and effects on the quality of local views and the amenity of the viewer;
  - views of the local townscape character, together with the change in spatial character and built form; and
  - the setting of heritage assets and the degree to which the significance of the heritage asset's significance can be appreciated, experienced and understood.

The degree of effects will vary according to the proximity of the receptor to the site and will largely be adverse and short-term. No permanent effects would arise from the demolition and construction works except those relating to the completed development.

The assessment will consider the following potential impacts and associated likely effects of the completed proposed development:

- Visibility of the proposed development in local views and effects on the quality of local views, the amenity of the viewer and the character of the local townscape;
- Visibility of the proposed development and associated change in the townscape and spatial character and quality within the study area; and
- The effect of the proposed development on heritage assets (conservation areas, listed or locally listed buildings) and potential effects on their heritage significance, including consideration of visibility and other non-visual setting effects.

6.6.2 Approach and Methodology

The TVHIA will be reported in a single, separate volume.

Townscape and Visual Impact

The methodology for the townscape and visual impact assessment will be based on the principles set out in the third (2013) edition of 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA)[76], produced by the Landscape Institute with the Institute of Environmental Management and Assessment. Reference will also be made to national, regional and local guidance and policies.

Consultation

In respect of the townscape character assessment, no consultation over and above the scoping process, is considered necessary.

In respect of the visual impact assessment, no consultation has yet been undertaken in relation to the scope of this assessment. The set of views selected for assessment will be separately agreed with the WCC and other relevant consultees. A list and plan of proposed views will be provided for consideration by the WCC. The viewpoint plan will be derived from modelling work and field inspection, including a zone of theoretical visibility, and the identified views combine both indicative local views, strategic views and those with a particular heritage interest or value.

Study Area

The proposed townscape character assessment study area would comprise an area of 750 m from the site boundary.

The townscape character areas to be covered will be identified in accordance with the approach set out in the 3rd edition of the Guidelines on Landscape and Visual Impact Assessment. The approach will be informed by published character area studies, including conservation area appraisals.

[76] Landscape Institute, 2013. Guidelines for Landscape and Visual Impact Assessment (GLVIA3).

The study area for the visual assessment will be centred on the site and will be limited to locations from which the site can be seen, or from which new buildings on the site have the potential to result in a significant visual impact at the height proposed.

Four principal types of viewing location have been identified:

- Views that have been identified as significant, by the WCC or others, e.g. in relevant planning policy and guidance documents (including the LVMF SPG) and conservation area appraisals;
- Other locations or views of particular sensitivity, including those viewpoints in which the proposed development may significantly affect the settings of World Heritage Sites, listed buildings and/or conservation areas;
- Representative townscape locations from which the proposed development will be visible; and
- Locations where there is extensive open space between the viewer and the proposed development so that it will be prominent rather than obscured by foreground buildings.

The set of viewpoints has been chosen so that it covers:

- Protected views;
- The range of points of the compass from which the proposed development will be visible;
- A range of distances from the site; and
- Different types of townscape area.

Possible locations in these categories within the study area have been identified based on an examination of maps and aerial photographs; maps of conservation areas; and maps and lists of listed buildings. The study area and the possible locations have been visited to establish candidate viewpoints.

Demolition and Construction

The assessment of demolition and construction works will be based on the typical impacts and effects associated with a development of the proposed nature and scale taken in conjunction with the particular site and its sensitivities. The visual character and effects of the process would alter at different times of day and throughout the different phases of demolition and construction work, and so it is not possible to accurately represent the process in the verified views. Additionally, none of the effects resulting from the process, apart from those associated with the completed proposed development, would continue beyond the construction process, and so it is considered appropriate for the townscape and visual assessments to consider the effects of the completed proposed development in greater detail than those of demolition and construction, because those effects will be permanent and long-term.

Accordingly, a qualitative assessment will be undertaken based on professional judgement and experience. In carrying out this appraisal, the assessment will have regard to the generally lesser weight that temporary construction effects have on townscape character areas and views.

Completed Development

The assessment of the effect of the proposed development on a receptor (an area of townscape or view) will be made on the basis of professional judgement which will take into account relevant planning policies and guidance.

The sensitivity of the receptor as existing will be assessed as high, medium or low, depending on the importance, value and quality of the receptor, and its susceptibility to change, taking into account the quality of the receptor, and the nature and expectation of the viewer for views. The assessment of sensitivity will take into account the presence of any designated heritage assets (listed buildings, conservation areas, registered parks and gardens of special historic interest, world heritage sites) and non-designated heritage assets (locally listed buildings), and the amenity value

of the viewing location and area in which it is located. The assessment of the sensitivity of the receptor under consideration will be moderated to take into account a judgement about its quality in the round.

The magnitude of the impact resulting from the proposed development will be assessed as high, medium, low or negligible according to the change to the receptor. These two measures will be combined to provide a measure of the significance – major, moderate, minor or negligible - of the effect on the receptor which will result from the proposed development. It is generally considered that moderate to major effects are considered 'significant' in the context of the EIA Regulations and this is the approach that is proposed to be adopted in this EIA.

Effects will be assessed as beneficial, adverse, or neutral. There may be both beneficial and adverse effects to each receptor. These effects are outlined within the qualitative assessment for each receptor. The assessment for each receptor as a whole is a 'net equation' of all effects, resulting in a single quantifiable entry into the scale of effect matrix.

The townscape character assessment will be made of the site and the surrounding townscape in its existing state based on a study of the historic development of the area with reference to relevant publications, and study of the present-day condition of the area based on site visits, study of maps and aerial photographs, and relevant publications.

This analysis will inform the division of the study area into townscape character areas i.e. geographical areas which have readily identifiable characteristics in common. The impact of the proposed development on these townscape areas will then be assessed, based on conclusions drawn from the view's analysis.

The visual impact assessment will be made of the proposed development's visibility within the selected views. Viewpoints will be assessed in winter to assess a worst-case scenario when vegetation is not screening the proposed development.

For each of the identified views, there will be images of the view 'as existing' and 'as proposed', based on recent photography Where there is a high degree of tree cover that would affect the visual effects, winter views will be produced.

Where other developments have been granted consent and implemented and would be visible in the view, the other development would be shown in wireline (diagrammatic representations showing the outline of the proposed development, 'AVR1') as the 'future baseline'.

'As proposed' images are to be provided as 'Accurate Visual Representations' ('AVRs'). AVRs are provided either as rendered (photorealistic) images ('AVR3') or as 'wirelines' ('AVR1'). Rendered and wireline images illustrate accurately the degree to which the proposed development will be visible, and its form in outline. Rendered images also show the detailed form and the proposed use of materials.

Where other developments in the wider area which are proposed or have been granted consent would be visible to a significant extent in the view, a further image showing these schemes together with the proposed development will be produced.

For each of the identified views, a description of the view as existing will be given, identifying its visual quality, sensitivity to change and reason for that sensitivity. A description of the view as proposed will then be given with an assessment, based on the method set out above, of the significance of the effect that the proposed development will have on the view.

Cumulative Effects

A further assessment will consider cumulative effects, if any, for each view ('as proposed with cumulative' images will also be provided as AVRs). The approach to cumulative assessment for

views and townscape will be to focus on the additional effects of the proposed development on top of the cumulative baseline (not in combination).

Built Heritage Assessment

The methodology for the built heritage assessment will be consistent with best practice guidance from Historic England, and specifically dealing with managing significance in decision-making significance (GPA2), assessing setting effects and the effect on significance (GPA3) and tall buildings guidance (HEAN4), as well as the updated tall buildings advice note currently out for consultation until 28 May 2020). The chapter will have regard to guidance contained in character area appraisals from the relevant LPAs, including conservation area appraisals.

Study Area

The assessment will consider the potential for the proposed development, as a whole, to affect the heritage significance of identified and relevant heritage assets, within the study area (within 1 km of the site). The study area is based, in part, on views testing, which will identify the likely zone of visual influence and range within which significant effects of development of this scale would be experienced within the existing townscape context. Where there is potential for a significant effect on designated heritage assets outside the 1km study area then these assets will be scoped into the assessment.

There are no listed buildings located on-site. The northern half of Newcastle Place, which is within the redline boundary, is located within Paddington Green Conservation Area, but otherwise the site is not within a CA.

There are a number of designated heritage assets within the study area. The number heritage assets which will be scoped in to the assessment will be refined using professional judgement in order to ensure that the assessment is focussed on those assets which may experience likely effects of the proposed development. For example, where there is no setting relationship between the heritage asset and the site – whether that is intervisibility, historical association or otherwise – then these assets have been scoped out.

The heritage assets which have been scoped in to the assessment comprise the following:

- The Children's Hospital, Paddington Green, grade II listed;
- 17 and 18 Paddington Green, grade II listed;
- Church of St Mary, grade II* listed;
- Westminster Arms public house, grade II listed;
- Marylebone Lower House North Westminster Community School, grade II listed;
- Paddington Green Conservation Area;
- Maida Vale Conservation Area;
- Lisson Grove Conservation Area;
- Bayswater Conservation Area;
- Regent's Park, both as a Registered Park and Conservation Area;
- St John's Wood Conservation Area;
- Molyneux Conservation Area; and
- Hyde Park, Royal Parks Conservation Area and Registered Park.

Non-designated heritage assets for the purposes of the assessment are locally listed buildings identified by the WCC and other structures which meet the terms of a non-designated heritage

asset as set out in the NPFF, that is, have a degree of architectural or historic significance meriting consideration in the planning process. These are to be identified by appropriately qualified staff undertaking the assessment and through the consultation process with the WCC. Non-designated heritage assets within 500 m of the site will be scoped into the assessment.

Demolition and Construction

The assessment of demolition and construction works will be based on the typical impacts and effects associated with a development of the proposed nature and scale taken in conjunction with the particular site and its sensitivities. The visual character and effects of the process would alter at different times of day and throughout the different phases of demolition and construction work, and so it is not possible to accurately represent the process in the verified views. Additionally, none of the effects resulting from the process, apart from those associated with the completed proposed development, would continue beyond the construction process, and so it is considered appropriate for the Built Heritage assessment to consider the effects of the completed proposed development in greater detail than those of demolition and construction, because those effects will be permanent and long-term. Accordingly, a qualitative assessment will be undertaken based on professional judgement and experience. In carrying out this appraisal, the assessment will have regard to the generally lesser weight that temporary construction effects have on heritage assets which by their nature are long standing.

Completed Development

An assessment will be made of the significance of the identified heritage assets in their existing states (cross-referencing the townscape and visual baseline, see above). This will be based on study of the historic development of the area with reference to relevant publications, and study of the present-day condition of the area based on site visits, study of maps and aerial photographs, and relevant publications. These assessments will be proportionate to the significance of the assets and the likely effect of the proposed development on them. In line with paragraph 189 of the NPPF they will demonstrate an understanding of the potential impact of the proposal on their significance.

The assessment of the effect of the proposed development on a receptor (a heritage asset, as identified above for the purposes of this assessment) will be made on the basis of professional judgement which takes into account relevant planning policies and guidance. The methodology set out below is consistent with the following legislation and guidance:

- The Planning (Listed Buildings and Conservation Areas) Act 1990;
- Sections 12 and 16 of the NPPF (2019);
- The accompanying parts of the PPG;
- Historic Environment Good Practice Advice in Planning Notes 2 and 3 on The Assessment of Heritage Significance and The Setting of Heritage Assets (2015 and 2017)[77]; and
- Tall Buildings Historic England Advice Note 4 (2015)[78].

The sensitivity to change of each heritage asset or groups of assets will be considered in relation to impacts (taking into account both direct and indirect effects). This is based on the designation and grade of the heritage asset and an assessment of its heritage significance (in light of NPPF policy), i.e. what elements of its fabric / constituent parts and setting contribute to its heritage significance (at the designated grade/level). It will be assessed as high, medium or low.

The likely significance of effects is derived through consideration of the magnitude of impact and the sensitivity to change of the heritage assets. This assessment takes into account the heritage significance of the particular heritage asset and how the proposed development will impact on this.

[77] Historic England, 2017. The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Notes 3.
[78] Historic England, 2015. Tall Buildings Historic England Advice Note 4.

The proposed development may have a nil of negligible effect to a receptor. Where effects are identified they will also be assessed qualitatively as beneficial, adverse, or neutral in respect of their effect on the heritage significance of the heritage asset. This is in recognition of the fact that an effect on a heritage asset or its setting can enhance its heritage significance (a beneficial effect), harm its heritage significance (an adverse effect) or be overall neutral (a neutral effect). This consideration is independent of whether it is a major, moderate or minor effect. This assessment takes into account the nature and condition of the heritage asset and its setting as found today and how these contribute to its heritage significance.

The viewpoint selection has been informed by the presence of heritage assets, and the assessment on the historic environment will take those views into account for setting purposes.

The general conclusions about the impact of the proposed development on heritage assets include consideration of the overall impact on the historic environment in the round.

Cumulative

An assessment will be given of cumulative effects, if any. The approach to cumulative assessment for built heritage will be to focus on the additional effects of the proposed development on top of the cumulative baseline.

7. POTENTIAL NON-SIGNIFICANT ENVIRONMENTAL IMPACTS AND EFFECTS

During the EIA scoping process, consideration has been given to ensuring that the EIA is proportionate and therefore only focuses on the likely significant effects of the proposed development. Accordingly, the scoping process has identified a number of environmental topics that are unlikely to generate significant environmental effects and therefore, are proposed to be scoped out of the ES. These issues are discussed in this section.

7.1 Transport and Accessibility

A Transport and Accessibility technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant adverse effects in relation to Transport.

A Transport Assessment (TA) will be produced and submitted separately as part of the application, which will consider the implications of the proposed development on the local transport network, including walking and cycling environment, public transport and highway network.

7.1.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential transport environmental impacts[79] may arise:

- Demolition and construction works and the temporary disruption in terms of effects on severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, and accidents and safety.
- Completed development and changes to traffic flows and pedestrian and cycle environment in terms of effects on severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, and accidents and safety.

7.1.2 Considerations

Demolition and construction works will be subject to mitigation in the form of implementing a Construction Logistics Plan, and contractors will be required to sign up to the Construction Logistics and Cyclist Safety (CLOCS) standards for managing work related road risk, and follow WCC's Code of Construction Practice (CoCP). A Construction Staff Travel Plan will also be implemented to manage construction workforce travel.

As part of the construction management measures, suitable signage will be required where appropriate for pedestrian and cyclists to minimise disruption and there are existing signal-controlled pedestrian crossings on Edgware Road and Harrow Road. Construction traffic routes to the site would use the strategic highway network, minimising any effects on local roads and sensitive receptors, and the increase in traffic would not be significant given the existing high traffic flows on the A40 and A5 Edgware Road. On this basis, the demolition and construction stage would not give rise to significant adverse effects on severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, and accidents and safety.

In terms of the completed development, the proposal will be car-free with only disabled car parking provided, subject to scoping with WCC. The site is located in central London with a PTAL rating of 6b (the highest possible score on the PTAL scale, which indicates an "excellent" connectivity to the surrounding network). It is therefore anticipated that journeys to the site would largely be via public transport. The car parking will be provided in the basement, accessed from Church Street and via the West End Gate basement. Together with servicing trips, the total vehicle trip generation

[79] Environmental effects in accordance with the IEMA document 'Guidelines for the Environmental Assessment of Road Traffic' (1993)

for the site would be minimal and not significant. On this basis, no significant adverse effects are expected on severance, pedestrian delay, fear and intimidation or driver delay.

There are public realm improvements proposed on Newcastle Place, which would improve pedestrian amenity. Any changes to junctions will be subject to a Stage 1 Road Safety Audit. Therefore, beneficial effects can be expected for pedestrian amenity and no significant adverse effects are expected for accident and safety.

Multi-modal movements resulting from the proposed development on pedestrians, cyclists, and public transport will be assessed in the TA. A separate assessment on accidents and safety will also be included in the TA.

Accordingly, no significant adverse environmental effects are likely to arise in relation to Transport. A Transport and Accessibility technical assessment chapter is therefore proposed to be scoped out as a discrete chapter within the ES; however, a separate Transport Assessment will be submitted as part of the planning application.

7.2 Ecology

An Ecology technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant adverse effects in relation to Ecology.

7.2.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential ecological impacts may arise:

- Direct and indirect demolition and construction impacts (dust, noise, lighting, contaminated surface water, etc.) to designated sites;
- Direct loss of limited on-site habitats;
- Direct harm to protected species, if on-site; and
- Potential for biodiversity enhancement through the introduction of new landscaping as part of the proposed development.

7.2.2 Considerations

The site has been in use as a police station since the 1970s. It comprises an existing building and hardstanding areas. In addition, the site is located in a dense urban environment predominantly characterised by buildings, roads and hardstanding areas.

An extended Phase 1 Habitat Survey of the site was carried out on 4 September 2020, which included external building inspections for bat potential, together with a desk-based data search using data obtained from Greenspace information for Greater London (GiGL), to identify, characterise and map the habitats within the site according to the Phase 1 habitat survey[80] methodology. The results of the survey will be documented in an ecological appraisal report for the site.

The desk study confirms that no designated sites are present within the site. St Mary's Churchyard and Paddington Green Site of Importance for Nature Conservation (SINC) is present to the west of the site.

The extended Phase 1 habitat survey confirms that the site comprises habitats that are of negligible to site level importance for wildlife. Limited vegetation is present, with street trees of site level importance and scattered ephemeral vegetation of negligible importance. The street trees are suitable for use by common bird species. No potential roost features were recorded on the buildings or trees, and the site is considered to be of negligible potential for use by bats.

[80] JNCC, 1990. Handbook for Phase 1 Habitat Survey: A technique for environmental audit. Nature Conservancy Council

The appraisal confirms that on-site ecological conditions are consistent with a typical London urban site. Whilst impacts are likely to occur, these can be mitigated by means of standard measures in advance of redevelopment. Proposed mitigation measures comprise the following:

- Appropriate timing of demolition works to avoid impacts on nesting birds;
- Appropriate demolition and construction management controls to be set out within a Construction Environmental Management Plan (CEMP) to minimise dust impacts to St. Mary's Churchyard and Paddington Green SINC;
- Landscape planting and bat and bird boxes within the proposed development to mitigate for the loss of habitats within the site; and
- Green/brown roofs and living walls to deliver biodiversity enhancement.

During the demolition and construction stage, any potential ecological impacts such as from construction pollutants, would be effectively controlled by employing best practice measures to be implemented through a CEMP as agreed with WCC.

The emerging design and landscape proposals for the proposed development would deliver considerable biodiversity and amenity enhancement.

The above mitigation measures would either be embedded into the proposed development or secured by means of appropriately worded planning conditions.

Accordingly, the proposed development is unlikely to give rise to significant adverse environmental effects in relation to Ecology. A formal Ecology technical assessment is therefore proposed to be scoped out as a discrete chapter within the ES; however, an Ecological Impact Assessment will be presented in ES Volume 3.

7.3 Contamination

A Contamination technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant environmental effects in relation to Contamination.

7.3.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential pollutant linkages could present a potentially unacceptable risk (as defined in Model Procedures for the Management of Contaminated Land, CLR 11[81]):

- Demolition and construction workers may come into direct contact with potentially contaminated shallow soils, Made Ground (which may include asbestos containing materials) and impacted shallow groundwater;
- Adjacent site users may inhale /ingest potentially contaminated dust from demolition and construction works;
- Accidental spills could lead to contamination of surface water runoff, ground and controlled waters;
- Direct contact of potentially contaminated soils with proposed structures on-site, including potable water supply pipes; and
- Future site users may be exposed to potential ground contamination in the soil, ground gas ingress and/or vapour ingress into new buildings.

[81] Environment Agency, 2004. Model Procedures for the Management of Land Contamination

7.3.2 Considerations

The site has been in use as a police station since the 1970s. It comprises an existing building and hardstanding areas. In addition, the site is located in a dense urban environment predominantly characterised by buildings, roads and hardstanding areas.

Geological maps for the area indicate that the geology beneath the **s**ite is underlain by Langley Silt Member (Clay and Silt), Lynch Hill Gravels and London Clay Formation, as explained in Section 4.3.

The adjacent WEG development has been the subject of site investigations and remediation. It is anticipated that similar ground conditions are present on the site given the close proximity and linked history. By way of background, contaminants identified on the WEG development included hotspots of hydrocarbon contamination in the soil and asbestos within the made ground. Contaminants were also detected in groundwater including hydrocarbons and sulphate. These contaminants are common to brownfield sites.

The remediation strategy prepared for the WEG development discussed the removal of underground fuel tanks and the basement excavation which will remove much of the soil. Watching briefs and material management plans were recommended. Clean soil was also recommended in landscaping. These are standard remediation techniques that are likely to be appropriate for the site.

Furthermore, the following standard mitigation measures would be adopted as part of the development works:

- A Preliminary Risk Assessment (PRA) will be prepared and will be presented in ES Volume 3. The PRA will identify the risks associated with soil and groundwater contamination and how remediation (if required) would reduce risks to allow the development proposal to proceed in a manner that minimises risks to human health, controlled waters and the small areas of landscaping and reduces the risks to acceptable level.
- Site investigations will be undertaken to confirm the most appropriate remediation strategy and health and safety precautions to be adopted for construction workers and surrounding residents during ground disturbance and excavation works.
- A Remediation Strategy will be prepared (if required) and agreed in consultation with WCC environmental health;
- A Piling Risk Assessment will be undertaken to determine most appropriate means of piling to avoid the creation of pollution pathways during substructure works before the removal of material during excavation of the basement area; and
- A CEMP will be used to effectively control and manage contamination risks at the site as agreed with WCC.

The above mitigation measures would be secured by means of appropriately worded planning conditions.

On this basis, it is considered that the proposed development is unlikely to give rise to significant adverse environmental effects in relation to Ground Conditions. A formal Ground Conditions technical assessment is therefore proposed to be scoped out as a discrete chapter within the ES, but the PRA will be presented in ES Volume 3.

7.4 Water Resources and Flood Risk

A Water Resources and Flood Risk technical assessment chapter is proposed to be scoped out of the EIA because the proposed development would not give rise to significant environmental effects in relation to Water Resources and Flood Risk.

7.4.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential impacts and likely effects may arise in respect of water resources and flood risk:

- Demolition and construction workers may come into direct contact with potentially contaminated controlled waters (groundwater and surface water runoff);
- Accidental spills could lead to contamination of controlled waters (ground water and surface water runoff);
- The design of the proposed development could alter the surface water run-off speed and discharge from the site; and
- On-site occupants of the completed development could increase the demand for potable water and foul water.

7.4.2 Considerations

The site currently comprises a building and predominantly hardstanding.

A review of EA data indicates that the site is located in Flood Zone 1 (low probability) where the annual probability of flooding from rivers or the sea is less than 1 in 1,000 (0.1%). The site is also shown by the EA to be at Very low or Low risk of surface water (pluvial) flooding, associated with extreme rainfall and potential surcharging of sewer assets. There are areas of the A404 immediately south of the site which are shown to be at Medium or High risk of such flooding. However, any such flooding of the road is not predicted to impact on the site itself and would not prevent access to the site as Newcastle Place to the north and Edgware Road to the east are shown to be at Very Low or Low risk of such flooding.

The WCC Draft Strategic Flood Risk Assessment (SFRA), 2019, states that, as Westminster is a heavily urbanised area, it is at risk of surface water flooding, with several areas being designated as being Critical Drainage Areas (CDA's). No mapping associated with the 2019 Draft SFRA is available online. Mapping produced as part of the previous 2010 Strategic Flood Risk Assessment shows that the site was not considered to be within a CDA.

There are no surface water features on the site, and no main rivers located within a 1 km radius. The closest surface water features are the Grand Union Canal, located approximately 150 m to the south and the Boating Lake at Regent's Park approximately 1 km to the north-east. No additional surface water features have been identified within 1 km of the site.

The covers an area of 0.48 ha in area and therefore an FRA would be not be required in accordance with the NPPF. Nevertheless, a Flood Risk Note will be prepared to confirm the proposed development's drainage strategy and use of Sustainable Drainage Systems (SuDS) to demonstrate that the Proposed development will accommodate the 1 in 100 year plus climate change (40 % allowance) storm without exacerbating flood risk off-site.

The drainage and SuDS (Sustainable Drainage Systems) strategies would feed into the emerging design proposals to ensure substantial reduction of pre-development run-off rates, with an aspiration to achieve greenfield rates if feasible. As part of this process, Thames Water would be consulted with regard to the location of public sewer assets. An application for surface water or foul sewer connection into the Thames Water network will be undertaken post-consent as part of detailed drainage design.

In respect of controlled waters, the site is located within Flood Zone 1, with the nearest water feature (Grand Union Canal) approximately 150 m to the south. No hydraulic connectivity with the canal has been identified. Furthermore, contamination on-site will be addressed by means of standard mitigation measures, including the development of an appropriate Remediation Strategy

and the removal of sources of contamination as part of the basement excavation. As such the proposed development would not pose any risks to controlled waters.

In respect of water consumption, the proposed development would adopt standard water saving devices and features as part of its design.

Accordingly, no significant adverse environmental effects are likely to arise in relation to Water Resources and Flood Risk. A formal Water Resources Assessment is therefore proposed to be scoped out as a discrete chapter within the ES; however, a Flood Risk Memorandum will be presented in ES Volume 3.

7.5 Archaeology

An Archaeology technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant environmental effects in relation to archaeology.

7.5.1 Potential Impacts and Likely Effects

In the absence of mitigation, the proposed development could give rise to the following impacts and effects:

- Demolition and construction works, in particular the proposed basement excavation, as well as any remediation works (if required) which would remove heritage assets (if present on-site) within its footprint e.g. possibly including any medieval remains associated with agriculture or quarrying, and 19th/early-20th century building foundations and basements;
- Demolition and construction works, in particular piled foundations, which would entirely remove heritage assets with each pile footprint, if present on-site. Where the basement is of sufficient depth to remove all archaeological remains within its footprint, piles would only have an impact if inserted prior to basement construction (or outside the proposed basement footprint). Pile caps and ground beams, depending on the depth of the basement, may have no further impact; and
- Construction works, in particular landscaping and any associated works, servicing etc., which could remove any heritage assets (if present on-site).

7.5.2 Considerations

The Site is located within the Tier 2 Watling Street Archaeological Priority Area (APA) and adjacent to Tier 2 Paddington APA. The former designation exists on the basis of the possibility for evidence associated with a Roman road, and the latter for potential evidence of medieval settlement.

The site was open land before being first developed with the Metropolitan Music Hall in the mid-19th-century, with the most recent Paddington Metropolitan Police Station building constructed in the 1970s. Construction of the existing development would have severely affected any archaeological remains on-site, including excavation of the existing basement.

In addition, excavation works undertaken as part of the adjacent WEG development confirmed the archaeological potential to be limited to property boundaries and horticultural cut features dating to the 18th-century or earlier and masonry foundations and domestic waste deposits dating to the 18th-20th-centuries. Finds comprised 10 medieval residual pottery sherds and Ceramic Building Material (CBM) recovered from features dated to the 18th and 19th-centuries and a single residual Roman imbrex sherd. Modern basements had severely truncated much of the archaeological potential of the site, and no *in-situ* evidence pre-dating the post-medieval period was recorded. A programme of archaeological investigation and recording was undertaken in consultation with the archaeological advisor to WCC, in order to offset the impacts of the development on archaeological remains and reduce adverse effects to an acceptable level.

On this basis that – if required – a comparable programme of work can be successfully carried out on the site, it is not considered that the proposed development would give rise to significant adverse residual effects in respect of archaeology.

In order to set the site into its full archaeological and historical context, an archaeological desk-based assessment (DBA) will be undertaken to present known historic environment features within a 500 m-radius study area from the boundary of the site. The DBA will put the proposed development into its full archaeological and historical context and provide an assessment of the significance of known and potential buried heritage assets within and beyond the site, which may be affected by the proposed development. They will include assessments of factors which will have compromised the survival of archaeological remains.

The assessment of demolition and construction effects within the DBA will focus on physical impacts on buried heritage assets within the site. These will include any activity which would entail ground disturbance, for example site set up works, the construction of new foundations and basements, remediation, landscaping, new drainage and services.

A broad range of standard data sources will be consulted, including the Greater London Historic Environment Record (GLHER), Historic England's National Heritage List (NHL), and local authority data sources along with published works and cartographic sources specific to the area, and geotechnical and geoarchaeological data. The assessment will also consider the adjacent WEG development archaeological investigations. The MOLA in-house Geographical Information System (GIS) will be consulted which holds information on statutory designations' GIS data, projected Roman roads, georeferenced published historic maps and Defence of Britain survey data.

The DBA will use these sources to assess the likely presence and significance of any heritage assets which may be affected by development. This would include known assets and the potential for previously unrecorded remains, the likely depth of remains and a review of factors which may have compromised asset survival.

An appropriate mitigation strategy will be set out in the DBA with the aim of reducing or off-setting any adverse effect. The mitigation strategy would be secured by means of an appropriately worded planning condition.

Accordingly, no significant adverse environmental effects are likely to arise in relation to Archaeology. A formal Archaeology Assessment is therefore proposed to be scoped out as a discrete chapter within the ES; however, an Archaeological Desk Based Assessment will be presented in ES Volume 3.

7.6 Telecommunication Interference

A Telecommunication Interference technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant environmental effects in relation to Telecommunication or Electronic Interference.

7.6.1 Potential Impacts and Likely Effects

New, tall buildings and structures have the potential to impact on radio, television and other broadcast services as a result of shadowing and reflection effects caused. Table 7.1 provides an appraisal of the services that could potentially be affected by the proposed development.

Table 7.1: Telecommunication and Broadcast Services Appraisal

Service	Key Outcomes
Analogue Terrestrial Television	Due to the completed Digital Television Switchover, it is now not possible for the proposed development to impact analogue terrestrial television

Table 7.1: Telecommunication and Broadcast Services Appraisal

Service	Key Outcomes
	reception, as analogue television transmissions were switched off throughout the London region during 2012.
Digital Terrestrial Television (DTT)	DTT is more commonly known as 'Freeview'. The area is served by DTT services from the Crystal Palace transmitter (NGR TQ 33940 71220) to the south-west of the site. In relation to transmissions coming from the Crystal Palace transmitter, the signal shadows from the proposed development would be created to the north-east. When considering the existing tall buildings surrounding the site, it is considered that the additional massing associated with the proposed development would not significantly affect transmissions in the locality. Therefore, a pre-planning assessment is not deemed necessary. If transmissions are affected, the Applicant would investigate the complaints, and if deemed authentic and attributable to the proposed development, mitigation measures in the form of the provision of upgraded receiving equipment or a satellite or cabled TV service would be provided.
Digital Satellite Television	Digital satellite television services (such as Freesat or Sky) are provided by geo-stationary earth orbiting satellites positioned above the equator. For the optimum reception of all satellite services, all receiving dishes must be positioned on the highest part of the rooftop as possible to ensure views to the sky's south-east horizon are free from other local skyline building clutter. Should there be any roof mounted satellite signal receiver dishes on the adjacent locations where line-of-sight views to the serving satellites may be obscured by the proposed development (in areas northwest of the site), relocating dishes to new areas on roof tops where views to those satellites remain unobscured, would ensure optimal reception of satellite television signals.
Broadband and Cable Television	A number of 'TV over cable' operators exist in London. TV services are provided to a property via cables and decoded using a set top box or an integrated television set. Virgin Media, Sky and BT all provide such services. The availability of cable TV depends on provider's cable infrastructure. London has comprehensive coverage from most providers. As cabled TV services operate via wired broadband such as fibre and ADSL, interference effects cannot occur due to the nature of content delivery (through a cable, underground) and there is no possibility of effects from the proposed development on these services.
VHF (FM) Radio	The reception of VHF (FM) broadcast radio services are unlikely to be affected by the proposed development due to the nature of the radio broadcast network, the methods used for the encoding and decoding of signals and the likely current good coverage provided by the local VHF (FM) radio transmitters.
Digital Audio Broadcasting (DAB) Radio	The reception of DAB radio would not be affected by the proposed development as coverage is currently excellent throughout London and the radio network is designed to operate well in densely cluttered urban environments.
Mobile Phone Communications	The area will be served well by 2G, 3G and 4G mobile phone networks. Recently introduced 5G networks will also be available in the area. The proposed development would not have any impact upon the operation of mobile telephones. The cellular nature of a mobile telephone network enables each handset to 'pick' the best cell site to ensure the correct operation of the handset. At this location, mobile telephone coverage would

Table 7.1: Telecommunication and Broadcast Services Appraisal

Service	Key Outcomes
	be optimal and robust due to the nature of the commercial requirements in buildings within the wider area.
Fixed Microwave Links and other point-to-point Radio Communications Channels	Radio and microwave links can be adversely affected by obstructions on and near to their transmission path such as construction cranes, buildings and trees. In general, the directional nature of radio links means that interference can be avoided by defining clearance zones beyond which any degradation will be insignificant, or by moving the link to avoid the obstruction. Should any existing links be impacted upon because of the proposed development, standard mitigation options would be likely to comprise the: • use of other radio infrastructure sites; • use of a radio relay site; • construction of a new base station site; • use of private circuits or satellite services; and • redefining of the exclusion zones by the use of aerial engineering. The identification of the appropriate measures would be determined by a detailed review of the existing radio communications infrastructure at each base station, confirmation of the data for the services operated by the link's owner from the identified radio sites; and review of the theoretical analysis of the proposed development layout on the existing radio communication systems, to identify the exclusion zone for any affected radio infrastructure. It is noted that such standard mitigation measures can be readily implemented to ensure the continuing operation of links such that the proposed development is not considered likely to generate any significant residual effects on these services.
Tetra and Emergency Services	The Airwave radio network is based on the specialist TETRA specification. TETRA is a set of standards developed by the European Telecommunications Standardisation Institute (ETSI) that describes a common mobile radio communications infrastructure throughout Europe. This infrastructure is targeted primarily at the mobile radio needs of public safety groups (such as police, ambulance and fire departments), utility companies, and other enterprises that provide voice and data communications services. The UK's TETRA network is owned and operated by Airwave Solutions Limited and is often referred to as the 'Airwave' network. The Airwave / TETRA network is used by all the UK's emergency services. It is likely that this network will remain in use until at least 2024, when its 4G successor network becomes operational. Consequently, by the time of demolition and construction works on the site, the network will be entering a period of transition to 4G services and interference effects will not be a concern.
New Telecommunication Services within the proposed development	All new telecommunications services into the proposed development would consider the expected growth in internet traffic and would provide bandwidth for heavy simultaneous use. The 'e-infrastructure' would be designed well and easily upgradeable for a modern building. Any signal distribution systems would be designed to be future proof and the nature of such networks would ensure that no unwanted or uncontrolled electromagnetic emissions would occur. Any radio transmitters used within the proposed development (for example, Wi-Fi or maintenance needs) would be CE certified, meaning that the products have undergone stringent radio emission testing for use within the UK.

As set out in Table 7.1, potential effects on telecommunication services may be limited to DTT, fixed microwave links and other point-to-point radio communications channels only (should such

links be present near the site); however, these can be readily mitigated by means of standard measures as listed in Table 7.1.

In respect of emergency services, it is noted that the relocation of the Paddington Green Metropolitan Police Station, removes the key sensitive receptor of concern.

In addition, the Applicant would be prepared to undertake pre-and post-construction signal surveys, to be secured by means of an appropriately worded planning condition if necessary.

Accordingly, the proposed development would not give rise to significant environmental effects in relation to telecommunication interference. A formal telecommunication interference impact assessment is therefore proposed to be scoped out as a discrete chapter within the ES.

7.7 Light Spill

A Light Spill technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant environmental effects in relation to light spill.

7.7.1 Potential Impacts and Likely Effects

Light spill is defined as any light emitted from artificial sources into spaces where this light would be unwanted. An example of this would include egressing light from highly glazed commercial buildings or a car parking's flood lights into residential accommodation, where this would cause inconvenience to their occupants, or light spill to sensitive ecological receptors.

7.7.2 Considerations

Although initial lighting concepts would be explored by the Applicant, definitive proposals will not accompany the Application. At the appropriate time, and in response to a suitably worded planning condition, quantitative criteria for acceptable levels of light as detailed within the Institution of Light Engineers (ILE) document entitled 'Guidance Notes for the Reduction of Light Pollution'[82], would be used to proactively inform a detailed Lighting Strategy for the Site and submitted to WCC for approval (to be secured by means of an appropriately worded planning condition).

The ILE Guidance defines light pollution as three different impacts, these being light spillage into residential windows; light spillage into areas of natural significance; and upward light spillage into the night sky.

Light spill (specifically light trespass) typically occur when commercial properties are located within close proximity to residential dwellings such that point source lighting can intrude into bedrooms windows and cause disturbance to amenity.

The proposed development is a residential led scheme with a component of non-residential uses (i.e. office and retail). Given the typically solid residential façade treatment, and the absence of exterior façade lighting, as well as the location of commercial and retail space at lower levels than residential uses, significant light spill is unlikely to arise from the proposed development.

Furthermore, the predominant residential use of the proposed development will further reduce the potential for light spillage to occur as:

- illumination levels would be more benign when compared with a commercial scheme;
- the occupants of the proposed residential blocks are expected to have curtains, blinds or screens drawn at night; and
- occupancy of the buildings would vary.

82 Institute of Lighting Professionals (previously Institution of Lighting Engineers), 2005. Guidance Notes for the Reduction of Obtrusive Light. ILP.

The site is located within an area already characterised by high levels of illumination, especially due to the close proximity to the A40 Westway and A5 Edgware Road. It is not anticipated that the proposed development would exceed the ambient sky glow for this locality and therefore, it is not considered that light spill into areas of ecological sensitivity would be an issue in this locality.

Notwithstanding this, when preparing the scheme's Lighting Strategy, consideration would be given to the use of shading devices; the appropriate specification of street and amenity lighting with downward and directional lighting being specified to avoid light spillage onto nearby residential properties; and the integration of lighting control attachments (such as cowels and louvers) to maximise the effectiveness of lighting on-site whilst avoiding adverse impacts.

Accordingly, it is considered that the proposed development would not give rise to significant environmental effects in relation to Light Spill. A formal Light Spill Assessment is therefore proposed to be scoped out as a discrete chapter in the ES.

7.8 Waste

A Waste technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant environmental effects in relation to Waste.

7.8.1 Potential Impacts and Likely Effects

There site is currently vacant and there are no or limited existing waste streams.

The WCC is a unitary waste authority responsible for the collection, recycling and disposal of residential and commercial waste for the site. WCC has a Waste Management Strategy[83] covering the period 2016 – 2031, as well as a Local Plan including policies for guiding developers in waste management and a Recycling and Waste Storage Requirements Guidance Document[84].

Waste streams arising from the demolition and construction stage of the proposed development would mainly be comprised on inert waste such as crushed concrete and brick, as well as waste materials from stripping out of the demolished structure. Excavation works would also generate soil and rubble and construction works would produce a mix of typical construction waste.

Operational waste would be a mixture of residential, commercial and municipal waste streams from public areas due to the residential-led, mixed-use nature of the proposed development.

7.8.2 Considerations

During demolition and construction works, the greatest potential for waste arisings would be from the demolition of existing buildings. Suitable mitigation measures will be employed in order to maximise on-site re-use and recycling and thereby reduce landfill waste from the demolition works. The anticipated waste streams during construction have a high potential to be diverted from landfill.

Following the IEMA 2020 guidance Materials and Waste in Environmental Impact Assessment, primary mitigation measures will be identified by the design team to minimise material use and waste arisings. This will include the use of prefabricated elements, achieving a high floorplate efficiency and a structurally efficient design to reduce material usage and the re-use of demolition and excavation arisings in the construction process where possible.

The volume of waste produced from demolition and construction works from the proposed development and other developments in the surrounding area is not anticipated to exceed the regional landfill void capacity and thus the cumulative effect from the development arising from demolition and construction waste is not considered to be significant.

83 WCC 2014, Municipal Waste Management Strategy 2016 – 2031. Available online: https://www.westminster.gov.uk/waste-strategy
84 WCC 2019, Recycling and Waste Storage Requirements. Available online: https://www.westminster.gov.uk/waste-storage-planning-advice

Waste management at the site would be undertaken in accordance with a detailed Construction Site Waste Management Plan (SWMP) to ensure the sustainable management of construction waste, minimisation of waste arisings and maximisation of waste re-use and recycling.

The Applicant's contractors would be encouraged to maximise opportunities for waste recycling and re-use both on and off-site where practically possible. In the event that residual materials require off-site disposal, the Applicant's contractors would ensure the appropriate categorisation of waste in accordance with current regulatory requirements.

ES Chapter 5: Demolition and Construction Description will outline likely waste quantities arising from demolition and construction works, and present the Applicant's commitments to waste minimisation and management during these works.

Operational waste arisings would be managed in accordance WCC guidance and sufficient space provided for the storage of waste. Measures would be put in place to support segregation of recyclable waste streams. Management and collection arrangements would also be developed in line with WCC requirements.

ES Chapter 4: Proposed Development Description will summarise the operational waste management measures which would be included within the proposed development (and outlined within the Waste Strategy). For example, the new on-site floorspace would be provided with appropriate waste facilities to promote sustainable waste practices and recycling.

Sufficient information relevant to the waste management practices during all stages of the proposed development will be provided to fulfil requirements in line with the key UK waste related legislation and overarching EU Directives.

Based on the proposed development's land uses and waste streams, plus the proactive commitment to waste reduction, it is considered that waste generation would not be a significant issue requiring separate assessment within the EIA. It is not anticipated that there would be any environmental effects from the future waste generation streams by the proposed land uses, save for the environmental effects of the collection of waste and secondary effects of emissions and traffic noise associated with waste vehicles. The movements of waste vehicles will be factored into the proposed development's trip generation figures and outlined within the TA.

Accordingly, the proposed development would not give rise to significant environmental effects in relation to waste. A waste assessment is therefore proposed to be scoped out as a discrete chapter within the ES.

7.9 Climate

A Climate technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not significantly contribute to climate change and would be designed to be resilient to the effects of climate change.

7.9.1 Potential Impacts and Likely Effects

In accordance with IEMA guidance it is acknowledged that all greenhouse gases (GHG) contribute to climate change but that this should be considered in context of regional and national emissions. The potential for the proposed development to contribute to climate change would be through embodied carbon, transport and on-site emissions during the demolition and construction works, as well as the operational use of new buildings once the development is completed.

The proposed development could also be impacted by the effects of climate change, for example due to changes in average temperature and increased frequency of heavy rainfall events. Climate change could also worsen the effects identified in other environmental topics.

7.9.2 Considerations

To minimise GHG emissions the Applicant will seek to achieve a number of sustainable design initiatives in line with policy requirements and in particular, the Mayor of London's 'Energy Hierarchy' and sustainability targets, as well as any relevant requirements set out by the WCC.

The proposed development's energy and sustainability strategy will therefore aim to:

- minimise overall energy demand and consumption through practicable energy efficient design;
- minimise GHG emissions arising from the operation of the proposed development as far as practicably possible through the use of efficient plant, fittings and fixtures; and
- reduce GHG emissions arising from the operation of the proposed development as a result of on-site low carbon technology.

A BREEAM pre-assessment will also be submitted with the application.

The Applicant will also seek to ensure that construction materials are selected following the Building Research Establishment (BRE) 'Green Guide to Specification' to:

- minimise embodied energy content (the energy used in manufacture);
- use recyclable materials where they have high embodied energy; and
- maximise the recycled content of the material, ease of maintenance, appropriate sourcing of materials and totally excluding deleterious and hazardous materials.

The proposed development would also seek to reduce the need to travel by private car through the provision of a mixed-used development which provides employment opportunities on-site or within good proximity to sustainable transport options. The proposed development would only provide parking spaces for disabled users to further encourage the use of low carbon travel choices. The proposed development would likely deliver a reduction in on-site car parking spaces. In addition, the proposed development would provide secure cycle parking and other initiatives to improve accessibility and sustainable transport links with the adjacent community.

Furthermore, the Applicant will commit to best practice measures during the demolition and construction stage to minimise potential climate impacts. These measures will be set out within a CEMP to be prepared in advance of demolition and construction and would be secured by means of a suitably worded planning condition.

The Applicant will also seek to ensure that the proposed development's design is resilient in respect to the potential effects of climate change. This will include taking account of climate change when assessing flood risk and minimise overheating within the residential units through appropriate design measures. The following assessments will consider the proposed development's indirect or secondary impacts on climate:

- FRA Memorandum; and
- Energy and Sustainability Assessment (including BREEAM Assessment).

Accordingly, the GHG emissions arisings from the proposed development are not considered likely to be considered significant in the context of regional or national emissions and the proposed development would be designed to be resilient to climate change. Therefore, there are no significant climate effects likely to arise from a development of this nature. Climate will be comprehensively considered within the proposed development's design and as appropriate within the ES. Accordingly, a discrete Climate technical assessment chapter is proposed to be scoped out of the ES.

7.10 Major Accidents and Disasters

A Major Accidents and Disasters technical assessment chapter is proposed to be scoped out of the EIA because the proposed development would not give rise to significant environmental effects in relation to Major Accidents and Disasters.

7.10.1 Potential Impacts and Likely Effects

The site is not located within 1 km of any Control of Major Accident Hazards (COMAH) regulated establishments.

The site is not located within a geographical region that has historically been subject to natural disasters. Whilst the site lies in an area where the potential effects, for example, of failure of the TTD could be considered a disastrous event, resulting in flooding of large areas of Greater London, the proposed embedded mitigation measures will include amongst others, ensuring finished floor levels are set above the Climate Change predicted flood level, ensuring a safe means of escape for vulnerable users and preparing an emergency flood evacuation plan.

There is no recognised guidance on the assessment of major accidents and disasters. The EIA Regulations state that "*a description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned*" should be provided within the ES.

Many examples of major natural disasters, such as epidemics, earthquakes, volcanic eruptions and droughts are not of relevance to the site or the proposed development; however, vulnerability to flood risk and storm events are relevant.

Flood risk will be considered within the FRA, where best-practice mitigation measures will be outlined. Strong winds associated with storm events will be factored into the design of the proposed development in respect of structural integrity and appropriateness of landscaping features. No further assessment in respect of natural disasters is necessary.

In respect of major accidents:

- Utility failure (such as electricity, gas, water supply or sewerage) will be avoided through appropriate design and sufficient consultation with utility providers, ensuring that necessary repairs can be undertaken, and continuation of supply ensured;
- Urban fires will be mitigated through appropriate design in accordance with Building Regulations and relevant safety guidance, in addition to the established 999 emergency response procedures in place in London; and
- Terrorist incident risk is not heightened or noteworthy due to the site's location and intended uses of the proposed development.

7.11 Human Health

A Human Health technical assessment is proposed to be scoped out as a discrete chapter within the ES because the proposed development would not give rise to significant environmental effects in relation to human health. Nevertheless, several technical assessments within the ES will give consideration to human health.

7.11.1 Potential Impacts and Likely Effects

The potential impacts and likely effects of a new development on the health of new and existing residents and workers would be largely determined by the way the proposed development's buildings and spaces are used, as well as lifestyle factors which cannot be accurately quantified or controlled at the planning stage. These wider factors sit outside of the scope of planning and EIA.

Development and planning can play a certain role within the wider determinants of health and well-being, including provision of good quality workspace, employment, access to health services, access to open space and access to healthy forms of transport. This role of planning, development, health and wellbeing is limited to the location, design and nature of uses proposed and the methods in which they are constructed. The scope of this assessment needs to be applied proportionately to the type of development being considered.

Residential, commercial, office, leisure, community, retail and industrial uses are located within the surrounding area. The proposed development itself would also comprise residential, commercial and industrial spaces.

Mitigation measures will be incorporated into the design of the proposed development to maximise health and wellbeing such as the provisioning of well-designed residential units and pedestrian areas; the provision of on-site employment opportunities and public realm; as well as access to schools and healthcare facilities.

A number of assessments within the EIA will consider the proposed development's indirect or secondary impacts which can have an effect on human health (such as those relating to industrial land uses and the safeguarded wharf), namely, the:

- Ground Conditions Preliminary Risk Assessment (technical appendix);
- Air Quality Assessment;
- Noise and Vibration Assessment;
- Daylight, Sunlight and Overshadowing Assessment; and
- Wind Assessment.

Accordingly, a discrete health and wellbeing technical assessment chapter is proposed to be scoped out of the ES.

8. SUMMARY

The ES will address the requirements of Schedule 4 of the EIA Regulations. The preliminary structure and content of the ES is as follows:

- Non-Technical Summary;
- Volume 1: Main Environmental Statement:
  1. Introduction;
  2. EIA Process and Methodology;
  3. Alternatives and Design Evolution;
  4. Proposed Development Description;
  5. Construction Environmental Management;
  6. Socio-Economics;
  7. Air Quality;
  8. Noise and Vibration;
  9. Wind Microclimate;
  10. Daylight, Sunlight, Overshadowing and Solar Glare;
  11. Intra Cumulative Effects;
  12. Summary of Residual Effects; and
  13. Glossary of Terms and Abbreviations
- Volume 2: Townscape, Visual and Built Heritage Assessment
- Volume 3: Technical Appendices.

Following review of the emerging proposed development it is not deemed necessary to undertake a full EIA and produce ES chapters for ecology; ground contamination; water resources and flood risk; archaeology; telecommunication interference; light spill, solar glare; waste climate change; major accidents and disasters; human health; however, ES Volume 3 will include the following ES technical appendices to inform the planning application:

- Ecological Impact Assessment;
- Preliminary Risk Assessment;
- Flood Risk Assessment Memorandum; and
- Archaeological Desk Based Assessment.

APPENDIX 1
CUMULATIVE SCHEMES

Paddington Green Police Station: Cumulative Schemes

No.	Scheme	Application Reference	Planning Application Description	Consented Status	Cumulative scheme in the EIA
1.	One Merchant Square	18/05018/FULL	Redevelopment comprising the erection of a 42 storey building (Building 1) and a 21 storey building (Building 6) above three basement levels. Use of buildings as 426 residential units (Class C3) (including 67 affordable housing units in Building 6), retail floorspace (Classes A1/ A2/ A3/ A4/ A5) and retail/leisure floorspace (Classes A1/ A2/ A3/ A4/ D2); Provision of car parking, cycle parking, ancillary space, plant, servicing, highway works, hard and soft landscaping and other associated development (EIA Development).	Resolution to grant Subject to S106 being signed	Yes
1.	One Merchant Square	10/09756/FULL	This planning application is part of a larger scheme for Merchant Square to provide a mix of uses including residential accommodation, employment (offices), hotel, retail, medical and community facilities. Development comprising: • Erection of a 42 storey building; • A maximum of 222 market residential units (and no less than 213 residential units) (Class C3) comprising: - 49 one bedroom units; - 91 two bedroom units; - 79 three bedroom units; and - 3 four (+) bedroom units. • A 90 room boutique hotel (Class C1) (totalling 8,040 m^2 GIA); • Provision of basement parking to deliver: - 133 car parking spaces; and - 232 cycle spaces. • Provision of servicing and ancillary space, highway works, new vehicular and pedestrian access and associated hard and soft landscaping.	Granted – Signed S106 Implemented	No. Completed and is included in the baseline.
2.	Two Merchant Square	10/09757/FULL CLEUD confirming lawful	This planning application is part of a larger scheme for Merchant Square to provide a mix of uses including residential accommodation, employment (offices), hotel, retail, medical and community facilities. Development comprising:	Granted – Signed S106 Construction started 31/08/2015. Status unknown.	To be confirmed by WCC

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Paddington Green Police Station: Cumulative Schemes

No.	Scheme	Application Reference	Planning Application Description	Consented Status	Cumulative scheme in the EIA
		implementation issued 31/06/2016 Ref. 16/01467/CLEUD	• Erection of a 17 storey building; • 20,775 m^2 of office floorspace (Class B1); • 396 m^2 of retail floorspace (Class A1/A2/A3/A4/A5); • Provision of basement parking to deliver: - 10 car parking spaces; and - 196 cycle spaces. • Provision of servicing and ancillary space, highway works, new vehicular and pedestrian access and associated hard and soft landscaping.		
3.	Three Merchant Square	10/09758/FULL	This planning application is part of a larger scheme for Merchant Square to provide a mix of uses including residential accommodation, employment (offices), hotel, retail, medical and community facilities. Development comprising: • Erection of a 21 storey building; • A maximum of 201 market and affordable residential units (and no less than 195 residential units) (Class C3) comprising; - Market housing; - 37 one bedroom units; - 65 two bedroom units; - 54 three bedroom units; and - 3 four (+) bedroom units. - Affordable housing; - 19 one bedroom units; - 12 two bedroom units; and - 11 three bedroom units. • 1,031 m^2 GIA of retail floorspace (A1/A2/A3/A4/A5); • 750 m^2 GIA nursery and community floorspace; • Provision of basement parking to deliver; - 78 car parking spaces; and - 252 cycle spaces. • Provision of servicing and ancillary space, highway works, new vehicular and pedestrian access and associated hard and soft landscaping.	Granted – Signed S106 Construction Completed	No. Completed and is included in the baseline.

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Paddington Green Police Station: Cumulative Schemes

No.	Scheme	Application Reference	Planning Application Description	Consented Status	Cumulative scheme in the EIA

4.	Six Merchant Square	11/10445/FULL
		
		Refer to scheme 1 for revised proposal under 18/05018/FULL
			This planning application is part of a larger scheme for Merchant Square to provide a mix of uses including residential accommodation, employment (offices), hotel, retail, medical and community facilities.
			Development comprising:
			• Erection of a 15 storey building;
			• 57 market residential flats and 62 affordable residential flats (Class C3) comprising:
			  • Market housing;
			  - 4 one bedroom units;
			  - 29 two bedroom units; and
			  - 24 three bedroom units.
			  • Affordable housing;
			  - 21 two bedroom units;
			  - 16 three bedroom units;
			  - 3 four (+) bedroom units;
			• 583 m^2 GIA retail floorspace (Class A1/A2/A3/A4/A5);
			• 811 m^2 GIA medical centre (Class D1);
			• Provision of basement parking to deliver:
			  - 51 car parking spaces; and
			  - 152 cycle spaces.
			• Provision of servicing and ancillary space, highway works, new vehicular and pedestrian access and associated hard and soft landscaping.
				Granted – Signed S106
				Implemented – confirmed through CLEUD
				18/05018/FULL has resolution to grant subject to S106 being signed
					No. Consented and is included in One Merchant Square

5.	Paddington Exchange (North Wharf Gardens) Phase 1 West	12/11911/FULL
		S73 – 14/09037/FULL
		S73 – 16/03632/FULL
			Development comprising:
			• Erection of a 15 storey building;
			• 150 residential units (Class C3) comprising:
			  • Market housing;
			  - 35 one bedroom units;
			  - 48 two bedroom units; and
			  - 42 three bedroom units.
				Granted – Signed S106
				Commenced 16/1/15
					No. Completed and is included in the baseline.

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Paddington Green Police Station: Cumulative Schemes

No.	Scheme	Application Reference	Planning Application Description	Consented Status	Cumulative scheme in the EIA

			• Affordable housing;
			  - 4 one bedroom units;
			  - 10 two bedroom units;
			  - 10 three bedroom units; and
			  - 1 four (+) bedroom unit.
			• 1,257.7 m^2 GIA social and community space (Class D1/D2) and/or affordable business accommodation (Class B1);
			• 565.5 m^2 GIA retail units (Class A1/ Class A3);
			• 605.7 m^2 GIA gym use (Class D2);
			• Provision of basement parking over two storeys to deliver:
			  - 90 car parking spaces;
			  - 234 cycle spaces;
			  - 30 motorcycle spaces; and
			  - 19 wheelchair accessible spaces.
			• Energy centre and ancillary servicing accommodation; and
			• Provision of public open space, public realm and landscaped area, highways works including widening of Hermitage Street to accommodate two way vehicular traffic, new vehicular andpedestrian accesses.		

6.	Paddington Exchange (North Wharf Gardens) Phase 2 East	13/11045/FULL
		S73 – 16/12289/FULL
			Development comprising:
			• Erection of buildings between 6 and 20 storeys;
			• 335 residential units (Class C3) comprising:
			  • Market housing;
			  - 98 one bedroom units;
			  - 126 two bedroom units; and
			  - 77 three bedroom units.
			  • Affordable housing;
			  - 8 one bedroom units;
			  - 25 two bedroom units;
			  - 26 three bedroom units; and
			  - 5 four (+) bedroom units.
			• 23,156 m^2 GIA hotel and serviced apartments (Class C1);
				Granted – Signed S106
				Commenced 1/10/16
					Yes

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Paddington Green Police Station: Cumulative Schemes					
No.	**Scheme**	**Application Reference**	**Planning Application Description**	**Consented Status**	**Cumulative scheme in the EIA**
			• 548 m² GIA office floorspace (Class B1); • 915 m² GIA gym (Class D2); • 943 m² GIA retail (Class A1/A3); • 2,572 m² GIA primary school (Class D1); • Provision of basement parking over two storey to deliver; - 16 car parking spaces; - 52 wheelchair accessible spaces; and - 598 cycle spaces. • Provision of associated landscaping and open space, highways works, and off street ground floor service bay.		
7.	The Landseer 38-44 Lodge Road	09/09773/FULL 14/04393/FULL 15/00529/FULL S73 – 15/02673/FULL	Demolition of existing buildings and redevelopment to include: • Erection of buildings between 5 and 12 storeys; • 129 residential units (Class C3) providing 17,594.3 m² GIA) comprising: • Market housing; - One studio unit; - 15 one bedroom units; - 36 two bedroom units; - 19 three bedroom units; and - 10 four (+) bedroom units. • Affordable housing; - 24 one bedroom units; - 18 two bedroom units; and - 5 three bedroom units. • Provision of basement parking to deliver; - 91103 car parking spaces; and - 160258 cycle spaces. • Ancillary leisure and gym facility; and • Provision of associated landscaping and ancillary works.	Granted – Signed S106 Commenced construction	Yes

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Paddington Green Police Station: Cumulative Schemes					
No.	**Scheme**	**Application Reference**	**Planning Application Description**	**Consented Status**	**Cumulative scheme in the EIA**
7.1	36 St John's Wood Road 38-44 Lodge Road (same location as site 7)	18/08105/FULL	Redevelopment of land at 36 St John's Wood Road for an extra care facility, ancillary medical and rehabilitation facilities, landscaping, car and cycle parking, and the redevelopment of 38-44 Lodge Road for a care home and residential units along with landscaping, car and cycle parking. • 26,000 sqm proposed • 89 extra care residential (C3) • 7,494 sqm care home (C2) • 1,8553 sqm affordable residential (C3)	Consented April 2020 at appeal	yes
8.	Paddington Triangle	12/07668/FULL	Permission exists for the development of the site as part of the Paddington Integrated Project. The development of 'Paddington Triangle' specifically relates to the following: • Erection of a 21 storey building; • 34,184 m² GIA office space (Class B1); • 132 m² GIA retail space (Class A1/A2/A3); and • Provision of associated landscaping and other associated works.	Granted – Signed S106	Yes
9.	Dudley House (North Wharf Road and 139-147 Harrow Road)	15/11458/COFUL	Demolition of existing buildings (Dudley House and Nos. 139-147 Harrow Road) and redevelopment to include: • buildings ranging in height from 7 to 22 storeys; - 187 – 197 intermediate residential units (Class C3); - 41 x Studio units; - 42 x 1 bedroom flats; - 38 x 2 bedroom flats - a new secondary school and a replacement church (7,440 m² GIA D1); and - 130 m² GIA retail (A1/A2/A3). • Provision of basement parking to deliver: - 32 car parking spaces; - 22 motorcycles spaces; - 11 wheelchair accessible spaces; and	Granted 29/4/16 Commenced 1/12/16 Completed	No. Completed and is included in the baseline.

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Paddington Green Police Station: Cumulative Schemes

No.	Scheme	Application Reference	Planning Application Description	Consented Status	Cumulative scheme in the EIA
			- 276 cycle spaces. • Provision of associated landscaping and other associated works.		
10.	55-65 North Wharf Road	14/12648/FULL	Development comprising: • Erection of a 15-storey building; • 30,026 m^2 of office space (Class B1); • Provision of ground and basement parking to deliver: • 2 wheelchair accessible car parking spaces; and • 246 cycle spaces. • Provision of associated landscaping and other associated works.	Granted – Signed S106 Completed	No. Completed and is included in the baseline.
11.	Crossrail Paddington Station Eastbourne Terrace	11/05349/XRPS	Request for approval of plans and specifications pursuant to Schedule 7 of the Crossrail Act 2008 for a new station comprising a ticket hall, canopy, two ventilation structures, stairs, escalators, lifts, railings and other associated works.	Granted Under Construction	Yes
12.	Warner Stand Redevelopment	13/12002/FULL	Demolition of the existing Warner Stand and redevelopment to provide a new stand of 2,922 seats with match day control facilities, restaurant, bars and catering outlets together with new landscaping, servicing and enabling works including plant and equipment. Relocation of one of the existing temporary floodlights from the rear of the Warner Stand so that the base of the floodlight mast is within the new stand. Erection of new glazed link between the new stand and the listed Bowlers Pavillion façade.	Granted – Signed S106 Completed	No. Completed and is included in the baseline.
13	Paddington Cube	16/09050/FULL S73 18/08240/FULL	Demolition of existing buildings and mixed use redevelopment comprising a commercial cube providing up to 50,000 m^2 (GEA) floorspace of office/commercial uses, retail and café/restaurant uses at lower levels and top floor level, a retail/restaurant building on Praed Street; a new major piazza including pedestrianisation of London Street, a new access road between Winsland Street and Praed Street, hard and soft landscaping, new underground station entrance and new Bakerloo Line Ticket Hall; and associated infrastructure and interface highway and transport works for	Granted – Signed S106 Under construction	yes

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Paddington Green Police Station: Cumulative Schemes

No.	Scheme	Application Reference	Planning Application Description	Consented Status	Cumulative scheme in the EIA
			underground connections, and ancillary works.(EIA Application accompanied by an Environmental Statement). Site includes 31 London Street, 128-142 Praed Street, London Street, Paddington Station Arrivals ramp and associated surrounds		
14	1A Sheldon Square, W2	17/05609/FULL	Demolition of existing management office building and lift building, and erection of a new building comprising basement, three lower levels (canal level -1, amphitheatre level -2 and railway level -3), ground and 19 upper levels plus rooftop plant to provide a hotel with up to 200 bedrooms/suites and associated ancillary facilities including conference facilities/ meeting rooms/ private dining/ bars/ restaurants including publicly accessible restaurant/ bar at Level 19 (Class C1), flexible hotel/ retail (Class C1/ A1) at part ground level, flexible hotel/ retail/ restaurant/ bar use (Class C1/ A1/ A3/ A4) at part - 1, and part - 2 level, and hotel (Class C1) at part -2 level as well as Level 17 roof terrace, replacement lift, plant, cycle parking, landscaping and other associated works.	Consented March 2018	Yes
15	Lords Cricket Ground – Compton and Edrich stands redevelopment St John's Wood Road, NW8	18/08510/FULL	Demolition of the existing Compton & Edrich stands and redevelopment comprising the erection of a new stand to provide up to 11,500 seats, relocation of the existing floodlights, provision of new hospitality facilities, retail and food and beverage floorspace, hard and soft landscaping, servicing facilities, and all necessary ancillary and enabling works, plant and equipment.	Consented March 2019 Under Construction	yes
16	Luton Street/ Capland Street/Bedlow Close site, NW8	17/08619/FULL	Demolition of buildings and redevelopment to provide two six storey buildings above lower ground and a row of three storey townhouses comprising up to 168 residential units with ancillary facilities (Class C3) and a Sports Hall (Class D2), and associated car park, energy centre and all other works incidental to the proposed development.	Consented March 2019 Implemented/ under construction	yes

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