79 CAMDEN ROAD
& 86-100 ST PANCRAS WAY

draft construction management plan

November 2013

by URS

Rev	Date	Details	Prepared by	Checked by	Approved by
1	9th October 2013	Working Draft	Andrew Dickson Environmental Consultant	Vanessa Buckland Principal Consultant	Mark Elton Technical Director
2	25th November 2013	Final	Andrew Dickson Environmental Consultant	Vanessa Buckland Principal Consultant	Mark Elton Technical Director

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

This draft Construction Management Plan (CMP) outlines the commitments and measures that will be adopted by Barratt West London to ensure that the development at 79 Camden Road, and 98 – 100 St Pancras Way, NW1 9EU, Camden (referred as '79 Camden Road') will have a minimal impact on the environment and any disturbance to local community will be minimised.

This draft CMP is included within the planning application for the Proposed Development and will be updated when more detailed construction information becomes available. It is not, at this stage, a definitive final document. The development of the CMP is an iterative process and as such is dependent upon on-going dialogue between stakeholders and consultees to ensure that the CMP addresses the necessary issues. This dialogue is, by nature, dependent upon the availability of greater detail relating to the construction activities than is currently available.

Note:

Yellow highlighted and italic text throughout the report indicates were information is required to be inserted prior to construction works and following consultations with the London Borough of Camden Council (LBCC).

The nature of the CMP requires that it is regularly monitored and updated where necessary when further details become available.

1. INTRODUCTION

URS have been commissioned by Barratt West London (the Applicant) to prepare a draft Construction Management Plan (CMP) for the construction phase related to the residential development of 79 Camden Road, Camden ('Proposed Development').

1.1 Purpose and Scope of the CMP

1.1.1 Purpose

The aim of the CMP is to provide an overarching and strategic framework for the management of effects and the implementation of measures in the run up to, and during, the construction phase. This draft CMP outlines the measures that will be implemented by the contractor to minimise and mitigate the construction impacts of the Proposed Development.

The CMP will be finalised prior to commencement of construction activities, taking into account any planning conditions or Section 106 agreements. Therefore at this stage, this CMP is not a definitive document.

The content of the CMP will be agreed with the London Borough of Camden Council (LBCC) and other organisations as appropriate, prior to the commencement of construction. The construction contractors will be required to comply with the requirements of the CMP.

1.1.2 Scope

The scope of this document provides the framework for identifying commitments made within the Technical Reports that accompany the Detailed Planning Application lodged for the development of the 79 Camden Road site (the Proposed Development). It provides a 'continuous link' between the design and consent phase of the project, the construction of the project and its implementation. The commitments are translated into a framework of actions to be undertaken, either before or during the construction works, and will identify the key roles and responsibilities for implementing those actions.

1.2 Technical Reports

This document has been prepared using information from the Technical Reports that accompany the Planning Application. These include the following:

- 'Phase 1 Habitat Survey Report' (September 2013); (prepared by URS);
- 'Noise Assessment' (November 2013), URS; (prepared by URS);
- 'Air Quality Assessment' (November 2013); (prepared by URS);
- 'Surface Water Drainage Statement' (November 2013); (prepared by URS);
- 'Heritage Desk-Based Assessment' (November 2013); (prepared by URS);
- 'Tree Survey' (November 2013); (prepared by B. J. Unwin Forestry Consultancy);
- 'Transport Assessment' (November 2013); (prepared by SKM Colin Buchanan)
- 'Travel Plan' (November 2013); (prepared by SKM Colin Buchanan)

1.3 Framework of the Draft CMP

The draft CMP is based on established good management practice and includes the following information:

- Management of the CMP: information pertaining to data management, roles and responsibilities and structure
- General Framework and Administration: information pertaining to staff training, health and safety, community liaison,
- Commitment to Environmental Best Practice: overview of commitment to adopting measures consistent with best practice and industry guidance into the working methods;
- Outline of the Project: information of the site and the Proposed Development;
- Construction Information: outline of the construction works, timing and duration;
- Environmental Mitigation:, identification of potentially sensitive receptors, key environmental issues, management of environmental risks and reducing impacts;
- Monitoring, Auditing and Reporting: procedures for recording and reporting monitoring and audit results, action for non-compliance; and
- Appendix A – Framework of Mitigation Measures

2. MANAGEMENT OF THE CMP

2.1 The CMP File

The on-going management and completion of CMP actions need to be documented and kept on file for record management. Audits of the CMP will be logged in the file, which will be kept at the site compound, available for view.

The CMP File will include:

- Copy of the latest version of the CMP;
- Details of the appointed roles;
- Monitoring and Audit Information; and
- Complaints Register;

2.1.1 Documentation Control

The CMP will be held and maintained electronically, with the latest revisions identified with a document reference.

2.2 Hours of Construction Working

The hours of construction working that is audible at the site boundary shall only be undertaken between the hours of:

Monday to Friday	0800 hours to 1800 hours (site opens at 7:30am, work starts 8:00am)
Saturday	0800 hours to 1300 hours

(Note: Further details regarding management and timing of deliveries to the site; refer sections 6.4.3 and 6.4.4 below)

Should noisy work outside of these hours be required, this would be subject to an application and separate approval from the LBCC via the Section 61 process under the 'Control of Pollution Act 1974'.

No work to be carried out on Sundays and Bank Holidays (unless agreed in advance with the LBCC).

2.3 Site Management - Roles and Responsibilities

An effective CMP relies on each of the roles and responsibilities being clearly defined and unambiguous. The successful implementation of the CMP and management of the environmental impacts is reliant on clear definition and understanding of requirements among Project Team staff. An outline of the key roles and responsibilities are listed below.

Table 1. Summary of the key roles and responsibilities

Role	Key Responsibilities
Developer	Responsibility for appointment / allocation of the Principal Contractor, Project Manager and Environmental Manager, and holds overall responsibility for the activities on site and implementation of the CMP.
Principal Contractor	Responsibility of the day to day management of the demolition and construction activities on site, ensuring the activities adhere to the actions set out in the CMP, including: • Ensuring that the construction activities are carried out in compliance with the CMP;

	• Checking the qualifications and competence of the contractors / subcontractors for appointment; • Ensure environmental awareness training for all workers, including an induction for all site workers / contractors to support the implementation of the CMP; • Observing the demolition / construction activities to ensure they undertaken are in accord with contract; • Monitor the performance of contractors/ sub-contractors and provide direction as necessary; • Monitoring (co-ordinate with Environmental Manager) the demolition / construction programme to ensure CMP actions are integrated into it; • With the Environmental Manager, undertaking a monthly audit of the CMP and report findings – all audits will be followed up noting any completed actions, further work needed and actions that are not being complied with. Records will be kept in the CMP file which will be available to view at the site compound; • Undertaking corrective actions in the event of breaches of CMP.
Structural Engineer	- Advising Client on structural design.
Environmental Consultant	• Advise Client on environmental related matters; • Preparation of CMP.
Project Manager	The Project Manager is responsible for directing the Principle Contractor on the project, and include: • Lead responsibility on contractual appointments and budget matters; • Check that the Principal Contractor has allocated sufficient resources to allow delivery of the CMP and direct as required; • Assign specific requirements / duties to competent members of the project team; • Co-ordinate communication with key stakeholders and other third parties as required; • Review findings of the monitoring programme, and direct Principal Contractor / Environmental Manager as required.
Site Foreman(s)	• Lead responsibility for the practical construction of the development, including day to day co-ordination of the contractors • Co-ordinate with the Project Manager and Principal Contractor for management of the construction acitvities.
Environmental Manager	Co-ordinate monitoring and reporting of the CMP implementation, through liaison with the Principal Contractor and other parties as appropriate, to ensure that the works are implemented in accord with the commitments in the CMP, including: • Checking that the CMP is audited and reported back to client on a monthly basis; • Reviewing the CMP and other complementary plans and procedures to ensure they are compliant with the CMP; • Monitor the Principal Contractor to ensure that all relevant legal consents, licences, etc are in place in advance of the relevant works commencing, and that all requirements are adhered to; • Co-ordinating the technical and environmental specialists as part of the implementation of the monitoring regime to monitor and record the impacts arising from the construction activities; • Acting as the first point of contact for any environmental issues encountered by the Principal Contractor - Investigate all environmental incidents, and ensure they are recorded and reported, with corrective / preventative actions are undertaken; • Contribute to communication on environmental matters between project team and relevant consultees / stakeholders; • Co-ordinate the CMP review process; and • Ensure that the objectives of the CMP are being achieved and that are not contrary to any relevant legal requirements.
Health and Safety Officer	Responsible for managing health and safety of workers / contractors during demolition and construction, including: • Acting as the first point of contact for any health and safety issues encountered by the Principal Contractor - Investigate all health and safety incidents, and ensure they are recorded and reported, with corrective / preventative actions are undertaken; • Ensure health and safety awareness training for all workers, including an induction for all

	site workers / contractors.
Contractor / Sub-Contractor	• Individual contracts will incorporate relevant requirements in respect of environmental control - a commitment to responsibilities within the CMP will be a contractual obligation for trade contractors • Work to agreed plans, methods and procedures to minimise environmental impacts; • Understand the importance of avoiding pollution on-site, including noise and dust, and how to respond in the event of an incident to avoid or limit environmental impact; • Report all incidents immediately to their line manager; • Monitor the work place for potential environmental risks and alert their line manager if any are observed.

2.4 Key Contacts

Table 2. Key roles and contact details

Role	Name	Address	Contact Details
Developer			
Principal Construction Contractor			
Structural Engineer			
Environmental Consultant	URS	St George's House 5 St George's Road London SW19 4DR	
Project Manager			
Site Manager			
Environmental Manager			
Health and Safety Officer			

[*Note: Names and telephone numbers of the key contacts during the construction phase to be inserted.*].

2.4.1 Site Management

During the demolition phase, the demolition contractor will act as Principal Contractor.

The substructure and frame package will be let as a Principal Contractor role, with the Applicant moving in to the Principal Contractor role once sufficient frame is constructed to allow additional trades to begin works and additional welfare and storage areas become available.

On site management provided by the Applicant will consist of the following:

- Project Manager;
- Site Foreman (Externals and Façade);
- Site Foreman (Internals Block A-C); and
- Site Foreman (Internals Block D-F).

3. GENERAL FRAMEWORK AND ADMINISTRATION

3.1 Construction Site Staff Training

The raising of environmental awareness is an important consideration for the implementation of the CMP. All staff will undergo environmental awareness training. A training plan that identifies the requirements for all personnel allocated with environmental responsibilities will be produced and be contained within all relevant documents for all demolition and construction activities. Awareness and appreciation for the contents and purpose of the CMP will be a priority during the training and induction process.

Line managers and supervisors would ensure that all personnel engaged in activities that may have an impact on the environment are competent to carry out their duties or, where necessary, arrange for suitable training to be undertaken, before commencement of the associated construction activity.

To ensure compliance, trade contractors will have contractual obligations to adhere to requirements for environmental control, based on good working practice, such as careful programming, resource conservation, adhering to health and safety regulations and quality procedures.

All contractors involved with the construction phase, including trade contractors and site management, will be committed to adopt the agreed best practice and environmentally sound methods. The trade contractors will be required to demonstrate how they will meet the targets of the CMP and how the potential impacts will be offset, reduced or minimised.

Health, Safety and Environmental requirements will be made clear in the procurement process and the Principal Contractor will be responsible for quality assurance, corrective action and disciplinary procedures for non-compliance. In addition, the Principal Contractor will hold informal 'Toolbox Talks' as necessary, to promote safe working and environmental responsibility.

3.2 Health and Safety

There is a legal requirement to protect project personal and the general public from any significant adverse effects during the construction works.

The safety of the general public, site workers (i.e. management, contractors, sub-contractors) and visitors to the site (i.e. suppliers) will be the uppermost guiding factor to all operations carried out on site.

A series of Safety, Health and Environmental Procedures will be implemented onsite. The Site Manager will carry out a recorded weekly inspection; and this will be reinforced by a monthly audit by senior site management. Applicant's Health and Safety department will visit and audit site every two weeks.

Each member of the team will be expected to fully comply with the requirements of the "White Book", current regulations and the site rules. Failure to comply would lead to removal from site and in the case of repeat or serious breaches, permanent exclusion from site.

3.2.1 Project and Construction Personal

Appropriate induction training will be given to all persons working on the site. Part of the induction will include the site protocols, procedures and controls. All employees and subcontractors will be required to fully comply with the site requirements.

All staff are also required to undergo environmental awareness training, as part of the induction to the site, in order to make them aware of the key roles and responsibilities, procedures to be followed and to ensure competency.

All site operatives and visitors will be given appropriate personal protective equipment (PPE) for the activities to be undertaken.

3.2.2 General Public

Throughout the demolition and initial phases of the construction programme, the development site will remain closed to the general public. Control and safety of the general public at the entrances / exits will be managed by trained personal.

Measures to safeguard visitors to the site and to segregate them from on-going construction operations will be implemented. A defined pedestrian and plant access will be established and maintained. Safe and unobstructed routes to operational buildings will be provided. Clear visitor routes will be defined through the use of appropriate signage. Where possible, construction traffic movements will be segregated from visitor traffic and pedestrian routes.

3.3 Emergency Procedures

[*Emergency procedures to be followed in the event of an environmental incident (e.g. spillage) to be included here*]

3.4 Waste Management – General Requirements

Waste produced on site will be subject to the Duty of Care under the *Environmental Protection Act (1990)*. Liaison with the Environment Agency will be undertaken to ensure that waste and materials handling on-site will be conducted appropriately, this will include a site meeting with the local Agency officer before work commences.

The transportation of waste to and from the Site will comply with the Duty of Care requirements. These include ensuring waste is transported by registered carriers, disposal to appropriately licensed sites and maintenance of appropriate waste transfer documentation. The Principal Contractor will audit waste carriers and disposal facilities and maintain documentary evidence that these requirements are being met, including a register of waste carriers, disposal sites (including transfer stations) and relevant licensing details for each waste stream. Waste contractors who remove waste will be registered with the Environment Agency.

All deliveries on site will be supervised by a responsible person and storage tank levels will be checked before and during delivery to prevent overfilling and that the produce is delivered to the correct tank.

The Site Waste Management Plan (SWMP) will be implemented by the Principal Contractor, which includes methods for waste segregation, storage and removal arrangements, and measures to deal with wastewater.

3.5 Community Liaison, Communication and Complaints

3.5.1 CMP File

In line with good environmental practice, the CMP file will be available at the site compound. The documents within the file will be available to view by regulatory bodies on request.

3.5.2 External Organisations

It is best practice to ensure a good working relationship with the relevant authorities and statutory and non-statutory bodies, including the local planning, environmental protection, waste and highway authorities, the Environment Agency, and Transport for London (TfL).

There will be regular and proactive liaison with the LBCC and other third parties as appropriate on environmental issues throughout the project implementation. The project team / Principal

Contractor should determine whether there are any works which may benefit from early discussion.

3.5.3 Public Liaison

The Project Manager will be appointed as the Neighbourhood Liaison Officer and will be named representative for the contact with the community. The Liaison Officer will circulate contact details to the residents in the neighbouring properties and to the relevant amenities.

The Project Director will attend the regular community meetings with the residents, so that any concerns can be voiced and agreement reached, on action to be taken to tackle those concerns where practical.

Outside of normal working hours, site security staff will act as the main point of contact via a dedicated phone number. Security will alert the Principal Contractor (or representative) if necessary.

3.5.4 Complaints

Complaints about noise, or incidences where action levels are exceeded are to be reported to the Principal Contractor and immediately investigated.

A Complaints Register will be set up and maintained by the Principal Contractor.

Complaints made to the site or client regarding environmentally related issues are to be recorded into the Complaints Register within 24 hours. The complainant will be notified what action is being taken to address the complaint.

4. COMMITMENT TO ENVIRONMENTAL BEST PRACTICE

The Principal Contractor (and contractor / sub-contractor) will be expected to incorporate the appropriate pollution prevention and mitigation measures consistent with best practice and industry guidance into their working methods. Key references and examples to be adopted include:

- London Borough of Camden - 'Guide for Contractors working in Camden' (February 2008);
- Mayor of London – 'The control of dust and emissions from construction and demolition – Best Practice Guidance' (November 2008);

  Note: Draft: The control of dust and emissions from construction and demolition – Best Practice Guidance' (September 2013) – currently being consulted on

- Environment Agency – 'Pollution Prevention Guidance' (PPGs) notes, including:
  - PPG 1: General guide to the prevention of pollution;
  - PPG 2: Above ground oil storage tanks;
  - PPG 3: Use and design of oil separators in surface water drainage systems;
  - PPG 5: Work or maintenance near water;
  - PPG 6: Working at construction and demolition sites: preventing pollution guidance;
  - PPG 8: Safe storage and disposal of used oils;
  - PPG 13: Vehicle washing and cleaning;
  - PPG 21: Pollution incident response planning; and
  - PPG 22: Dealing with spills.
- The construction project be registered under the 'Considerate Contractor's Scheme' and subject to the below Code of Considerate Practice objectives, with the aim to exceed the minimum requirements and comply with the Code.
  - Enhancing the Appearance;
  - Respecting the Community;
  - Protecting the Environment;
  - Securing everyone's Safety; and
  - Caring for the Workforce.
- Control of Pollution Act 1974 (CoPA) - provisions to control noise. Section 61 of the CoPA allows a legally binding agreement with the local authority to limit noise levels at the boundary of the construction site, providing the best practicable means of preventing, reducing and minimising noise.
- Site Waste Management Plan Regulations (2008) – All construction projects over £300,000 (in England) must have a site waste management plan, explaining how construction waste will be handled.

5. OUTLINE OF THE PROJECT

5.1 Project Location

The site is located within the London Borough of Camden, London. The location of the site is illustrated in Figure 1 below.

5.2 Existing Site and Surrounding Context

The site covers an area of 0.42 hectares (ha) and is bounded to the south east by Camden Road (A503), to the south west by St Pancras Way (A5202), to the north west by commercial properties fronting St Pancras Way and to the north east Rochester Place. The existing site layout is illustrated in Figure 2 below. The site is located in a mixed use residential and commercial area.

The site is currently under the ownership of the London Borough of Camden and comprises three buildings (79 Camden Road, 98 St Pancras Way and 100 St Pancras Way), of which are currently all vacant. The authorised use of the buildings is within Use Class B1 and some parts of the building were most recently used within Use Class B1(a) offices, with some ancillary public facilities.

Camden Road London Overground Station is located approximately 160 metres (m) to the south east of the site and Camden Road Underground Station is located 600m to the south east of the site. There are two bus stops along Camden Road and one bus stop along St Pancras Way.

Within the area surrounding the site, there is a primary school located on Camden Street, approximately 600m south of the site, and a secondary school located on Charrington Street, approximately 1.2 kilometres (km) south east of the site. The surrounding area also contains some community facilities, including a GP surgery on Bartholemew Road (located approximately 300m north west); a dentist on Kentish Town Road (located approximately 300m south west); a library on Kentish Town Road (located approximately 700m to the north); and the Kentish Town Sports Centre (approximately600m north west). A superstore is also located on Camden Road, approximately 500m south of the site.

The entire London Borough of Camden has been designated as an Air Quality Management Area (AQMA).

The site is formed of 100% impermeable surfaces and, as such, the majority of the site's surface water runoff is discharged into the combined sewer network in the area.

There are no World Heritage Sites, Scheduled Monuments, Registered Battlefield or Registered Parks and Gardens within a 250 m radius of the site (archaeological study area). Six non-designated archaeological and historical assets are located within the archaeological study area of the site, one of which lies within the site itself. The site is not located within an Archaeological Priority Area; however, the southern limit of the Kentish Town Archaeological Priority area is located within the north of the archaeological study area.

There are no Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites within 5km of the site. In addition, there are no statutory designated sites for nature conservation on or directly adjacent to the site; however, three statutory designated sites for nature conservation are located within 2km of the site:

- Camley Street Nature Park – Local Nature Reserve located 1.1km to the south east of the site;
- Barnsbury Wood – Local Nature Reserve located 1.6km to the east of the site; and
- Belsize Wood – Local Nature Reserve located 1.9km to the north west of the site.

There are no non-statutory designated sites for nature conservation on or immediately adjacent to the site. However; there are 29 non-statutory designated sites for nature conservation within 2km of the works boundary, of which nine are designated as Sites of Local Importance for Nature Conservation (SLINCs), nine as Grade 1 Sites of Borough Importance for Nature Conservation (SBINCs), seven as Grade 2 SBINCs, and four as Site of Metropolitan Importance for Nature Conservation (SMINCs).

No records of protected or otherwise notable species are found to occur within the site and there are 6 trees located on the site. Eleven trees are located nearby off-site.

5.3 Nature of the Proposed Development

The proposed redevelopment of the site is for residential land uses falling within the Use Class C3.

The Proposed Development of the site comprises the demolition of the existing buildings and the construction of up to 166 residential units (in blocks ranging from 5-7 storeys).

Figure 1: Site Location

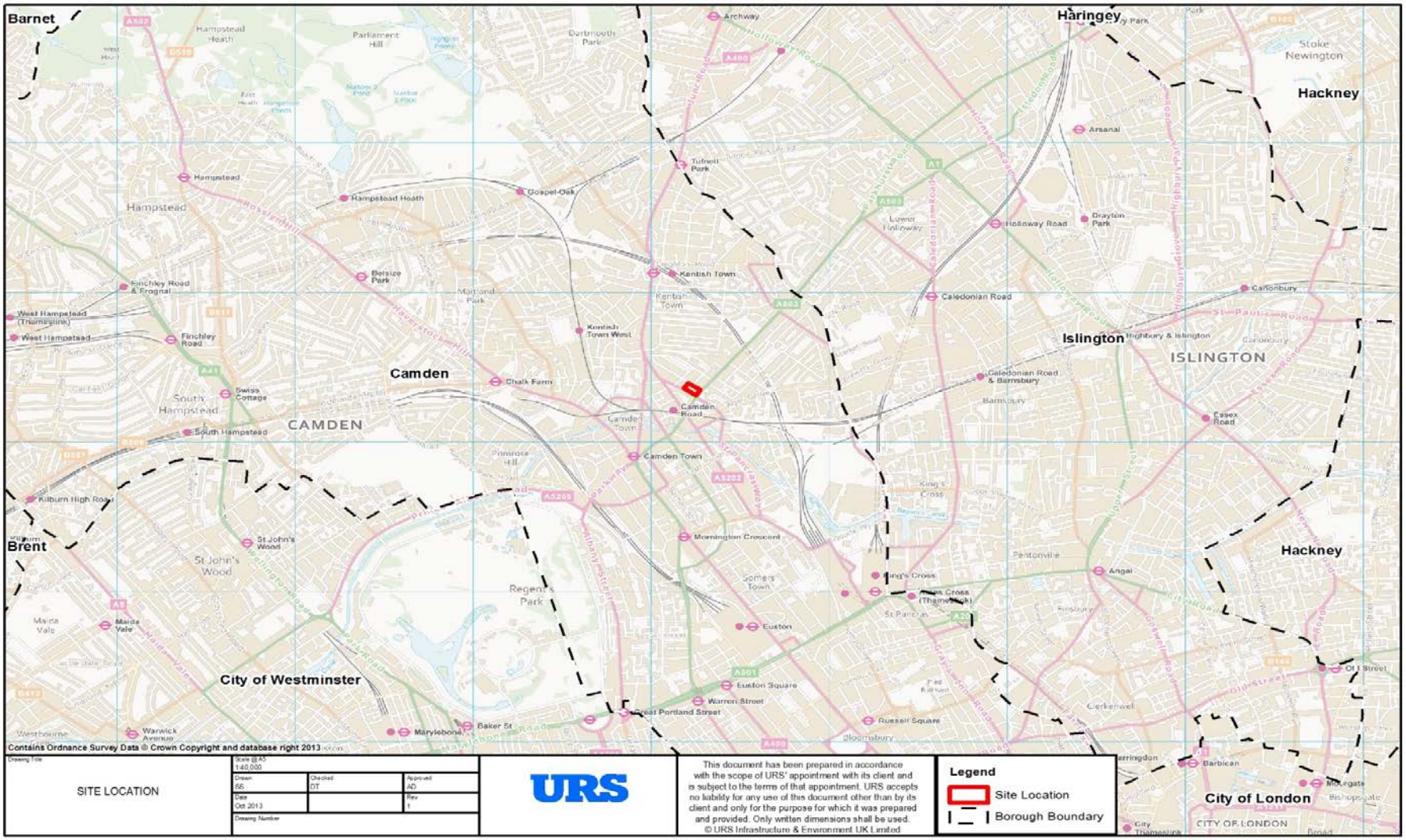
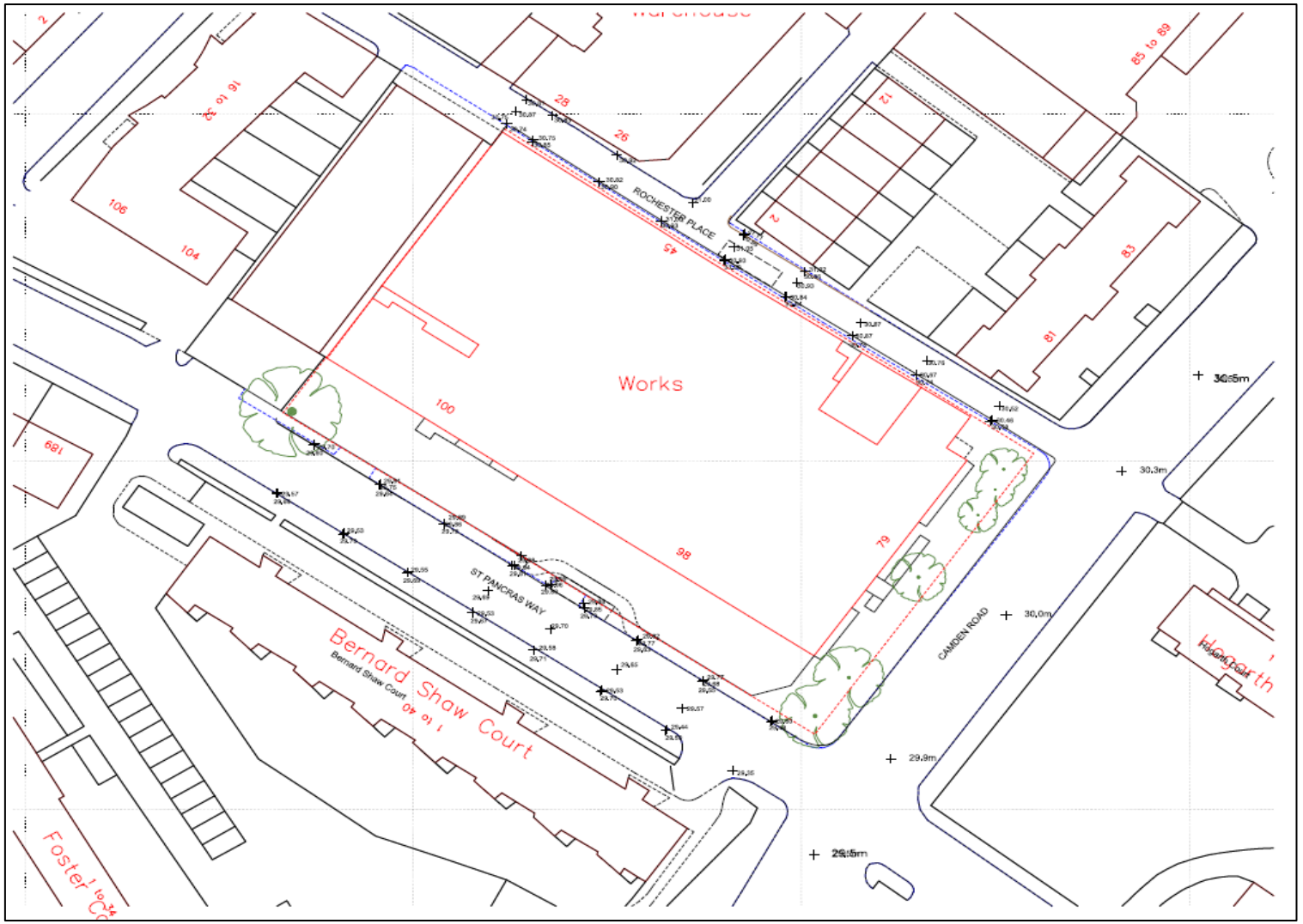


Figure 2: Existing Site Layout



6. CONSTRUCTION INFORMATION

6.1 Site Establishment

6.1.1 Site Office Set-Up

Prior to the permanent welfare and site office setup being completed, a temporary arrangement will be required. During the demolition phase, site welfare can be set up in the existing lay by off St Pancras Way within the site boundary. This will be provided in the form of 'Oasis units' during the demolition and early phases of the frame construction until basement areas become available, which will then house the permanent welfare and site office setup.

As the demolition contractor moves off-site, the welfare facilities will be located St Pancras Way, possibly incorporating a gantry system of accommodation. Secondary accommodation may also be situated along St Pancras way.

As the substructure works are completed and the frame construction gets underway, ancillary spaces in the basement identified for bike / bin storage will be used as the main site accommodation, with Block C and E being the current preferred locations with the remaining space used as storage or subcontractor offices.

Offices and welfare facilities will allow adequate space for all site staff, meeting rooms/induction facility, visitors, operatives, and welfare facilities. Welfare facilities will include changing/drying rooms, toilets, shower and canteen facilities.

Very limited space will be afforded to trade contractors to establish site offices and storage compounds in these locations.

6.1.2 Site Personnel

It is expected that the Demolition Phase will have 10-20 subcontractor personnel on site at its peak. This will increase to approximate 200 personnel as works progress during the build phase. A maximum of 4 to 6 visitors could be expected per day.

6.1.3 Site Hoarding

A secure illuminated hoarding will be erected around the site ahead of demolition. This should be set out in a manner that allows it to remain in place for the duration of the construction programme. The hoardings are to be constructed from solid ply timber.

The site boundaries will be secured by hoardings 2.4m high (barrier from ground level). Where hoardings are located across ground the top edge should slope evenly and bottom adjusted as required to achieve 2.4m high. Details are to be specified by the contractor and agreed with the design team prior to construction on site.

Lockable gates are to be provided. Details are to be specified by the contractor and agreed with the design team prior to construction works on site.

6.1.4 Erection of Scaffold

A fully designed and developed scaffold scheme will be undertaken. Scaffolding will include monoflex or safety netting to all faces of the scaffold to prevent windblown materials from exiting the site during construction, and to safe guard against materials accidentally dropped.

6.1.5 On Site Management

The measures outlined within the mitigation framework (Appendix A), for transport (refer rows 33 to 48) will be adopted during the demolition and construction works to ensure any potential adverse impacts arising from works on site are avoided or reduced:

A 'Traffic and Pedestrian Management Plan' will be prepared (refer section 6.4.3 below), identifying pedestrian routes through and around the site during demolition and construction. Clear segregated routes for separate vehicle and pedestrians use will be provided across the site.

Temporary lighting will be provided along designated routes and the site compound, additional lighting will be provided as the development progresses

6.2 Stages of Development

The works have been determined to be undertaken within a 24 month demolition / construction period. Works would start in the early summer (June) of 2014 and be completed and operational in 2016. There are to be three main stages of development proposed and are described within Table 3 below.

Table 3. Three main stages of Demolition and Construction Works

Activity	Activity Components
Stage 1: Will consist of the securing of the site, initial site set up and the demolition of the existing building	
Soft Strip	*Disconnection of existing services*
	Removal of existing office furniture
	Removal of non-structural materials
Asbestos Removal	*Installation of asbestos decontamination unit*
	Asbestos strip moving in controlled zones from basement level upwards through the building
	Removal of remaining soft strip items restricted by Asbestos
Structural Demolition	*Creation of well holes within the building using existing lift shafts or cutting through existing floor slabs*
	Erection of demolition specification scaffold where necessary
	Top down demolition clearing floor by floor to ground level
Stage 2: Will consist of substructure works, lower ground floor slab and frame and ground floor slab	
Piling	*Site formation preparation*
	Piling Mat
	Piling
Reduced Level Dig	*Temporary works*
	Propping And Shoring
	Reduced level dig and cart away
Services and Utilities	*Enabling works for future connection to existing drainage system*
	Enabling Works for future utility connections
Basement Slab	*Form basement slab and stubs columns*
	Form Penetrations for future services and drainage
	Erect Tower Cranes
Structure to Ground Floor Slab	*Form Verts*
	Form Lift and stair cores
	Form Risers and Penetrations
	Form Ground Floor Slab
Stage 3: Will consist of all superstructure works, internal fit out and external works. The affordable units will be completed ahead of the private sale units to ensure all construction works are complete before occupation of private units	

6.3 Phasing

For the purposes of demonstrating the various stages of the construction of the development plots, the construction programme has been divided into monthly timeslices. It is envisaged that the site will be delivered in phases.

A description of the timeslices outlining the anticipated progress of the construction of the site, representing a snapshot of the key construction activities taking place, the related logistics, the key locations for deliveries, and the provision of the new development, is outlined in Table 4 below.

Table 4.Description of the timeslices outlining the anticipated progress of the construction of the site

Timeslice	Stage of Construction	Outline of key on-site management activities
Month 1	**Site Establishment**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Gateman controlled at entry/exit • Jet wash used to minimise risk of debris being deposited onto the highway • Site welfare established within existing building during initial demolition works
Month 3	**Site Establishment**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Gateman controlled at entry/exit • Jet wash used to minimise risk of debris being deposited onto the highway
Month 5	**Substructure Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Piling Works design still to be confirmed
Month 7	**Substructure Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Basement slab construction begins
Month 8	**Substructure Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Tower Crane bases formed and cranes erected
Month 9	**Superstructure Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Ground floor slab construction, stairs and Verts to first floor underway
Month 11	**Superstructure Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Superstructure Metsec and Cladding Works underway • Storage areas created within ancillary lower ground floor plant and bin store areas
Month 14 to 16	**Internal Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • First fix works commence internally
Month 18	**Internal Works**	• 2.4m hoarding to be erected around site boundary • Lighting to be fixed to all elevations • Vehicle Marshalling Zone using controlled entry/exit onto St Pancras Way • Tower cranes removed • External works and landscaping underway
Month 24	**Completed**	Works completed

6.3.1.1 Outline of Crane Strategy

A scaffold and crane strategy will be designed to allow sequential dropping of scaffold from the North West to South East elevations in a block by block format (if necessary).

Two luffing cranes are the preferred solution to maximise output and to allow greater flexibility during peak periods. The crane in the north west courtyard can be removed earlier than the crane in the south eastern courtyard.

Used in conjunction with canti-decks, the strategy would involve substantially loading out floors with bulk materials such as plasterboard ahead of envelope close up to minimise the number of hoists required later in the construction process.

All necessary temporary propping and floor loading constraints would be examined beforehand.

6.3.2 Materials Storage

Very limited material storage will be available on site, therefore a just in time delivery policy will need to be implemented, which factors in necessary lead/procurement times.

6.4 Traffic Management and Deliveries

6.4.1 Road Network Overview

The site is bordered on three sides with carriageways and with an existing building on the remaining North West boundary. Camden Road is a major thoroughfare with bus stops directly outside the site boundary line. St Pancras way runs North West to South East and has no right turn from Camden road. Rochester place is a narrow cobbled surface street with one way traffic and on street parking bays adjacent to the site.

6.4.2 Construction Routing

(The possible routes available for construction HGV's are being reviewed. The final routing will be finalised by the Principal Contractor and confirmed within the final CMP before works commence on site.)

6.4.3 Management of Deliveries to Site

The maximum anticipated vehicles movement per day will be in the region of 10 to 20 vehicles, arriving and leaving the site during a working day. This will be the busiest period resulting in 3 vehicle movements per hour. The majority of the vehicles will be rigid body types between 4 and 6 metres long.

The largest vehicles will be articulated vehicles, which will only be required to transport the largest of materials to the site during the build-up period. It may be necessary to deliver large plant outside the defined working hours if agreed in advance by the Metropolitan Police/Highways Authorities. Any stakeholders directly affected by such movements will be advised beforehand.

Delivery scheduling and logistical control will be key to minimise disruption to other road users and local residents and businesses.

To manage the deliveries to the site, a Traffic and Pedestrian Management Plan will be prepared and will conform to the Applicant's standards and legislative health and safety requirements. The Traffic and Pedestrian Management Plan will be displayed in diagrammatic format on the Site Notice Board. It is likely the Traffic and Pedestrian Management Plan will be update as the work progresses. The Traffic and Pedestrian Management Plan will be reviewed and updated regularly throughout the course of the project to ensure that is relevant and can be properly implemented at all times.

Traffic movements within the confines of the site are extremely restricted. It is envisaged that deliveries to the site will have to travel along St Pancras Way and turn in to Rochester place.

Loading and unloading will be from St Pancras Way. Traffic bays will need to be suspended to create an off load area using a hangman system and crane off-loading.

It will be necessary to plan deliveries on a weekly and daily basis. Delivery of all materials to the site will be planned in advance, so as to minimise the disturbance and inconvenience to other road users and homeowners and clearly stated on any orders placed.

Control of construction traffic will commence with the placement of orders to trade contractors that restrict deliveries at certain times of the day, particularly early mornings and late afternoon. Site Management will enforce these controls. Sub-contractors will be asked to book deliveries a minimum of 24 hours ahead with the gateman. The times and routes for external deliveries will then be attached to material orders and subcontractor orders and specifically identified to Trade Contractor Principals at Pre-Contract Meetings.

Arrivals of vehicles to the site will be staggered to prevent onsite congestion. When drivers approach the site, they will be required to adhere to the following:

- Call ahead the duty gateman / banksman to be given permission to proceed to the site; and
- If, any reason, the banksman advises a driver not to proceed to the site (e.g. if there is no available space on site), the driver will be instructed to wait off site.

A delivery / collection policy will be developed within the Traffic and Pedestrian Management Plan, in consultation with the Local Highway Authorities. This will be issued to all contractors and suppliers as part of their site induction and order documentation. This document will include the following as a minimum:

- Permitted hours for deliveries/collections/access to the site;
- Arrangements for deliveries/collections outside of permitted hours, including licence applications;
- Access routes and storage areas;
- Queuing / temporary holding point areas and arrangements; and
- Code of Conduct and PPE requirements for delivery/collection drivers.

6.4.4 Deliveries to Site during Peak Periods & School Terms

Restriction of construction traffic movement between the hours of (08:00 to 10:00 hours) and (16:00 to 17:30 hours) on Monday to Friday, will allow work to begin on site every morning while still preventing any potential conflict with busy periods. In order for work to commence on site at 08:00 hours on weekdays, vehicles will arrive between 07:30 - 08:00 hours but loading / unloading will not commence until 08:00 hours.

6.4.5 Road Cleanliness

The Principal Contractor is responsible for maintaining the Public Highways and footpaths in a clean and orderly manner.

There is insufficient space on site to install a mechanical wheel wash and so jet washing will be used. Temporary drainage will be required on site at the jet wash location to prevent dirty water and arising's being washed onto the road/footpath. A sump will be used to minimise the risk of oils or other contaminants entering the drainage system.

A jet washing facility will be located at the exit point. They will be installed and controlled by the Principal Contractor until the work is completed.

All traffic routes will be kept clean, tidy and even prevent displacement of loads. The immediate area and access roads outside the site will be kept clean and free of deposits. Any waste deposited on the roads will be removed immediately. If necessary, a street sweeper will be deployed as and when required by the Site Management.

All operatives will be made aware of the requirements during site induction and task briefing.

6.5 Road and Footpath Closures

[Details of any required road and/or footpath closures, should be agreed with Highway Authority and incorporated into this CMP, including details of any diversion measures that will be implemented to compensate for the loss of the use of the relevant road/footpath].

7. ENVIRONMENTAL MITIGATION

7.1 Environmental Requirements and Mitigation

For each category listed below, a series of mitigation measures is provided within a schedule (refer Appendix A), outlining a framework of mitigation measures, for incorporation into the methods and activities by workers on site during the demolition and construction phases, derived from the commitments referred within the supporting technical environmental reports supporting the application and industry standards and best practice. This is so that the potential impacts arising from the construction activities can be avoided or mitigated to an appropriate level of impact.

The framework presented in Appendix A relating to the works will be reviewed and updated where necessary throughout the demolition and construction programme.

The measures are translated into a framework of actions to be undertaken, either before the construction works commence, and will identify the key roles and responsibilities for implementing those actions.

The schedule of mitigation measures has been divided into the following categories:

- General Activities – Site Establishment
    - Overview: Outlines a series of site establishment measures, including hours of operation, boundary treatment and contact details relating to the management of the site.
- Health and Safety
    - Overview: Requires a set of actions to be undertaken to prevent accidents or injury for operators working on site.
- Community Liaison
    - Overview: Identifies actions to maintain contact and establish good relations with the local community.
- On-Site Management
    - Overview: Outlines a series of measures for the management of activities on site with the objective to prevent accidents or injuries on site.
- Lighting
    - Overview: Addresses measures to mitigate the impact of the provision of artificial lighting during construction
- Noise
    - Overview: Outlines the measures to be implemented during the demolition and construction phases to reduce the impact of noise on nearby sensitive receptors.
- Traffic and Transport
    - Overview: Outlines a series of mitigation measures for the management of deliveries to the site, as well as catering for the associated impacts that the development is likely to have on the surrounding local road network.

- Water Management
    - Overview: Identifies a series of mitigation measures and actions to prevent contaminants entering the existing environment and potentially pollute water bodies.
- Waste
    - Overview: Refers to the provision of a Site Waste Management Plan
- Utilities
    - Overview: Addresses a series of actions to prevent damage of the existing sub-surface utilities.
- Ground Conditions
    - Overview: Identifies mitigation measures to prevent contaminates entering the ground, or contaminated ground being dispersed.
- Sustainability
    - Overview: Outlines a series of best practice measures in order to reduce the impact of construction activities on the environment.
- Archaeology
    - Overview: Refers to the requirement for archaeological investigation.
- Air Quality
    - Overview: Outlines the measures to be implemented during the demolition and construction phases to reduce the impact of dust and vehicle emissions on nearby sensitive receptors.
- Ecology
    - Overview: Identifies a series of mitigation measures prevent harm to bats or nesting birds.
- Tree Protection
    - Overview: Outlines a series of best practice measures to prevent disturbance or permanent damage to those trees that are to be retained.

7.2 Potential Effects and Sensitive Receptors

A summary of the potential environmental effects likely to arise during the demolition and construction works, and a summary of the likely sensitive receptors to be considered is presented in the below table. Proposed measures to mitigate the potential environmental effects are also included, with reference to the framework of mitigation measures provided within Appendix A.

The below list relating to the works will be reviewed and updated where necessary throughout the demolition and construction programme.

Table 5.Summary of the potential environmental effects and sensitive receptors likely to be affected

Topic	Potential Environmental Effect from Works	Likely Sensitive Receptor	Mitigation Reference (rows within mitigation framework – Appendix A)
Noise and Vibration	• Noise arising from demolition and construction works/activities/plant causing nuisance; • Increase in noise levels generated by increase in road traffic from demolition / construction vehicles • Increased vibration from HGVs; • Increased vibration levels from demolition and construction activity (i.e. piling)	• Closest residential properties (i.e. Rochester Place) • Pedestrians • Local businesses • Wildlife	General Activities (1 -6) Noise (25 - 32) Health and Safety: (7 – 13) Community Liaison: (14 – 15)
Transport	• Demolition / construction traffic increasing congestion on local road network; • Increase in proportion of HGV on local road network; • Road closure and highway alteration works; • Disruption and safety to road network users	• Major roads in local area (traffic congestion) • Pedestrians • Cyclists	General Activities (1 -6) Traffic and Transport:(33 – 48) Air Quality (80 - 91) Water Management (49 – 64) Health and Safety (7 – 13)
Air Quality	• Dust arising from demolition / construction activities on site (e.g. excavations); • Dust from exposed ground surface, stockpiles; • Loaded HGV traffic as dust source (including transfer of mud / materials by vehicles onto local road network); • Emissions from demolition / construction vehicles; • Emissions from onsite plant;	• Air Quality Management Area • Closest residential properties (i.e. Rochester Place) • Local businesses • Pedestrians • Cyclists • Wildlife	General Activities (1 -6) Air Quality (80 - 91)
Ecology	• Disruption to nesting birds and habitat; • Disturbance to, and removal, of existing mature trees	• Flora • Fauna	Ecology (92 – 97) Tree Protection: (98 – 106)
Heritage Assets	• Impact on the setting of Conservation Area; • Disruption to existing buried heritage assets / archaeology	• Buried heritage assets	Archaeology (78 – 79)

Topic	Potential Environmental Effect from Works	Likely Sensitive Receptor	Mitigation Reference (rows within mitigation framework – Appendix A)
Water Resources	• Damage to existing water supply utility; • Damage to existing drainage utility; • Increase in surface water run-off from the site, • Increased pressure / flooding on local drainage network; • Increased water consumption; • Disturbance to local surface water bodies; • Disturbance to groundwater from construction of foundations; • Flooding risk	• Surface Water bodies • Existing utility infrastructure (water supply, storm/foul water drainage) • Groundwater / Aquifer	General Activities (1 -6) Water Management (49 – 64) Sustainability (74 – 77)
Ground Conditions / Contamination	• Uncontrolled release of asbestos during removal; • Potential exposure to hazardous material and contaminated land; • Creation of preferential pathways and mobilisation of contamination; • Pollution to land, air and water; • Human health exposure; • Contaminated dust arising from excavations and construction works; • Ground contamination from spillages; • Risk of below ground structures being damaged and leaking; • Disturbance of existing unexploded ordnance / blast damage on site; • Ground gas – human contact with flammable material	• Site workers / contractors • General public • Wildlife • Surface Waterways • Groundwater / Aquifer	General Activities (1 -6) Ground Conditions (71 – 73) Utilities 967 – 70) Water Management (49 – 64) Health and Safety (7 – 13)
Waste	• Generation of waste; • Inefficient increase in vehicle movements; • Pollution to land, air, water	• Residents • Non-residential occupants • Water resources • Wildlife	General Activities(1 -6) Health and Safety (7 – 13) Ecology (92 – 97) Tree Protection (98 – 106) Waste: (65 – 66)
Visual	• Change to views of the site and local townscape during demolition/construction (i.e. hoarding, machinery) and completed development	• Residents • Non-residential occupants • Pedestrians • Local businesses	General Activities (1 -6) Lighting (23 – 24) Tree Protection (98 – 106)

8. MONITORING, AUDITING AND REPORTING

8.1 Monitoring

Monitoring of the development will ensure the overall environmental performance of the development is of a high standard.

Frequent monitoring during construction activities will be carried out to ensure construction activities are in accord with legislative and best practice environmental actions and requirements, and that agreed mitigation measures are being implemented.

Detail of the monitoring regime (i.e. equipment, location, frequency) will be in consultation with the relevant local and statutory authorities.

The Environmental Manager will hold the responsibility for maintaining a register of all environmental monitoring, which should be made available for inspection on request.

[*Programme and monitoring regime details to be included here*]

8.2 Audit

The CMP will be audited on a monthly basis by the Environmental Manager. Periodic auditing of the CMP will ensure the identified environmental risks are being safeguarded against and the commitments and requirements are being delivered.

This audit will involve the Environmental Manager and the Principal Contractor reviewing the site observation and monitoring records.

The aim of the audit will be to:

- Assess the effectiveness of the mitigation measures;
- Identify any shortcomings in the actions;
- Allow compliance with legislation and consent requirements to be easily demonstrated; and
- Specify any further action needed to safeguard the environment. A CMP progress report can provide updates and a record of the compliance with the environmental commitments outline within the CMP, including relevant legal consents and licences,.

[*Details of the internal audit programme to be implemented added here*]

8.3 Non-Compliance and Corrective Action

In the event of non-compliance of CMP actions, the Environmental Manager and / or Principal Contractor can request corrective action to make amends and to ensure construction activities are in accord with legislative and best practice environmental actions and requirements, and agreed mitigation measures. This will be issued to the relevant contractor via an CMP Corrective Note, stating what action is needed.

Any breaches of legislative requirements will be immediately acted upon to cease activity (if necessary) and reported to the relevant authorities within 24 hours.

9. SCHEDULE OF ENVIRONMENTAL LEGISLATION

The following is a list of some of the environmental legislation considered relevant to the site and to be taken into account during the demolition and construction activities. This schedule will be reviewed and updated where necessary throughout the construction programme.

Environmental Legislation	Summary of Relevance to the Site
Hazardous Substances	
Asbestos (Licensing Regulations 1983 (as amended 1998)	Intended to ensure that physical works involving asbestos, such as asbestos removal, are undertaken only by suitably qualified persons.
Control of Asbestos 2006	Employers are designated various responsibilities to protect employees from potential exposure to asbestos at work.
Control of Substances Hazardous to Health (COSHH) Regulations 1999 (as amended 2002)	The COSHH Regulations provide a legal framework for controlling people's exposure to all 'very toxic, toxic, harmful, corrosive or irritant' substance and apply to all places of work.
Waste	
Environmental Protection (Duty of Care) Regulations 1991	A legal duty of care is imposed on anyone – from producers, to carriers and disposers of waste, to ensure that: • Waste is not illegally disposed of or dealt with without a licence or in breach of a licence or in any way that causes pollution or harm; • Waste is transferred only to an 'authorises person', i.e. a local authority, registered carrier or a licenced disposer; and • When waste is transferred, it is accompanied by a full written description which forms part of a waste transfer note (or consignment note for hazardous wastes). All persons subject to duty of care are required to ensure that neither they nor any other person commit an offence under the Regulations
Environmental Protection Act (EPA) 1990: Part 2a	Section of the EPA created by the Environment Act 1995 containing the legislative framework for identifying and dealing with contaminated land.
Environment Act 1995	Inserted Part '2a' to the EPA 1990, giving powers and responsibilities to Local Authorities regarding contaminated land.
Discharges to Water / Land	
Water Resources Act 1991	The Act requires water abstractions to be licensed, and certain discharges into controlled waters to be subject to Environment Agency consent. If is an offence under the Act 'to cause or knowingly permit': • Poisonous, noxious or polluting matter, or any solid waste matter, to enter controlled waters; and • Matters other than trade or sewage effluent, to be discharged from a sewer in contravention of a relevant prohibition.
Control of Pollution (Oil Storage) (England) Regulations 2001	The Regulations impose general requirements in relation to the storage of oil and the types of container used.
Building Regulations 1991 (as amended 2002)	The Regulations impose requirement upon people carrying out certain building operations. Building work must comply with Schedule 1 of the Regulations which included minimum standards for various aspects including site preparation, toxic substance, drainage etc.
Emissions to Air / Noise	
Control of Pollution Act (COPA) 1974 (Sections 60,61)	Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction sites. The basis of the COPA legislation is that Best Practical Means should be used to control noise and vibration pollution.
Clean Air Act 1993	The Act prohibits, subject to certain condition, the emission of dark and black smoke from chimneys serving boilers and other industrial plant.
Ecology	
Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)	This Act as amended provides protection for various species of plant and animals, as listed in Schedules 1 to 10.

APPENDIX A FRAMEWORK OF MITIGATION MEASURES

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
General Activities – Site Establishment						
1	Prevent disturbance to local community	The site will operate between: Monday – Friday 08:00 – 18:00 (site opens at 7:30am, work starts 8:00am) Saturday 08:00 – 13:00	Toolbox talk to all staff prior to commencing work on site Daily review of the Complaints Register	No complaints of working out-of-hours	Principal Contractor	
2	Prevent disturbance to local community	The site boundaries will be secured by 2.4m hoardings with gates as shown on the site set up plan	Hoarding in place before works commence	Ensure solid barriers / hoarding is in place before works commence	Principal Contractor	•Hoardings are to be solid ply timber •Hoardings should provide a 2.4m high barrier from ground level. Where hoardings are located across ground the top edge should slope evenly and bottom adjusted as required to achieve 2.4m high. Details are to be specified by the contractor and agreed with the design team prior to construction on site
3	Maintain site security	Lockable gates are to be provided as shown on the approved plans	Lockable gates in place before works commence	Ensure lockable gates are in place, in accord with the approved plan, before works commence	Principal Contractor	Plans / details of the lockable gates are to be specified by the contractor and agreed with the design team prior to construction works on site
4	Maintain good relations with local community	Appoint a dedicated point of contact for during normal working hours and after hours.	Check daily to ensure notice board with contact details is visible from the outside site.	No complaints	Principal Contractor	
5	Maintain good relations with local community	Produce notice board with contact details for designated team member for members of the public to contact if needed.	Notice board in place before works commence on site	No complaints	Principal Contractor	Notice board to be maintained during entire period of demolition / construction works
6	Prevent adverse impacts on the environment and community	Deviation from approved method statements will be permitted only with prior approval from the Principal Contractor and other relevant parties (i.e.	Toolbox talk to all staff prior to commencing work on site (re procedure)	All Method Statements / Plans (and subsequent amendments) approved by Principal Contractor	Principal Contractor / Contractor	Deviations from approved method statements - consult with the LPA / relevant statutory authorities re process. Protocol for approval dependent on detail, size, scale and likely impact of the deviation sought

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		statutory authorities) This will be facilitated by formal review before any deviation is undertaken.		only		
Health and Safety						
7	Prevent accidents or injury on site	Throughout the demolition and initial phases of the construction programme, the development site will remain closed to the general public	Toolbox talk to all staff prior to commencing work on site	No members of the public accessing unauthorised areas No members of the public involved in accidents or injured	Principal Contractor / Contractor	
8	Prevent accidents or injury on site	A fully designed and developed scaffold scheme will be undertaken	Scaffold erected in accord with approved scheme	Scaffold scheme prepared and approved before works commence on site	Principal Contractor / Contractor	
9	Prevent accidents or injury on site	A Construction Phase Health & Safety Plan will be developed and updated as necessary	Construction Phase Health & Safety Plan regularly updated during construction and demolition phases	Construction Phase Health & Safety Plan prepared and approved before works commence on sit	Principal Contractor	
10	Prevent accidents or injury on site	All operators on site must present a Construction Skills Certification Scheme (CSCS) card and complete an on-site induction before beginning to work on the site	All operators on site have valid CSCS card	All operators on site have valid CSCS card All operators on site completed on-site induction before commencing works	Principal Contractor / Contractor	Entry to site will not be permitted if operatives arrive to site without this

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
11	Prevent accidents or injury on site	Appropriate use of personal protective equipment (PPE) and safe working procedures Details of this will be outlined in the **Site Health and Safety Pla**n.	Preparation of the Health and Safety Plan before works commence on site Toolbox talk to all staff prior to commencing work on site	No instances of harm to human health	Contractor	Construction Phase Health & Safety Plan
12	Prevent accidents or injury on site	Appropriate personal protective equipment (PPE) must be worn at all times	All operators on site employ appropriate PPE during works	No instances of harm to human health	Principal Contractor / Contractor	Construction Phase Health & Safety Plan Entry to site will not be permitted if operatives arrive to site without this
13	Prevent accidents or injury on site	Any known Asbestos Containing Materials (ACMs) within the existing building will be removed in advance of the commencement of the main demolition works in accordance with the Control of Asbestos at work Regulations 2006 and Hazardous Waste Regulations 2009	Removal of ACM undertaken in accord with the Control of Asbestos at work Regulations 2006 and Hazardous Waste Regulations 2009	Removal of ACM not contrary to the requirements of the Control of Asbestos at work Regulations 2006 and Hazardous Waste Regulations 2009	Principal Contractor / Contractor	A competent/licensed asbestos removal contractor will remove all asbestos containing materials in accordance with the Control of Asbestos Regulations 2006
Community Liaison						
14	Maintain good relations with the local community	Appoint the Project Manager as the Neighbourhood Liaison Officer	Neighbourhood Liaison Officer maintains contact with community	Good relations with local community maintained	Project Manager	Neighbourhood Liaison Officer will be named representative for the contact with the community
15	Maintain good relations with the local community	The Project Director will attend the regular community meetings with the residents (*so that any concerns can be voiced and agreement*	Project Director attending the community meetings with the residents	Good relations with local community maintained	Project Director	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		reached, on action to be taken to tackle those concerns where practical)				
On Site Management						
16	Prevent accidents or injury on site	All mechanical handling equipment will have an audible reversing alarm	All mechanical handling equipment maintain an audible reversing alarm	No instances of harm to human health	Contractor	
17	Prevent accidents or injury on site	Where fitted flashing lights are to be used and regularly checked to ensure they are working. Any defective equipment will be documented and actioned as soon as reasonably practicable	All mechanical equipment fitted with flashing lights are maintained	No instances of harm to human health	Contractor	
18	Prevent accidents or injury on site	A banksman / gateman must accompany all reversing vehicle	A banksman / gateman accompanies all reversing vehicles	No instances of harm to human health	Contractor	
19	Prevent accidents or injury on site	It is a requirement that all operatives wear high visibility clothing in the vicinity of moving vehicle areas	All operatives working in the vicinity of moving vehicle areas wear high visibility clothing in the	No instances of harm to human health	Contractor	The clothing should be orange and have the word “Banksman” on the back
20	Prevent accidents or injury on site	Drivers of site vehicles will be required to demonstrate that they hold valid appropriate certification, applicable to the type of plant or equipment that they are operating.	All operators on site have valid appropriate certification	No instances of harm to human health	Principal Contractor / Contractor	A register of certification will be kept and maintained by the Demolition / Construction Management Team

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
21	Prevent accidents or injury on site	Each sub-contractor and supplier delivering materials to site will be asked to provide a detailed method statement to illustrate how the vehicle will be safely unloaded	All sub-contractors and suppliers delivering materials to site have detailed method statements on safely unloading their vehicles on the site	No instances of harm to human health	Principal Contractor / Contractor	
22	Prevent pollution to existing environment	Identification of designated areas within the construction boundary for storage, servicing, delivery vehicle parking and preassembly / fabrication	Complete action before works commence Weekly check of site to ensure appropriate utilisation of designated areas	For each phase / set of works, map designating specified areas	Principal Contractor	
Lighting						
23	Maintain good relations with local community	In order to mitigate any Light Pollution issues, construction contractors are required to employ the methods suggested in the Institution of Lighting Engineers (ILE) guidelines	Construction lighting erected and operated in accord with industry guidelines	No complaints received	Contractors	
24	Maintain good relations with local community	Artificial Site lighting for the demolition and construction works will be sensitivity positioned and directed, taking into account the neighbouring residential buildings	Construction lighting erected and operated in accord with industry guidelines	No complaints received	Contractors	
Noise						
25	Reduce noise impact of construction activities	Consideration will be given within each construction process to selecting plant and equipment that keeps noise to as low a level as	Weekly check of site to ensure appropriate selection of plant and equipment	No complaints received	Principal Contractor / Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		possible				
26	Reduce noise impact of construction activities	Use of solid hoarding	Hoarding in place before works commence	Ensure hoarding in place before works commence	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance
27	Reduce noise impact of construction activities	All trade contractors to demonstrate familiarisation with current noise legislation and British Standards (BS) such as BS 5228 (Parts 1 and 2) which will form a prerequisite of their appointment.	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail comply with requirements of noise legislation and standards	All contractors demonstrated knowledge and ability during tender/contract agreement stage	Principal Contractor / Contractor	When employing contractors, sufficient information should be included within tenders, contracts and pre-start meetings to cover noise prevention, training and monitoring and reporting Undertake in accord with best practice, as per LBCC construction / contractor guidance
28	Reduce noise impact of construction activities	Hydraulic demolition and construction to be used in preference to impact techniques	Contractor method statements outline approach and detail for incorporating	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance
29	Reduce noise impact of construction activities	All plant and equipment to be used for the works is to be properly maintained, silenced (where appropriate), and operated to prevent excessive noise and switched off when not in use and where practicable	Contractor method statements outline approach and detail for incorporating Daily check of equipment to ensure in good working order	No complaints received All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and	Contractor	When employing contractors, sufficient information should be included within tenders, contracts and pre-start meetings to cover noise prevention, training and monitoring and reporting Undertake in accord with best practice, as per LBCC construction / contractor guidance

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
				confirmation by contract agreement		
30	Reduce noise impact of construction activities	Plant to be certified to meet relevant current legislation and Noise and Vibration Control on Construction and Open Sites (BS 5228) Standards	Contractor method statements outline opportunities for incorporating	No complaints received All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	When employing contractors, sufficient information should be included within tenders, contracts and pre-start meetings to cover noise prevention, training and monitoring and reporting
31	Reduce noise impact of construction activities	Loading and unloading of vehicles, dismantling of equipment such as scaffolding or moving equipment or materials around site is to be conducted in such a manner as to minimise noise generation and, where practical, away from noise sensitive areas	Daily monitoring to ensure area identified for unloading is being used	No complaints received	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance
32	Maintain good relations with local community	Complaints about noise, or incidences where action levels are exceeded are to be reported to the Principal Contractor and immediately investigated.	Check daily the complaints register and appropriate action taken	All complaints resolved within 24 hours	Principal Contractor	Provision of a Complaints Register

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
Traffic and Transport						
33	Minimise impacts to surrounding road network	Personnel will be encouraged to access the site by foot, cycle or public transport	All construction staff to be briefed of objective before work commences of transport options	Objective included as part of Traffic and Pedestrian Management Plan	Contractor	
34	Minimise impacts to surrounding road network	Sub-contractors will be asked to book deliveries a minimum of 24 hours ahead with the gateman	The duty gateman / banksman is receiving all calls from approaching drivers	No complaints of traffic / transport related issues	Contractor	
35	Minimise impacts to surrounding road network	When drivers approach the site, they will be required to call ahead the duty gateman / banksman to be given permission to proceed to the site	The duty gateman / banksman is receiving all calls from approaching drivers	No complaints of traffic / transport related issues	Contractor	If, any reason, the banksman advises a driver not to proceed to the site (e.g. if there is no available space on site), the driver will be instructed to wait off site.
36		All vehicles will report to the site gateman	Records of all vehicles reporting to the site gateman	No complaints of traffic / transport related issues	Contractor	
37	Minimise impacts to surrounding road network	Loading and unloading will be from St Pancras Way	Loading and unloading undertaken on St Pancras Way	No complaints of traffic / transport related issues	Contractor	
38	Minimise impacts to surrounding road network	A detailed Traffic and Pedestrian Management Plan will be developed and updated as necessary (detailed logistics planning and delivery programming).	Traffic and Pedestrian Management Plan regularly updated during construction and demolition phases	Traffic and Pedestrian Management Plan prepared and approved before works commence on site	Principal Contractor	Produced as an element of the Construction Phase Health & Safety Plan This will include drawings, maps and written text detailing the preferred delivery vehicle approaches to the site along with procedures for controlling vehicles and pedestrians on the site itself The Traffic and Pedestrian Management Plan will confirm all relevant standards and legislative H&S requirements
39	Minimise impacts to surrounding road network	A delivery / collection policy will be developed (to be included within the	A delivery / collection policy maintained during demolition / construction phases	Delivery / collection policy developed as part of the Traffic and Pedestrian	Principal Contractor	Prepared in consultation with the Local Highway Authorities. This document will include the following as a minimum: - Permitted hours for deliveries/collections/access to the site;

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		Traffic and Pedestrian Management Plan)		Management Plan before works commence on site		-Arrangements for deliveries/collections outside of permitted hours, including licence applications; -Access routes and storage areas; -Queuing / temporary holding point areas and arrangements; and - Code of Conduct and PPE requirements for delivery/collection drivers.
40	Prevent accidents or injury on and off site	The Traffic and Pedestrian Management Plan will also identify pedestrian routes through and around the site	Pedestrian routes through and around the site maintained during demolition / construction phases	Pedestrian routes developed as part of the Traffic and Pedestrian Management Plan before works commence on site	Principal Contractor	
41	Minimise impacts to surrounding road network	The Traffic and Pedestrian Management Plan will be issued to all contractors and suppliers as part of their site induction and order documentation	All operators received Traffic and Pedestrian Management Plan before commencing works	Traffic and Pedestrian Management Plan prepared and approved before works commence on site	Principal Contractor	
42	Minimise impacts to surrounding road network	Times and routes for external deliveries will be attached to material orders and subcontractor orders and specifically identified to Trade Contractor Principals at Pre-Contract Meetings	All operators receive times and routes for external deliveries during demolition / construction phases	External deliveries to the site within times and routes described	Principal Contractor	
43	Minimise impacts to surrounding road network	A jet washing facility will be located at the exit point	Daily checks of vehicles leaving the site	Jet washing facility in place before works commence on site No complaints of traffic / transport	Principal Contractor	Maintained until over site is completed

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
				related issues		
44	Minimise impacts to surrounding road network	All traffic routes will be kept clean, tidy and even prevent displacement of loads	Daily checks of vehicles leaving the site, and of condition of surrounding road network	No complaints of traffic / transport related issues	Principal Contractor	Any waste deposited on the roads will be removed immediately. If necessary, a street sweeper will be deployed as and when required by the Site Management
45	Minimise impacts to surrounding road network	As part of the procurement process, successful contractors will be issued with a project route map and delivery schedule that they must pass on to their delivery drivers.	Toolbox talk to all contractors prior to commencing work on site	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Principal Contractor	
46	Minimise impacts to surrounding road network	Consultation with the highway authorities on any required road closures and diversions throughout the duration of works	Prepare and design required road closures and diversions with relevant highway authorities	Written confirmation from the relevant highway authority for closures and diversions	Principal Contractor	
47	Minimise impacts to surrounding road network	Alternative temporary diversion routes for pedestrians and cyclists will be identified and agreed with the highway authorities	Prepare and design routes with relevant highway authorities	Written confirmation from the relevant highway authority for closures and diversions	Contractor	
48	Minimise impacts to surrounding road network	Waste storage and pickup will occur within the site boundary	Daily / weekly check of site to ensure waste storage and pickup maintained within designated area within the site boundary	No complaints of traffic / transport related issues	Contractor	
Water Management						
49	Prevent pollution to existing environment	Temporary drainage will be required on site at the jet wash location to prevent dirty water and arising's	Agreed drainage arrangements maintained during the demolition / construction phases	Drainage arrangements finalised and agreed with statutory body	Principal Contractor	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		being washed onto the road/footpath.		before works commence on site		
50	Prevent pollution to existing environment	A sump will be used to minimise the risk of oils or other contaminants entering the drainage system	Inspect sump to ensure it is adequately maintained during demolition / construction phases	No contaminants entering the drainage system	Contractor	
51	Prevent pollution to existing environment	The Principal Contractor will ensure that any water, which may have come into contact with contaminated materials, will be disposed of in accordance with the Water Resources Act (1991) and other legislation, and to the satisfaction of the Environment Agency or Thames Water	All water potentially contaminated to be identified and appropriately disposed of from site	No instances of pollution to existing environment from contaminated water	Principal Contractor	
52	Prevent pollution to existing environment	Waste water / foul water (i.e. on-site sanitary facilities, sediment laden water from excavations, washing down / wheel wash facilities) during demolition and construction to be drained via existing Thames Water combined drains	Agreed drainage arrangements in place before works commence	On-site drainage system for waste water generation to drain to Thames Water network in place before works commence	Principal Contractor	
53	Prevent pollution to existing environment	The contractor will implement control measures during piling	Works undertaken in accord with details of control measures	No instances of pollution to existing environment from contaminated water	Contractor	
54	Prevent pollution to existing environment	Sediment traps will be installed on all surface water drains surrounding the site	Inspect abstracted water prior to discharge – regularly monitored during abstraction	Settlement tank / sediment traps installed and functioning before works commence	Contractor	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		Surface drainage, ground water seepage and any dewatering of the site is to pass through a settlement tank prior to entering the foul water sewer	All water potentially contaminated to be identified and appropriately disposed of from site Agreed drainage arrangements in place before works commence	No instances of pollution to existing environment		
55	Prevent pollution to existing environment	All liquids and soils of a potentially hazardous nature (for example, diesel fuels, oils, and solvents) are to be stored on surfaced areas, with bunding, to the satisfaction of the EA	Daily / weekly check of site to ensure appropriate location of designated areas Storage of hazardous materials only on surfaced areas, with bunding	No instances of pollution spills to existing environment from on-site storage of oils, fuels, chemicals	Contractor	
56	Prevent pollution to existing environment	Liquids from oil sumps / drains will be stored in bunded containers and disposed of appropriately.	Daily / weekly check of site to ensure appropriate location of designated areas Disposal in accord with waste regulations	No instances of pollution spills from on-site storage of oils, fuels and chemicals Action of disposal in accord with waste requirements	Contractor	Refer Site Waste Management Plan
57	Prevent pollution to existing environment	Pollution control measures will be implemented by the contractor where required and spillage containment will be present on site at all times.	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by	Contractor	When employing contractors, sufficient information should be included within tenders, contracts and pre-start meetings to cover pollution prevention, training and monitoring and reporting

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
				contract agreement No instances of pollution spills from on-site storage of oils, fuels and chemicals		
58	Prevent pollution to existing environment	Refuelling and delivery areas will be located away from surface water drains	Daily / weekly check of site to ensure appropriate location of designated areas	No instances of pollution of drains and river from on-site re-fuelling and delivery areas, arising from oils and fuels	Contractor	
59	Prevent pollution to existing environment	Disposal of water from brushing and water spraying of heavily-used site hard surfaces and wheel / body washing facilities will be through existing foul sewerage connections subject to agreement with TW	Agreed drainage arrangements in place before works commence	Discharge arrangements agreed with Thames Water No instances of pollution to existing environment from contaminated water	Contractor	
60	Prevent pollution to existing environment	Site access points will be regularly cleaned to prevent build up of dust and mud	Daily check of access points	Access points to the construction / development site remain free of excess dust and mud	Contractor	
61	Prevent pollution to existing environment	Properly contained wheel wash facilities will be used where required, to isolate sediment-rich runoff	Equipment checked when leaving the site	No instances of pollution to existing environment from contaminated water	Contractor	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
62	Prevent pollution to existing environment	Plant and machinery will be kept away from drains / water sources and will have drip trays installed beneath oil tanks / engines / gearboxes / hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator.	Daily check of equipment	No instances of oil spills on-site from machinery	Contractor	
63	Prevent pollution to existing environment	Should the mixing of concrete be undertaken on site, the mixing and handling of wet concrete will be undertaken in designated and properly managed areas	Daily / weekly check of site to ensure appropriate location / designated areas	No instances of pollution of drains and river from on-site re-fuelling and delivery areas, arising from concrete and cement products	Contractor	
64	Prevent pollution to existing environment	A designated area will be used for any washing down or equipment cleaning associated with concrete or cementing processes with contaminated waters directed into the foul drainage connection, subject to agreement with Thames Water	Daily / weekly check of site to ensure appropriate location / designated areas Agreed drainage arrangements in place before works commence	No instances of pollution of drains and river from on-site activities associated with concrete and cement products	Principal Contractor	
Waste						
65	Minimise the production of waste	Prior to works commencing, produce a Site Waste Management Plan	Ensure Site Waste Management Plan is finalised before works begin	Site Waste Management Plan is fully up to date at beginning of construction activities	Principal Contractor	Refer Site Waste Management Plan

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
66	Minimise the production of waste	Measures will be put in place to minimise the quantity of materials order and used.	Check design and programme on a weekly basis	No additional waste produced above Site Waste Management Plan aspirations	Contractor	Refer Site Waste Management Plan
Utilities						
67	Prevent damage to existing utilities	All existing utilities will be identified and marked as far as practicable prior to works commencing	Existing utilities are appropriately marked and clearly visible before works commence	No instances of disturbance to existing foul & surface water drainage system	Principal Contractor	
68	Prevent damage to existing utilities	Excavations near the sewer location will follow Thames Water guidelines for excavations near assets, which may include hand excavation in places	Check services drawing plans against utilities markings Excavations adhere to Thames Water guidelines in close proximity to utilities	No instances of damage / disturbance to functioning of existing foul & surface water drainage system	Contractor	Existing utilities will be identified and marked before commence
69	Prevent damage to existing utilities	Signs will be used to warn of the presence of any drainage systems	Existing utilities are appropriately marked and clearly visible before works commence	100% of utilities clearly marked out on site when works commence No instances of disturbance to existing foul & surface water drainage system	Contractor	Existing utilities will be identified and marked before commence
70	Prevent damage to existing utilities	Any damage to existing drainage networks will be immediately repaired	Measures to control disturbance to existing foul & surface water drainage system in place within 24 hours	No instances of significant disturbance to existing foul & surface water drainage system	Contractor	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
Ground Conditions						
71	Prevent pollution to the existing environment	An emergency **Spillage Action Plan** will be produced to ensure spillages and leakages are immediately contained	Toolbox talk given to contractors on arrival to the site – so that aware of document, contents, and where to locate	Emergency Spillage Action Plan prepared before works commence on site	Principal Contractor	*Site staff will have read and understood, and on-site provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material*
72	Prevent pollution to the existing environment	Stockpiling of grossly contaminated soils should be avoided, where possible Where necessary, stockpiles will be covered when not in use, placed on impermeable sheeting / hardstanding	Daily check of site and adjacent areas to ensure EA PPG is being adhered to; Stockpiles be covered when not in use; Stockpiles placed sheeting / hardstanding; Daily check of site to ensure appropriate utilisation of designated areas	No instances of uncontrolled release of contaminated soil to surrounding sites / area No instances of existing surface water, drainage systems or controlled waters being polluted from uncontrolled release	Contractor	Reference: EA PPG
73	Prevent pollution to the existing environment	In the event that further contamination is discovered during construction, work will stop immediately and measures will be taken to prevent further disturbance and mobilisation of contaminants, until the contamination can be treated *in-situ* or removed for off-site disposal	Works undertaken and monitored in accord with details subject of remediation / mitigation strategy (submitted and approved by the LPA)	Measures to control and treat the contamination in place within 24 hours	Contractor	
Sustainability						
74	Reduce the impact of	All relevant contractors will be required to investigate	Toolbox talk to all contractors prior to commencing work on	All contractors aware and	Principal Contractor /	When employing contractors, sufficient information should be included within tenders, contracts and pre-start meetings to

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
	construction activities on the environment	approaches to minimise and reduce the use of energy, such as: - Use of alternatives to diesel / petrol powered equipment (where possible) e.g. electric or battery powered equipment for example electric traffic lights, electric pallet trucks, electric hoists and forklifts; - The incorporation of sources of renewable energy to offset the use of main utilities; - Selection and specification of energy efficient plant and equipment	site Method statements outline approach and detail for minimising and reducing energy consumption	demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	cover pollution prevention, sustainable materials, training and monitoring and reporting
75	Reduce the impact of construction activities on the environment	All relevant contractors will be required to investigate approaches to minimise and reduce the use of water, such as: - Implementation of staff-based initiatives such as turning off taps, plant and equipment when not in use both onsite and within site offices - Use of recycling water systems such as wheel washes, site toilets	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail for minimising and reducing water consumption	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Principal Contractor / Contractor	When employing contractors, sufficient information should be included within tenders, contracts and pre-start meetings to cover pollution prevention, sustainable materials, training and monitoring and reporting

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		handwash - Use of a rainwater harvesting system for use in equipment and vehicle washing				
76	Reduce the impact of construction activities on the environment	Implementation of staff-based initiatives such as turning off taps, plant and equipment when not in use both onsite and within site offices; reducing paper consumption within the office, including double-sided printing and photocopying	Toolbox talk to all staff prior to commencing work on site	All staff aware and understand resource reduction initiatives – regular reviews	Principal Contractor	
77	Reduce the impact of construction activities on the environment	The energy and water consumption of the project throughout the demolition and construction programme will be monitored, either through sub-metering or utility bills, to allow comparison against best practice benchmarks.	Review and analyse utility bills monthly against agreed benchmarks	Benchmarks for energy and water consumption are not exceeded	Principal Contractor	
Archaeology						
78	Prevent damage to buried archaeology	Prepare details of a programme of appropriate archaeological investigation and recording before works commence on site.	Programme of appropriate archaeological investigation and recording prepared	Approval of archaeological details by LPA prior to works commencing on site	Archaeological Contractor	*Included as condition of planning permission (if granted), if deemed necessary*
79	Prevent damage to buried archaeology	Implement in accord with details of archaeological investigation and recording programme.	Archaeological investigation and recording undertaken in accord with programme during ground works	No damage to buried heritage assets	Principal Contractor / Archaeological Contractor	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
Air Quality						
80	Prevent dust emissions	Erect solid barriers to site boundary	Hoarding in place before works commence	Ensure solid barriers (hoarding) is in place before works commence No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance
81	Prevent dust emissions	Site layout will be planned – machinery and dust causing activities located away from sensitive receptors	Weekly check of site to ensure appropriate utilisation of designated areas	No complaints associated with dust	Principal Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
82	Prevent dust emissions	Effective vehicle cleaning and specific fixed wheel washing on leaving site and damping down / cleaning of haul routes	Equipment checked when leaving the site	No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
83	Prevent dust emissions	All loads entering and leaving site are to be covered	Equipment checked when leaving the site	No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
84	Prevent dust emissions	Prevention of site run-off of mud or water	Daily check of areas to ensure no run-off	No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with:

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
						- EA PPG - GLA Best Practice
85	Prevent dust emissions	Water is to be used as a dust suppressant	Water used as a suppressant	No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
86	Prevent dust emissions	Use enclosed chutes and covered skips	Check daily to ensure skips and chutes are covered	No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
87	Prevent dust emissions	Buildings to be demolished should be wrapped prior to demolition	Buildings wrapped pre-demolition. Check daily to ensure building remains wrapped	No complaints associated with dust	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
88	Minimise the impact from engine emissions on air quality	Catalytic converters are to be used	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
89	Minimise the impact from engine emissions on air quality	Vehicle engines are to be regularly maintained.	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	Undertake in accord with best practice, as per LBCC construction / contractor guidance Review and monitor in accord with: - EA PPG - GLA Best Practice
90	Minimise the impact from engine emissions on air quality	Vehicle compliance with emission standards for on-road vehicles and the requirements of the London Low Emission Zone	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	Review and monitor in accord with: - EA PPG - GLA Best Practice
91	Minimise the impact from engine emissions on air quality	The use by all non-road mobile machinery of low sulphur diesel, and their fitting with appropriate exhaust after-treatment from the approved list	Toolbox talk to all contractors prior to commencing work on site Method statements outline approach and detail	All contractors aware and demonstrate achieving objectives and measures during tender / contract stage, and confirmation by contract agreement	Contractor	Review and monitor in accord with: - EA PPG - GLA Best Practice
Ecology						
92	Reduce disturbance to wildlife	In the event that bats or signs of bats are found during construction, works must cease immediately.	Toolbox talk to all contractor staff prior to commencement of works on site	Works completed with no disturbance or injury to wildlife		Appropriate procedures to obtain a Natural England license for the works should then be followed if required.

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
93	Reduce disturbance to wildlife	Any vegetation clearance will be cleared outside the bird breeding season (i.e. during the period September to February).	Check design and programme on a weekly basis Toolbox talk to all contractor staff prior to commencement of works on site	Site cleared outside of period between September and February	Principal Contractor	Including the removal of any trees on site (in accord with the supporting technical report '*Tree Retention and Tree Protection Method Statement*'
94	Reduce disturbance to wildlife	If the site is to be cleared between March and August inclusive, an ecologist will be required to confirm the absence of active bird nests immediately prior to works commencing.	Ensure area is surveyed and task complete at least a week before works commence	Survey of site completed before removal of trees	Principal Contractor / Ecologist	
95	Reduce disturbance to wildlife	If a nest is discovered, clearance or other construction works should be stopped immediately within an exclusion zone, generally within 10 metres of the nest. The exclusion zone will be fenced with high visibility tape.	Buffer area clearly marked	Agreed buffer zone distance around nest maintained during clearance No physical disturbance to nests during works	Principal Contractor / Ecologist	Buffer area will comprise a circular area around the nest(s)
96	Reduce disturbance to wildlife	The nest will be subsequently be monitored, typically on a weekly basis, by a suitably qualified person	Area clearly marked and maintained during the works Area surveyed by experienced ecologist and written confirmation that no longer in use	Works completed with no disturbance or injury to wildlife	Principal Contractor / Ecologist	
97	Reduce disturbance to wildlife	This area will be left intact until it has been confirmed by an experienced ecologist that the young have fledged and the nest is no longer in	Area clearly marked and maintained during the works Area surveyed by experienced ecologist and written	Works completed with no disturbance or injury to wildlife Written confirmation	Principal Contractor / Ecologist	

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
		use.	confirmation that no longer in use	by experienced ecologist that nest(s) no longer in use		
Tree Protection						
98	Reduce damage / disturbance to existing trees	A site meeting before work commences between Council Tree Officer, Site Manager, Arboriculturalist / landscape architect.	Meetings organised with relevant parties to address tree related issues	Works completed with no disturbance or injury to trees	Arboriculture contractor. / Principal Contractor	Required to agree locations, and feasibility, of tree protection fencing and tree retention.
99	Reduce damage / disturbance to existing trees	Tree Protection Orders - contractor must satisfy himself that all necessary permissions from the local planning authority or tree owners are in place before undertaking works on the trees	Before works commence on a tree, the relevant background search has been undertaken	Works undertaken are not contrary to relevant legislation	Arboriculture Contractor	
100	Reduce damage / disturbance to existing trees	All off-ground tree work should be done by insured tree surgeon with certificates in aerial chainsaw use, and working to British Standard BS3998:2010	Tree surgeons are insured / certified Off-ground tree work undertaken in accord with British Standards	Works completed with no disturbance or injury to trees	Arboriculture Contractor	Stumps can be left to shoot again, ground out, or grubbed out, depending on location
101	Reduce damage / disturbance to existing trees	Effective protective fencing, erected as close as possible to the Root Protection Area (RPA) boundary before any other work starts on site including demolition in the vicinity of trees. It must be maintained until all work is completed, except final soft landscaping.	Protective fencing maintained for duration of demolition / construction works	Works completed with no disturbance or injury to trees	Principal Contractor	BS5837 defines a tree's Root Protection Area as a disc of soil 1m deep required to maintain long-term health a full-canopied tree of a given stem size, usually 12 x stem diameter (i.e. an idealised circle). Rooting areas are never symmetrical, but ideally there should be no ground disturbance within the RPA zone. At the discretion of an arboriculturalist, the RPA can be offset if work is proposed on one side only and the tree can root in the opposite direction. It is not appropriate to rely on the reduced RPA where potential disturbance extends halfway or more around the tree.

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
102	Reduce damage / disturbance to existing trees	There must not be the following activities within the 'Construction Exclusion Zone': • no construction access, • no storage of materials, including soil, • no ground disturbance.	Demolition and construction activities do not fall within the 'Construction Exclusion Zone	Works completed with no disturbance or injury to trees	Contractor	As outlined within the tree protection plan, within Appendix V of the supporting technical report '*Tree Retention and Tree Protection Method Statement*'
103	Reduce damage / disturbance to existing trees	If demolition / construction work is required to be closer than the all-round protection zone, then the fenced off zone can be made smaller on that side, or entered temporarily, subject to permission from retained arboriculturalist. / Principal Contractor	Amendments to the protection zone have been agreed in advance with the arboriculturalist. / Principal Contractor r	Works completed with no disturbance or injury to trees	Arboriculture contractor. / Principal Contractor	Within such zones, temporary horizontal ground protection plus temporary fencing would be essential. Options for ground protection would be:- • Retain existing paved surfacing, protect this as required. • Temporary ground protection plates such as aluminium "Eve Trakway" or plastic interlocking-plate ground protection, both on 150mm depth of woodchip or bark, shown in Appendix VII. • A layer of woven geo-textile under minimum 250mm depth • of graded aggregate which is lifted after work. • Butted scaffold boards or 22mm plyboard laid on bearers on • 100mm depth woodchip or bark mulch (pedestrian only)
104	Reduce damage / disturbance to existing trees	Any soak-away system must be designed so that it does not add to, or decrease, ground water in trees' rooting zones.	Soak-away system maintained in accord with approved design	Works completed with no disturbance or injury to trees	Contractor	Existing systems should be used where possible to minimise change in trees' root zones
105	Reduce damage / disturbance to existing trees	Service trenches within RPA of any retained trees should be avoided. If it cannot be prevented, Hand digging or trench-less systems must be used.	Evidence that the best practicable option for provision of services / utilities on site has been undertaken	Works completed with no disturbance or injury to trees	Contractor	Use an air-spade to reveal roots (Appendix VIII of the supporting technical report '*Tree Retention and Tree Protection Method Statement*').

Ref	Objective	Action / Measure	Monitoring / Audit Requirement	Achievement Criteria	Responsible	Notes
106	Reduce damage / disturbance to existing trees	Trees should be re-inspected on completion of each phase of the works, and design and implementation of appropriate remedial work .	Trees on site and within the immediate vicinity have been inspected by certified aboriculturalist	Works completed with no disturbance or injury to trees	Arboriculture contractor. / Principal Contractor	This inspection would reveal the need for remedial tree work for the following reasons:- • to rectify damage occurring during construction (regrettable but possible), • to allow additional clearance, • or complete tree removal if trees were considered too close for safe retention.