Code of Construction Practice

February 2022

City of Westminster

City for All

CONTENTS

CODE OF CONSTRUCTION PRACTICE OVERVIEW

This Code of Construction Practice covers the full range of impacts that construction work has on the local environment and residents. It sets out what the Council expects from developers and those involved in construction activities across the City. The expectation is that all construction sites meet the requirements or best practice set out in the Code, reducing disruption for those who live, work and visit our City.

Chapter 1 provides important background information on what this document is and how it will be used.

Chapter 2 sets out requirements for liaison with the public.

The remaining chapters 3 to 12 deal with the specific impacts that need to be managed, which are:

- General site operations
- Traffic, transport and use of the Public Highway
- Noise and vibration
- Dust and air pollution
- Waste management
- Water pollution and flood risk
- Urban ecology
- Heritage assets Protection of existing installations
- Protection of Westminster City Council Assets

Each chapter highlights the objective and relevant legislation before outlining specific requirements for the particular issue. Depending on the size and impact of the construction (categories as Level 1, Level 2, Level 3 and Basement projects[1]), there are key issues to address which are summarised by chapter in Table 1 below. Further details are provided within each chapter and where not stated the requirements apply to all types of project.

[1] Definition of the above categories can be found in section 1.4 of this document.

TABLE 1: KEY REQUIREMENTS FOR LEVEL 1, 2, 3 AND BASMENT PROJECTS

Topic	**Site Level**			
	Level 1	**Level 2**	**Level 3**	**Basements**
Site Environmental Management Plan (SEMP)	✓	✓		
Construction Management Plans (CMP)				✓
Liaison with the Public (Chp 2)				
Engagement with, and information to, neighbours prior and during the works	✓	✓	✓	✓
Information about site contractor and contact details on the notice board	✓	✓	✓	✓
Regular Community Liaison meetings	✓	(✓)		
QR Code with link to project website which contains project contacts (on hoarding or notice board)	✓			
General requirements (Chp 1 & 3)				
Inquiry about site environment and sensitive receptors	✓	✓	✓	✓
Planning of the site layout and work programme	✓	✓	✓	✓
Site safety, health & safety, emergency procedures	✓	✓	✓	✓
Check which permits will be needed	✓	✓	✓	✓
Considerate Constructors scheme	✓	✓	(✓)	(✓)
Traffic, transport and the use of the highway (Chp 5)				
Construction traffic arrangements, access/egress to/from site; measures to ensure cycling safety	✓	✓	✓	✓
Hoarding proposal incl. lighting of the hoarding	✓	✓	✓	✓
Use of highway (for skips, scaffolding, gantries, pitlanes, etc.)	✓	✓	✓	✓
Need for road closures, parking suspension / transport of abnormal loads	✓	✓	✓	✓
Pre-condition survey	✓	✓		✓
Deliveries and traffic routes, traffic management plan	✓	✓		
Lorry holding areas and lorry management	✓	(✓)		
Noise and vibration (Chp 6)				
Baseline noise monitoring	✓	✓		
Noise risk assessment for the site	✓	✓	(✓)	
Noise and vibration mitigation management plan (Best practicable means)	✓	✓	✓	✓
Section 61 prior approval for all works	✓	✓		

Section 61 prior approval for all noisy works outside of core working hours	✓	✓	✓	✓
Noise and vibration monitoring and trigger action levels	✓	✓		
Dust and air quality (Chp 7)				
No burning on site	✓	✓	✓	✓
Air quality dust management plan	✓	✓	✓	✓
Baseline PM10 PM2.5 monitoring	✓			
Dust risk assessment for the site	✓	✓	(✓)	(✓)
Dust mitigation (Best practicable means)	✓	✓	✓	✓
Dust monitoring procedure including trigger action levels and reporting	✓	✓	(✓)	(✓)
Dust complaints procedure and reporting	✓	✓	✓	(✓)
Wheel washing facility; road sweepers	✓	✓	(✓)	(✓)
NRMM requirements	✓	✓	✓	✓
Waste management (Chp 8)				
Arrangement for storage and disposal	✓	✓	✓	✓
Reuse of construction material	✓	✓	✓	✓
Sustainable Waste management plan	✓	✓	(✓)*	(✓)*
Other areas to consider, if applicable				
Water pollution and flood control (Chp 9)				
Urban ecology incl. tree protection (Chp 10)	✓	✓	✓	✓
Heritage assets (Chp 11)				
Contaminated land (Chp 8)				
Protection of existing installations (Chp 12)				

Legend: ✓ = required; (✓) = may be required (check with WCC); blank = not required.

* A SWMP is required where the construction project is valued at over £300,000.

Appendix A contains checklists which are required to be returned to the Council.

Appendix B lists key legislation and guidance referred to in the CoCP.

Appendix C provides a glossary of key terms and acronyms

Guidance documents regarding the submission of a Site Environmental Management Plan (SEMP) and Construction Management Plan (CMP) is provided on Westminster's website as well as contact details of the Environmental and Highways department.

1 INTRODUCTION

This chapter sets out the scope and the issues covered by the Code of Construction Practice. It applies to all major development and infrastructure projects in Westminster and to residential basements and other types of smaller development that are likely to have significant construction impacts.

1.1 WHY WE HAVE A CODE OF CONSTRUCTION PRACTICE

Our City is the heart of the capital, serving up to 1 million residents, workers and visitors every day. It is densely populated with premises and developments of all kinds including housing, businesses, historical and cultural sites - and as the City reopens following the Covid19 pandemic new developments and construction will continue to play a vital role in promoting our City as well as supporting our wider environmental ambitions including meeting the challenge of the Climate Emergency.

The council requires developers to consider retrofit and refurbishment options before embarking on the demolition of an existing building and construction of a new building. The Code of Construction Practice applies to substantial refurbishment projects and developments where demolition and construction are unavoidable.

Construction can cause significant disturbance to local residents, businesses and traffic, and how we manage and balance these pressures has an impact on the daily lives of people, the economy and the environment.

The Code of Construction Practice (CoCP) is intended to help developers, architects, engineers and construction professionals to plan, cost and manage the environmental issues which frequently arise in the industry, and sets out standards and procedures for managing, minimising and coordinating the impact of construction projects. The CoCP also informs residents and other affected parties about how the Council manages and minimises environmental impacts from demolition and construction activities. It also seeks to assure that best practice standards will be applied.

It is expected that developments at least meet the requirements set out in the Code and furthermore aim to exceed them . The standards relate to every element of construction that has the potential to affect the environment, amenity and safety of local residents, businesses and the general public in the vicinity of the proposed works. This CoCP covers a broad range of requirements: however, Appendix A identifies which requirements will be signed off by the Council.

1.2 POLICY AND LEGAL CONTEXT

Planning Policy Context

The Code of Construction Practice is secured through planning conditions, on the basis of the planning policies derived from Westminster City Council City Plan: 2019 - 2040:

Policy 29 (Freight Servicing and Delivery)
Policy 32 (Air quality)
Policy 33 (Local Environmental Impacts)
Policy 38 (Design Principles)

Developers will also have regard for the requirements set out in:

- The council's Environmental Supplementary Planning Document (ESPD)
- local neighbourhood construction standards or procedures such as the Best practice guidance on construction standards and procedures - Knightsbridge Neighbourhood Forum (knightsbridgeforum.org)
- the London Plan.
- The Mayor of London's Supplementary Planning Guidance on a variety of topics provides developers with additional information on expected standards and procedures, for example the Circular Economy Statement.
- The Canal and River Trust's Code of Practice, and encourage contractors to seek advice from there on specific issues: https://canalrivertrust.org.uk/business-and-trade/undertaking-works-on-our-property-and-our-code-of-practice

Legal Context

A large body of environmental and safety requirements relevant to construction projects (including demolition) exists, in the form of primary legislation (Acts of Parliament), secondary legislation (Statutory Instruments, including Regulations and Orders) and statutory guidance and Codes of Practice. This CoCP draws together the relevant requirements and stipulates selective additional requirements where the Council considers it necessary, for example due to the unique pattern and context of development in the City of Westminster.

Each chapter of this document sets out the main statutory provisions, regulations, codes of practice and standards relevant to each topic. In addition, a list of all items of legislation, referred to in the CoCP is included in Appendix B. However, the legislative requirements, standards, etc. in this document are not exhaustive. It is the responsibility of the developer and contractors to monitor the development and implementation of new legislation and regulation and to use the appropriate standards prevailing at the time of awarding contracts. The contractor must comply with all prevailing legislation at the time of construction, including any Health and Safety requirements.

Legislation places responsibilities on developers and contractors in three principal ways. The

developer/contractor:

1. Has a duty to obtain, maintain and renew permits (e.g. licences, consents, authorisations) to undertake certain activities (e.g. a discharge consent is required to drain wastewater to a surface watercourse);

2. Is prohibited from causing harm to the environment or human health, this approach runs through all UK pollution control legislation, and places an onus on a site operator to manage activities in such a way as to protect both the environment and human health;

3. Has a duty to comply with specified requirements and site-specific conditions (e.g. complete duty of care for waste transfer).

In addition to statute law, common law also places requirements on contractors to apply a duty of care to others. Developers and contractors may be liable for any personal injuries or property damage that may arise from a breach of that duty.

Besides permits (mentioned above), other aspects of construction are also subject to licensing requirements. For example, licences are required from the Council before:

- Erecting any scaffolding, hoardings, gantry, temporary crossing or fence on the highway (see section 3.9);
- Depositing a skip;
- Operating a mobile crane, aerial platform, concrete pump lorry, oversailing cranes or any such equipment.

Consent must be sought from the Council before any activity takes place on the public highway.

Modern Slavery

We are committed to ensuring that victims of modern slavery and exploitation are not employed in Westminster's construction sites. It is vital for developers and site managers to know how to recognize the signs of modern slavery and the appropriate way to respond to it. The council is one of the leading London authorities in responding to modern slavery. We have collaborated with the London Borough of Kensington and Chelsea, community groups, stakeholders and experts to produce a bi borough Modern Slavery Strategy which sets out the Coordinated Community Response (CCR) approach. Everyone including developers are required to play their part and liaise with partners to ensure that no one is overlooked or unsupported.

For further information and support contact www.angelou.org/human-trafficking
Modern Slavery Helpline 0800 121 700

Inclusive and Local Employment

Westminster council will continue to support the removal of barriers to employment for local residents to improve their life chances and help continued business growth. Where appropriate, new development will also be required to contribute towards initiatives that provide employment, training and skills development for residents and ensure that local people and communities' benefit.

1.3 USERS OF THE COCP

The CoCP is aimed at developers, consultants (including those designing and promoting schemes) and contractors/ sub-contractors who are constructing projects in Westminster.

While the developer has ultimate responsibility, the various parties concerned in a particular project will agree a nominated person who will take responsibility for compliance with the CoCP on their behalf, and the Council will be informed of the name of this person and their contact details. The terms "developer's nominated representative" or "nominated representative" are used in the CoCP to describe this person.

1.4 WHEN THE COCP APPLIES

The CoCP applies to four tiers of development (categorised based on their size and potential impacts) as follows:

- **Level 1 projects:** 'Large/strategic'[2] proposals that involve the creation of 100 or more new or additional residential units or the creation/ change of use of 10,000 sqm or more floorspace. These are projects that will have impacts on the direct neighbourhood and on the wider community. Level 2 projects may be 'upgraded' to Level 1 projects due to the sensitivity of the local environment, which can include proximity of noise sensitive receptors or cumulative impacts.

- **Level 2 projects:** Developments involving the creation of 10 or more new build residential units, or buildings where the new build floorspace to be created is 1000 sqm or more, or any basement developments. Level 3 projects may be 'upgraded' to Level 2 projects due to the sensitivity of the local environment, which can include proximity of noise sensitive receptors or cumulative impacts.

- **Level 3 projects:** All developments falling outside of the definitions of Level 1 and 2 projects or are a basement development. Level 3 projects may be 'upgraded' to Level 2 projects due to the sensitivity of the local environment, which can include proximity of noise sensitive receptors or cumulative impacts and the nature of the proposed works for example developments that involve significant high impact structural work and/or substantial refurbishments over a period of 12 months

[2] Definition of 'large/ strategic development' is as per the guidance on categories of development set out on WCC's website for the purposes of pre application advice.

(or more)

- **Basement developments:** All developments that are neither a Level 1 or Level 2 development but involve the construction of a new or extended basement.

- **Major Refurbishments:** those which are of such a scale that the impacts are equivalent to those arising from a new build, e.g. where there is extensive demolition and rebuilding, significant new construction behind a retained façade etc. The 'Level' will follow on the size thresholds as outlined for Level 1, 2 and 3 projects above.

A mechanism exists to allow the Council to **'upgrade'** a site from a lower to a higher level, particularly where:

- impacts on neighbouring users are expected to be high, or
- in particularly sensitive areas, e.g. close proximity to noise sensitive receptors or those particularly sensitive to vibration.
- nature of the proposed works for example developments that involve significant high impact structural work and/or substantial refurbishments over a period of 12 months (or more)
-

A decision to 'upgrade' a site will be taken during the planning application process prior to the signing of a contract with the Council. Note that 'sensitive receptors' can include, but are not restricted to, schools, care homes, hospitals and GP surgeries, community facilities, and residential areas where there are higher than average levels of health indicators that could be exacerbated by construction and development, such as Chronic obstructive pulmonary disease (COPD) or asthma prevalence.

Infrastructure projects will generally be expected to comply with the Code of Construction Practice, although mostly more stringent project-specific requirements will apply.

1.5 COCP PROCESS MAP

1.6 APPLICATION OF THE COCP TO LEVEL 1, LEVEL 2 AND BASEMENT PROJECTS

Submission of Appendix A creates a requirement for the developer/applicant and their contractors to comply with the contents of the Code.

The impacts of demolition and construction work must be considered as early as possible in a project. The CoCP will be forwarded to developers during the planning application process, allowing the developer to consider and discuss with WCC its application to their specific development. Developers should ensure that their contractors are fully aware of this CoCP and its implications so that they can carefully plan how to minimise impacts and feed this into their cost calculations.

A pre-commencement condition will require applicants to agree to be bound by the contents of this CoCP. Compliance with the condition will be demonstrated by submission of an approval of details application that is accompanied by a completed and countersigned Appendix A and a copy of the finalised version of the SEMP/ CMP that has been agreed by the Environment & City Management department (see the *'Submitting an SEMP/CMP'* section below). You should ensure that you leave sufficient time prior to the planned date for the commencement of development on site to enable the Council as Local Planning Authority to assess and approve the submitted Appendix A. Please note this may in some circumstances take up to 8 weeks (particularly in circumstances where the Appendix A has not been countersigned by the Environment & City Management department prior to submission of the application), although often the approval of details application will be determined sooner. Please note that If you fail to discharge this pre-commencement condition prior to commencing the development, you will be in breach of condition and the development will be unlawful. Additional conditions may be used to control specific aspects of demolition and construction, such as working hours.

The developers of Level 1, Level 2 and Basement Projects within Westminster must comply with the CoCP and must ensure that their contractors and sub-contractors comply with it. The developer is responsible for payment of charges arising under this Code and has ultimate responsibility in the event of non-compliance by any contractor, and the Council will use the full range of powers available to it under different legislation to ensure development is managed appropriately.

The condition wording is:

Prior to the commencement of any:

(a) Demolition, and/or
(b) Earthworks/piling and/or
(c) Construction

on site you must apply to us for our written approval of evidence to demonstrate that any implementation of the scheme hereby approved, by the applicant or any other party, will be bound by the Council's Code of Construction Practice. Such evidence must take the form of the relevant completed

Appendix A checklist from the Code of Construction Practice, signed by the applicant, and approved by the Council, which constitutes an agreement to comply with the Code of Construction Practice and requirements contained therein. Commencement of the relevant stage of demolition, earthworks/piling or construction cannot take place until the City Council as local planning authority has issued its written approval through submission of details prior to each stage of commencement.

Submitting a Site Environmental Management Plan/Construction Management Plan

For Level 1 and Level 2 projects, developers must prepare a Site Environmental Management Plan (SEMP) to demonstrate the management, monitoring, auditing and training procedures as well as the Community engagement that will be put in place to ensure compliance with the requirements of this CoCP.

For basements, a Construction Management Plan (CMP) must be prepared demonstrating these as well.

The SEMP or CMP will also need to set out the specific roles and responsibilities of the contractors' personnel in managing, monitoring and controlling all sub-contractors. The SEMP or CMP shall be produced and submitted to the Environment and City Management department of the Council for approval at least 40 working days prior to starting on site, along with the Appendix A. You should ensure, as set out the section above, that you leave sufficient time prior to the planned date for the commencement of development on site to enable the Council as Local Planning Authority to assess and approve the submitted Appendix A. Appendix A sets out the information that will be required within the SEMP or CMP for approval by the Council. Further guidance is available on Westminster's website to help developers draft SEMP and CMP's and meet the requirements listed in Appendix A.

The developer's representative will need to agree with WCC any revisions to the SEMP/CMP.

Draft SEMPS or CMPs are not required with the planning application. A draft submitted with the planning application is not a substitute for a full CMP or SEMP submitted with the Appendix A for approval, nor does this replace a s61 process.

The Council provides a service to advise developers about the requirements for a SEMP or CMP prior to the planning approval or prior to submission. The fees will be dependent on the size and complexity of the project, with further details set out in Appendix F.

Requirement to Liaise with the Council's Environment and City Management Team and fees

WCC's Environment & City Management department will be responsible for liaising with the developer's nominated representative on a regular basis, for the duration of the project, advising them of their environmental responsibilities, agreeing routine arrangements for each site's activities and ensuring compliance with the CoCP. The time spent by officers liaising with the site will be charged to the developer. The fee will be calculated based on an estimate of the time input required to liaise with the

developer's nominated representative and monitor the demolition and construction activities and their impacts. The exact charge will depend on the number of monitoring visits required on the individual site and the duration of the project. Further details are set out in Appendix F.

Before works begin

Prior to commencing work on site, the developers nominated representative will arrange a "kick off" meeting with WCC to introduce the project and set out roles and responsibilities.

Statutory undertakers must be consulted about the detailed location of their assets and infrastructure in advance of the final design and in advance of any demolition and construction works.

Storage of Documentation

The developer's nominated representative should ensure that all appropriate documentation relevant to the requirements of this CoCP are kept in designated files held on site. They must always be available for inspection and review by WCC or other authorities and should include as a minimum:

- a site information sheet,
- noise, vibration and dust monitoring results,
- waste management documentation,
- a complaints/incidents log with actions taken, liaison/meeting minutes, letters, photos, and
- copy of the newsletters.

Review and Coordination Meetings

The developer's nominated representative shall attend monthly review meetings, at reasonable times, and with sufficient notice, with the City Council's Environmental and Highways officers, or as requested, to discuss their own responsibilities under the CoCP and those of other parties involved in work on the site.

Where construction activities are being undertaken on two or more sites in close proximity, regular meetings shall be arranged and attended by representatives from each site and WCC to ensure that works are appropriately coordinated in order to prevent any culminative impacts.

The developer and contractor shall permit WCC's Environmental and Highways officers to undertake regular planned inspections of the site to check compliance with the CoCP and associated records.

Project Completion

Developers for Level 1, 2 and basement projects are required to inform the Council when their project or relevant phase of works is complete. The developer is required to confirm in writing by sending the certificate of completion/practical completion or when the phase of the development has been

completed by appropriate means.

1.7 APPLICATION OF THE COCP TO LEVEL 3 PROJECTS

For Level 3 projects, developers/ contractors are generally not required to prepare a SEMP or CMP, nor pay monitoring fees. However, this does not alter the need for all projects to comply with the relevant legislation covering demolition and construction impacts or to be considerate of the impacts their activities may have on neighbours. The legislation that developers and contractors of Level 3 projects need to comply with is summarised in the CoCP. Where necessary WCC will not hesitate to enforce the statutory powers, they possess.

In circumstances where sites are deemed to be particularly sensitive, the Council reserves the right to request that Level 3 sites may submit information as per the 'Level 3' checklist at Appendix A, potentially including a CMP, although generally, this will not be expected.

Not all parts of the CoCP will apply to every construction project. However, WCC will expect all developers and contractors to comply with the spirit of the CoCP, with appropriate provisions being applied to the site at all times (e.g. working hours, minimising impact, informing neighbours, incident reporting).

Developers and contractors are also reminded that Level 3 projects may be 'upgraded' to Level 2 projects due to the sensitivity of the local environment, which can include proximity of noise sensitive receptors or cumulative impacts.

2 LIAISING WITH THE PUBLIC

This chapter sets out the processes that must be followed in liaising with the public for different types of projects.

2.1 OBJECTIVES

The Developer or developer's nominated representative should develop and maintain good relations with the local community by keeping neighbours informed of progress and by responding to complaints quickly fairly, and effectively.

2.2 THE VALUE OF ENGAGEMENT

The CoCP sets a framework for dealing with the impacts of construction and can be backed with legal compliance action by the Council where this is needed. However, the best outcome will be achieved if problems are avoided in the first place or, where they do happen, for them to be resolved at site level quickly, and without the need for external intervention. Effective engagement between those involved with development projects and those living and working in the area is an essential precondition to this kind of constructive approach.

The Council requires early discussions between developers, those neighbouring their development and any other parties that may be potentially impacted by their development. These discussions and engagement should include details such as the duration of the project, works involved, a point of contact, signposting to further information. Early discussions are in the developers' interests, as they are likely to identify any site-specific issues early, so that working methods and practices can be tailored to accommodate the needs of the neighbours where practicable.

Engagement should be carried out after planning permission is granted, before development commences, and throughout the construction process. Engagement will provide neighbours with information about the progress of a project, telling them in good time when works with the potential to cause disruption will take place. Engagement with the local community and responsiveness to neighbours who have comments or complaints will often help prevent larger issues and will reduce the need for formal Council intervention. Experience shows that engagement is important for all projects no matter their size.

The council also encourages forms of public engagement that go beyond the requirements of this Code and that aim to increase public understanding of the work and processes of the construction sector, particularly for Level 1 sites. These could include for example specific engagement with any local schools or site tours for residents.

Engagement with neighbouring construction sites

Engagement with neighbouring construction sites should be carried out before and throughout the development to reduce any cumulative impacts as far as it is practicable.

This CoCP is intended as a guide to good practice. It is not a substitute for consultation between developers, contractors and regulators. Nor should it be taken as reducing or removing the need to consult and inform neighbours or be considerate of the impacts that construction may have on them.

2.3 COMMUNITY RELATIONS (LEVEL1 & LEVEL 2 PROJECTS ONLY)

The contractor will ensure that all:

- occupiers of nearby properties
- local amenity associations and neighbourhood forums
- business improvement districts or similar groups where these exist,

will be informed in advance of works taking place, including: the start date, estimated duration and nature of the project, the principal stages of the project, details of contact names and numbers of appropriate site personnel. The extent of the engagement will be dependent on the nature and scale of the project and shall be agreed with the Environmental Sciences and Highways teams.

Level 1 Projects should provide a project website that is regularly updated to disseminates information about the project to the wider community that is accessible via QR code. Level 2 projects are not required to have a website although they may wish to use social media channels to provide updates to the wider public.

Community relations personnel will be provided, who will be focused on engaging with occupiers of nearby properties (residential and business), local amenity associations and neighbourhood forums where these exist, at all stages of the project starting, where practicable, at least 3 weeks before any works begin on site. This may be of particular importance, where the site is in close proximity to neighbours who are sensitive to noise, dust, or those sensitive to vibration where early engagement will be invaluable. They will provide appropriate information and be the first line of response to resolve any concerns. In particular, reasonable steps should be taken to engage with the elderly, residents with disabilities, and other groups in the neighbouring area who have the potential to be impacted in different ways (religious groups with different holy days, or noise sensitive receptors for example).

In the case of work required in response to an emergency, the Council and local residents shall be advised as soon as reasonably practicable that emergency work is taking place.

The developer's nominated representative will ensure that:

(a) contractor and subcontractor compliance with undertakings and performance against commitments, local agreements and specific community requirements throughout the project is monitored and recorded.

(b) For level 1 projects a website/social media channels are maintained and regularly updated.

(c) a newsletter is produced and distributed at least monthly and at appropriate stages (unless otherwise agreed with the Council) to provide:
- details of site progress, including photographs,
- A look ahead to the coming weeks advising people in advance of all works and highlighting the ones that are likely to be noisy, dusty, create vibration or traffic disruption.
- Contact details for the site including out of hours emergency
- Contact details for people impacted by noise, dust or vibration from the site.

(d) regular community meetings should take place to allow the community to raise issues of concern and enable modification of activities to reduce impact. The frequency of this meetings should be agreed with the Council and the community;

(e) emergencies, complaints or other contacts made via the 'Hotline' or any other recognised means are responded to quickly and effectively, with feedback given about the action taken;

(f) there is close liaison with the emergency services, local authority officers and other agencies (based on established contacts) who may be involved in incidents or emergency situations;

(g) there is effective liaison and engagement with appropriate local community projects and initiatives (required for Level 1 projects only, but good practice for all other projects);

(h) a comprehensive community emergency plan is put in place for each phase of the work. This will ensure that in the case of a major emergency, the community can be kept fully informed and will ensure that adequate arrangements are in place for the evacuation of an affected area if necessary; and

g) a 'contact board' is displayed outside the site (e.g. on hoardings), identifying key personnel (with contact addresses, telephone numbers and email address) and emergency contact details so that members of the public know who to contact in the event of a report or query. Additional information should include display up-to-date information on the site programme and include start and finish dates. Level 1 sites are required to display a QR codes with link to project website which contains project website which contains project information and contact details.

Where temporary structure is located on the Public Highway, the Council will require the developer/contractor to affix its own signboard/contact details as a condition of licence.

For level 1 and 2 sites where practicable and suitable the developer's nominated representative may also arrange for a viewing platform and / or observation window at the site.

The developer's nominated representative will ensure that a telephone 'Hotline' and email address is maintained and advertised, which must be staffed during working hours to handle enquiries regarding construction activities from the general public. It will also act as a first point of contact and information in the case of any emergency. Contact details to deal with any out of hours issues will also need to be provided.

All calls will be logged, together with the responses given and how the callers' concerns were addressed. All calls should be responded to promptly. The helpline will be widely advertised and displayed on site signboards.

2.4 SEMP & CMP NOTIFICATION (LEVEL 1, LEVEL 2 & BASEMENT PROJECTS)

On Level 1 and Level 2 projects a Site Environmental Management Plan (SEMP), or, for basements, a Construction Management Plan (CMP) must be produced to demonstrate how the project will comply with this CoCP. A condition will require applicants to submit Appendix A, demonstrating that the applicant agrees to be bound by the CoCP, its charges and monitoring and that it will submit an SEMP/CMP to the Council for approval, which deals with the relevant issues.

Table 2 below sets out indicatively, how it is envisaged that public notification and comments will inform the SEMP/CMP. Where the 'notification' of the public runs parallel to public consultation undertaken as part of the planning application, it is still necessary for the developer to demonstrate in the SEMP/CMP how issues raise arising either from the planning process or from the developer notification process are being addressed.

TABLE 2: PUBLIC LIAISON

Stage	Action
Planning application submitted	Public consultation begins on the planning application, and any comments made by the public or Councilors relating to construction impacts to be taken on board by the Developer and incorporated in the SEMP/CMP.
Planning application is determined	Any comments arising relating to construction impacts to be taken on board by the Developer and incorporated in the SEMP and CMP. Where appropriate, and particularly where there are significant concerns, the planning committee or other decision maker will impose conditions requiring specific mitigating measures within the SEMP and CMP. In such circumstances the permission cannot be implemented unless those mitigation measures have been agreed within the SEMP and

	CMP.
Notification of neighbouring uses 3 weeks prior to submission of SEMP/CMP	The developer is required to notify the surrounding public about their SEMP/CMP a minimum of 3 weeks before it is issued to WCC. The developer shall address each substantive construction related concern received both as part of the planning application process and arising from the three-week notification of the SEMP/CMP and to propose within the submission document all necessary mitigation measures.
Submission of SEMP/CMP at least 40 working days prior to working on site	Environmental and Highway officers review SEMP and CMP respectively

2.5 LEVEL 3 PROJECTS

The specific requirements regarding liaison with the public apply to Level 1 Level 2 and basements projects only. However, liaison with the public is no less important on Level 3 projects. The developer's nominated representative must ensure that occupiers of nearby properties are informed in advance of works taking place, including: the start date, estimated duration and nature of the project, details of contact names and numbers of appropriate site personnel on the site hoarding. This may be of particular importance in proximity to noise sensitive receptors, or those sensitive to vibration where early engagement will be invaluable in planning logistics. In the case of work required in response to an emergency, WCC and local residents shall be advised as soon as reasonably practicable that emergency work is taking place.

Where complaints are made to the site, the contractor is expected to respond sympathetically, promptly and effectively. If no resolution can be found the site should seek permission from the affected parties and refer the complaint to the Council, who will investigate it. The nominated representative must ensure that a dedicated complaints logbook is maintained covering: the nature of the complaint; the cause; and where appropriate, the remedial action taken. The logbook should be made available at the request of the Council at any time.

3 GENERAL SITE OPERATIONS

This chapter outlines the requirements relating to site management practices, including, site layout and appearance, good housekeeping and health and safety.

3.1 OBJECTIVES

The Council requires that the contractor carries out the work in accordance with current best industry practices to minimise, as far as reasonably practicable, any adverse impact of their construction activities (including demolition work).

The site shall be managed in accordance with the requirements of the Council. The developer's nominated representative will be responsible for obtaining and renewing all appropriate licences and consents in respect of site operations.

All of those working on a site must comply with all the relevant statutory provisions in respect of safety and will be required to work in such a way as to ensure the safety of the public and its workers.

3.2 HEALTH AND SAFETY

All site work must be carried out in accordance with the provisions of the Health and Safety at Work Act 1974 to the satisfaction of the HSE or its local officer.

The developer's nominated representative will ensure that appropriate industry standards for health and safety are applied, and that continuous improvement in safety performance is sought, in accordance with current guidance published by the Health & Safety Executive and other regulatory bodies.

This Code should not be read as replicating, amending or replacing duties under the Construction (Design & Management) Regulations 2015. The developer will ensure that adequate arrangements are in place for the discharge of all duties as named parties under the Construction (Design & Management) Regulations 2015 (CDM 2015). The key duties, taken from the HSE summarises the key duties:

For Level 1 and Level 2 projects the developer is responsible for ensuring the production of a health and safety management system in accordance with legislation regulations and guidance.

Further references to health and safety issues are picked up in relevant sections of this Code of Construction Practice.

3.3 EMERGENCY PLANNING AND RESPONSE

Emergency Procedures: For Level 1 and Level 2 projects the developer's nominated representative will ensure that emergency procedures are developed, implemented and updated where necessary. The emergency procedure will include emergency pollution control measures that will consider current relevant Environment Agency and government guidance relating to pollution. The emergency procedures will be produced in consultation with the emergency services.

The emergency procedure will contain emergency phone numbers and the method of notifying WCC and other statutory authorities. Copies of the procedures will be issued to the City Council, London Fire Brigade (LFB), the Police, the Ambulance Service and other relevant authorities etc. Emergency telephone numbers for developer's/contractor's key personnel will also be included.

Emergency Access: The nominated undertaker will ensure that the requirements of the London Fire and Emergency Planning Authority (LFEPA) will be followed for the provision of site access. Where appropriate, the accesses to the site will be designed to the requirements of the London Fire Brigade Note 'Access for Fire Appliances' which addresses the road widths required for fire apparatus. The accesses may vary over time and must also be suitable for ambulances.

Fire Prevention and Control: All construction sites and associated accommodation or welfare facilities will have in place appropriate plans and management controls to prevent fires. The site fire plans will be prepared and will have due regard to the following documents:

(a) Fire Safety in Construction (HSG 168);
(b) Fire Prevention on Construction Sites (CFPA Europe).

During project planning and design development, the developer's nominated representative should ensure reduction of fire risk and potential fire load during construction, operation and subsequently during maintenance or repair. The specification of non-combustible materials, products and packaging will be pursued wherever reasonably practicable. The project will also have to comply with any third-party requirements as may be appropriate at specific sites.

3.4 SECURITY

The developer's nominated representative must ensure that the site is secure and that unauthorised entry to or exit from the site is prevented. Site gates must be closed and locked when there is no site activity and site security provisions must be put in place. Alarms must be connected to a 24-hour monitoring station and should adhere to HSE requirements, with a notice specifying contact details for the monitoring company and must incorporate an appropriate cut out period.

Hoardings and temporary structures should be positioned and designed to minimise opportunities for antisocial behavior, rough sleeping and the behaviors associated with this. The developer's nominated representative should refer rough sleepers they are concerned about to Streetlink on www.streetlink.org.uk to enable local teams to work with the developer to address any issues.

3.5 LIGHTING AND SECURITY CAMERAS

Lighting to site boundaries must be provided to ensure the safety of the passing pubic, including disabled people, and security. Structures need to be adequately lit so they are visible during the hours of darkness. The council strongly advocates the use of energy saving techniques for example LED technology. Where practicable, precautions are required to be taken to avoid shadows cast by the site hoarding on surrounding footpaths, roads and amenity areas to reduce the potential for crime and antisocial behavior

Site lighting must also be positioned and directed so as not to unnecessarily intrude on adjacent buildings, or to cause distraction or confusion to passing traffic on adjoining public highways for example red lights should be used to highlight structures fronting the carriageway. The design will ensure that any artificial light emitted from premises will not be prejudicial to health or be a nuisance, as required by the Environmental Protection Act 1990.

Lighting is required to be designed to minimise effects on terrestrial ecology and the aquatic environment.

Site lighting will be designed to comply with the provisions of current legislation regulation and guidance.

Where a hoarding, scaffold or temporary structure is to be installed upon the highway in close proximity to a lighting column, wall mounted light or illuminated street signage (less than 2m) the further measures need to be discussed with Westminster's Lighting Compliance and Highways Officers. If WCC assets need to be removed, then this needs to be arranged in good time and an estimate for their removal paid by the developer.

Site security cameras, where used, must be sited in locations which will not cause nuisance or offence to local residents.

3.6 SITE LAYOUT AND FACILITIES

Early consideration of the site layout should address in the preplanning stage and is should be set out to reduce and mitigate potential impacts from noise, vibration, dust and traffic to neighbours as far as it is practicable. Further detailed information regarding the Council's requirements is set out in Chapter 4 (traffic, transport and use of the public highway) and Chapter 5 (noise and vibration).

3.7 DISPLAY OF PUBLIC INFORMATION

As a minimum requirement, the site hoarding will display up-to-date information on the site programme (start and finish dates) and telephone contacts for the developer's nominated representative and other key personnel of use for information or reporting purposes. As a condition of licence for any temporary structure on the Public Highway, the City Council will require the developer/contractor to affix its own signboard/contact details.

Where practicable and suitable the developer's nominated representative may also arrange for a viewing platform and / or observation window at the site.

3.8 FENCING AND HOARDINGS

General: All work sites will be completely fenced to prevent public access. The range of allowable variations is described below. Developers must also have regard for safety, visibility and continued ease of access for the public outside the site when proposing hoardings.

Fencing and hoardings that are located on the public highway will require to be licensed by WCC and any hoardings are required to meet the requirements of the provisions of the Health and Safety at Work Act 1974.

For specific hoarding and fencing requirements, the developers nominated representative should seek advice from WCC and the Local Crime Prevention Officer of the Metropolitan Police.

Hoardings should be removed as soon as practicable after the works requiring them have been completed.

Green Hoarding: Climbing plants are increasingly used on hoardings to improve visual amenity, resist graffiti, reduce noise and improve air quality through filtering dust and pollution. For Level 1 developments, when a horizontal length of more than 50 metres of hoardings needs to be erected adjacent to the public highway and where it is in place for 6 months or more, the incorporation of green hoardings must be used unless the developer provides a clear justification why this is not practicable. This requires plans for appropriate ongoing maintenance and irrigation, and a plan for sustainable disposal of green hoardings once work is completed. If practicable this should incorporate for example a full cover of climbing plants or wildflower mats, with the plants trimmed back only to allow for essential lighting and health and safety signage.

Special Circumstances: Where a particular appearance or acoustic rating is needed this will be specifically requested by the City Council, unless dictated differently under a statutory Estate Management Scheme/Lease in the Westminster area. For example, hoardings may need to be of a design appropriate to the character of the surrounding townscape. This may include one or more of the following:

- Incorporation of artwork visualising the proposed development or photographic views of the local area or incorporating artwork, mounted onto standard well maintained hoardings.
- Incorporation of viewing windows into standard well maintained hoardings to preserve important views and provide opportunities to observe construction activity.
- Incorporation of a full cover of climbing plants, with the plants trimmed back only to allow for essential lighting and health and safety signage.

The developer's nominated representative will ensure that all hoardings are painted in a plain uniform

manner but will have contrasting markings at projecting angles (to assist the visually impaired) to the satisfaction of the City Council. Any specially designed exterior decorations will require City Council approval and potentially consent under the Control of Advertisements Regulations. Hoardings and fencing will require frequent inspection, repair and repainting as necessary to comply with the conditions of the City Council's Licence. All flyposting and graffiti is to be removed as soon as reasonably practicable and within 24 hours of notice from the City Council.

3.9 LOCATION OF HUTS, EQUIPMENT, SKIPS ETC

Advice should be sought from WCC on the location of these facilities. Where practicable they should be accommodated within the boundaries of the site. Particular care should be taken where skips or heavy equipment are to be placed above vaults. Only in exceptional circumstances, where site huts cannot be accommodated on site, will the Highway Authority consider applications for licences/consents to locate them outside the boundaries of the site. Consent will not, however, be granted for any site huts for office accommodation on or above the highway. Applications for welfare facilities on or over the highway on gantries will be considered on their merits. The relevant consent or licence must be obtained from the Highway Authority before placing on the highway any skip, erecting any temporary structure, scaffold, hoarding, hoist, gantry, fence or conducting an excavation on the highway. Where this will lead to loss of residents' parking spaces an equal number of visitor parking bays in the vicinity should be converted into residents' parking bays for the duration of the works.

Permission must be obtained from the Highway Authority by the developer's nominated representative before any plant and or equipment can be stored or operated on the public highway.

3.10 TEMPORARY STRUCTURES ON THE HIGHWAY

In view of the potential impacts faced by both traffic and pedestrians, temporary structures etc. will only be allowed on the highway in exceptional circumstances. Where they are permitted, the contractor must pay attention to the safety of pedestrians as well as ensuring that any revision to traffic cyclist or pedestrian flows are properly controlled by signs, lights, banksmen etc. as necessary.

When locating storage areas, temporary structures, etc. the developer's nominated representative must consider the needs of and the vulnerability of pedestrians in order to provide a safe and direct route for them. This will ensure adequate highway is available throughout the period of the works, particularly where there are high volumes of pedestrians. All barriers, clutter, and storage of materials and equipment within the footway will be minimised to ensure safe pedestrian movement.

Fenced storage areas, scaffolding gantries, loading/unloading bays, skips and other temporary structures on the highway will be provided and maintained to the conditions of a Licence issued by the City Council or TfL. It is recommended that due to structural stability issues basement contractors have some knowledge of temporary works as defined in BS5975:2008.

3.11 CRANES

Crane arcs will be confined within the site boundary unless agreed otherwise with the Highway Authority and with property owners/occupiers whose air space is affected. Any Temporary Traffic Order (see Chapter 4) that may be required by the developer or its contractors must be applied for at least ten weeks before commencement of any Order, and the relevant fee must be paid beforehand. The developer's nominated representative will ensure the relevant permissions are obtained from the appropriate authority for cranes located adjacent to railways, roads or rivers. Cranes will be operated in accordance with the requirements of current legislation, regulation and guidance.

The City Council will require either an indemnity against all claims or a licence associated with the operation of crane jibs that oversail the highway.

3.12 FACADE RETENTION

All façade retention schemes must ensure that the required temporary steelwork is appropriately installed and monitored during the construction process. Pedestrian and vehicular access on the pavements and roads adjacent to the site should not be impeded by the works

3.13 LIVING ACCOMMODATION

No living accommodation will be permitted on site other than with the approval of the Council. Mess rooms, locker rooms, toilets, canteens and showers will be permitted.

3.14 MAINTENANCE OF WELFARE FACILITIES, RUBBISH COLLECTION & FOOD WASTE

All welfare facilities on site should be well maintained and have suitable toilet facilities and other welfare facilities for its staff. A contract should be in place or appropriate methods for the removal of general and food waste from site

3.15 PEST CONTROL

The developer's nominated representative shall ensure that the risk of infestation by pests or vermin is minimised. Adequate arrangements for disposing of food waste or other material attractive to pests must be implemented. If an infestation occurs, the nominated representative must ensure that appropriate action is taken to irradiate/prevent the infestation reoccurring, as required by the City Council's Environmental Health Officer.

3.16 UNEXPLODED ORDNANCE

There may be unexploded bombs, shells and incendiary devices buried in sites that have been left undisturbed since World War II. The developer's nominated representative must ensure that all operatives are warned of this possibility.

Where appropriate, a risk assessment will be completed, and an emergency response procedure will be prepared and implemented by the contractor for the possibility of unexploded ordnance being found.

3.17 ELECTROMAGNETIC INTERFERENCE

The developer's nominated representative will consider the impacts of any electromagnetic interference on wireless telecommunication systems during the design and construction of the project. Technology should be used to prevent Radio Frequency Inference (RFI) where appropriate. Developers must also have regard for any potential adverse health impacts related to RFI. In the case of adverse impacts, the nominated representative will investigate, and if it is found to be linked to site activities, it must be resolved or, where this is not possible, mitigated.

3.18 RESPONSIBILITY FOR SITE INSPECTION

Nominated representatives from the developer/contractor and the City Council will inspect the worksite on a regular basis as agreed beforehand. The inspection will cover matters including equipment, confirming working methods on site are in accordance with those agreed in the CMP/SEMP and arrangements on site. A schedule of defects will be prepared and agreed. The amount of time allowed to make good all defects will be determined by Council officers (normally 24 hours). If the contractor fails to take any required action to do this, the developer/client will exercise provisions in the contract to rectify the situation.

3.19 CONSIDERATE CONSTRUCTORS SCHEME (LEVEL 1 AND 2 PROJECTS ONLY)

Contractors will be required to manage sites and achieve formal certification under the Considerate Constructors Scheme (CCS), operated by the Construction Federation (or any future comparable scheme).

The Code of Considerate Practice commits those sites and companies registered with the Scheme to enhance site appearance, respect the community, protect the environment, secure everyone's safety and care for the workforce. Contractors are required to comply with the best practice requirements of the Scheme particularly in relation to measuring, managing and minimising the impact of air, light and noise pollution.

A copy of the CCS registration will be required as part of the SEMP and the CCS certificates will be provided to the Council on request.

3.20 GOOD HOUSEKEEPING

The developer's nominated representative will always ensure that all those working on a site follow a 'good housekeeping' policy and ensuring considerate site behavior of all those working on a site; this

will include, but not necessarily be limited to the following, with more information for many of these provided throughout this document:

- Ensuring considerate site behaviour of those working on a site
- Prohibiting open fires
- Ensuring that appropriate road cleanliness is implemented
- Removal of rubbish at frequent intervals, leaving the site clean and tidy
- Frequent inspection, repair and re painting as necessary of all site hoardings to comply with the conditions of the City Council's Licence - all flyposting and graffiti is to be removed as soon as reasonably practicable and within 24 hours of notice from the City Council
- Maintenance of toilet facilities and other welfare facilities for its staff
- Removal of food waste
- Wheel washing facilities provided
- Prevention of vermin and other infestations (and prompt and effective action to deal with any that do arise).

4 TRAFFIC, TRANSPORT AND THE USE OF THE PUBLIC HIGHWAY

This chapter outlines the requirements relating to the use of the public highway, including, safety, network management, access & egress arrangements.

Westminster City Council is committed to maximising road safety as well as minimising disruption created by site traffic. The impact of construction activity must be minimised, lorries should not be stacked or held, and barriers should be retracted when they are not in use.

All vehicles and their drivers servicing construction sites within the borough are bound by the conditions laid out in the CLOCS or FORS Silver Standard as a minimum. Vehicles should also adhere to London-wide emissions requirements such as the London Low Emission Zone and London Ultra Low Emission Zone (ULEZ).

It is your responsibility to ensure that your principal contractor is fully compliant with the terms laid out in these standards. It is your principal contractor's responsibility to ensure that all contractors and sub-contractors attending site are also compliant and that they adhere to the agreed SEMP and CMP.

As part of your SEMP and CMP you should submit the proposed method for checking operational, vehicle and driver compliance with the vehicle standards throughout the duration of the contract and confirm the person/s responsible for this.

Every SEMP and CMP must also contain a Traffic Management Plan (TMP) this should include;

- A plan of the site showing the location of loading points and/or temporary crossovers used by vehicles accessing the site including carriageway and footway dimensions.
- Swept path designs for the largest delivery vehicles.
- Confirmation of the different sizes of delivery vehicle planned throughout the project.
- Any exceptional loads planned, including plant delivery.
- A histogram of the proposed deliveries including type and size.
- Proposed tower crane positions.
- Proposed and available Vehicle routes to and from site.
- Should the works involve concrete operations the maximum pour size/vehicle numbers per pour should also be highlighted.

4.1 IMPACT

Routes should be carefully considered, and risk assessed, taking into account the need to avoid where possible any major cycle routes and trip generators such as schools, offices, stations, public buildings,

museums, shopping streets etc.

Consideration should also be given to weight restrictions, low bridges, and cumulative impacts of construction (including neighbouring construction sites) on the public highway network. The route(s) to and from the site should be suitable for the size of vehicles that are to be used.

Where practicable, developers should investigate the potential for the removal of spoil and transport of materials by river.

Access and egress routes are to be detailed as part of the TMP between the site and the Transport for London Road Network (TLRN). Route maps to be supplied as appendices to the TMP and differentiated where applicable for rigid and Articulated HGV's. Contractors and delivery companies are to be made aware of the route (to and from the site) and of any on-site restrictions, prior to undertaking journeys.

Swept path analyses for constrained manoeuvres along the proposed route should be included in the TMP. The TMP must explain how the construction site will manage a just in time delivery schedule and have a booking system that is monitored daily.

As part of your TMP you should provide details of the types of vehicles required to service the site and the approximate number of deliveries per day for each vehicle type during the various phases of the project.

Cumulative effects of construction traffic servicing multiple sites should be minimised. You will be expected to co-ordinate with other developments in the local area or on the route.
Vehicles must not queue or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver.

4.2 SAFETY

Pedestrian safety must be maintained with vulnerable footway users having been considered. These include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted or those with Alzheimer's and Autism. Appropriate ramps must be used if cables, hoses, etc. are run across the footway. Pedestrian diversions should be kept to a minimum with desired routes maintained. Frequent changes to desired routes should be minimised and where necessary need be agreed in writing with WCC officers along with a pedestrian management plan.

Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic marshals must ensure the safe passage of all traffic on the public highway when vehicles are entering and leaving site.

Traffic marshals, or site staff acting as traffic marshals, should be qualified and hold the relevant qualifications required for directing large vehicles when reversing. Marshals should be equipped with 'STOP – WORKS' signs (<u>not</u> STOP/GO signs) if control of traffic on the public highway is required.

Marshals should have radio contact with one another where necessary.

The TMP should include the method on how the access and egress arrangements for construction vehicles in and out of the site will be managed, including the number and location of traffic marshals where applicable. Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded. The method should form part of your CMP.

4.3 WHEEL WASHING

Provision of wheel washing facilities should be considered if necessary. There should be no muck/debris discharged onto the Public Highways or into gullies. Sites must be able to provide a road sweeper to clean debris left on the road as appropriate.

4.4 PARKING

The TMP should include details of the parking and loading arrangements for construction vehicles with regard to servicing and deliveries associated with the site (e.g. delivery of materials and plant, removal of excavated material). This is required as a scaled site plan, showing all points of access and where materials, skips and plant will be stored, and how vehicles will access and egress the site.

4.5 NETWORK MANAGEMENT

Full justification must be provided for proposed use of the public highway to facilitate works. The Council expects all options to minimise the impact on the public highway to have been fully considered prior to the submission of any proposal to occupy the highway.

Please note that Temporary Traffic Orders (TTOs) and hoarding/scaffolding licences may be applied for prior to CMP submission but will be subject to having a signed CMP in place before being agreed. There is approximately an 8-week lead time for a TTO, and it will be subject to consultation and co-ordination check.

Utility disconnections/connections must be coordinated where possible to minimise the disruption to affected frontages. If new utility services are required, options must be explored for the utility companies to share the same excavations/traffic management/TTO. Please supply details of these discussions as part of the draft CMP.

If the site is on or adjacent to the TLRN or conflicts with Bus Lane/Stop, details should be provided of preliminary discussions with Transport for London as part of your CMP.

4.6 SITE SET-UP

The CMP must contain a scaled plan detailing the local highway network layout in the vicinity of the site. This should include details of on-street parking bay locations, cycle lanes, footway extents, relevant street furniture, and proposed site access locations.

Any work above ground floor level may require a covered walkway adjacent to the site. A licence must be obtained for scaffolding and gantries. The adjoining public highway must be kept clean and free from obstructions, and hoarding should not restrict access to adjoining properties, including fire escape routes. Lighting and signage should be used on temporary structures/skips/hoardings etc. A secure hoarding, lit in the hours of darkness, will be required at the site boundary with a lockable access and where ensuring that tunnels beneath gantries are well lit at all times.

The CMP should detail power supply arrangements, particularly any temporary relocation of networked substations and any proposal to install a temporary builders supply to power site operations.

Parking bay suspensions should be kept to a minimum and your CMP should detail any proposed parking bay suspensions and or TTO's which would be required to facilitate the construction.

You can apply for temporary structure licence and or TTO here.
Information regarding parking suspensions can be found here.

4.7 WELFARE

Please note that use of the public highway for storage, site accommodation or welfare facilities will be at the discretion of the Council and is generally not permitted. If you propose such use, you must supply full justification, setting out why it is impossible to allocate space on-site or rented nearby.

4.8 SITE COMPLETION

Upon completion of the works the developer's nominated representative will clear and remove from the highway all plant, surplus materials, rubbish and temporary works of every kind. The site will be left clean and in a condition to the reasonable satisfaction of the City Council. Prior to being brought back into use the Highway must be free of any potentially hazardous defects. Damage, as a consequence of construction, is to be agreed at a joint site visit and repaired via a rechargeable job order.

4.9 RELEVANT LEGISLATION

Any temporary interference on the Public Highway should be in accordance with:

- Highways Act 1980
  https://www.legislation.gov.uk/ukpga/1980/66/contents

- New Roads & Street Works Act 1991
  https://www.legislation.gov.uk/ukpga/1991/22/contents
- Safety at Street Works Code of Practice 2013
  https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/321056/safety-at-streetworks.pdf
- Traffic Signs and General Directions 2016 Traffic Signs Manual Chapter 8
  https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/203669/traffic-signs-manual-chapter-08-part-01.pdf
- CLOCS
  https://www.clocs.org.uk/
- FORS
  https://www.fors-online.org.uk/cms/

5 NOISE AND VIBRATION

The levels of noise and vibration from the site must be monitored and controlled. Measures for reducing such levels are set out in this chapter. Level 1 and Level 2 projects will require prior approval via Section 61 of the Control of Pollution Act 1974 (CoPA), as will noisy demolition and construction activities outside of core hours on all sites.

5.1 OBJECTIVES

Due to the number of intensive development and infrastructure projects across the City, noise and vibration from building and construction activities are often cited by residents as a problem. Protecting residents, business and other noise sensitive premises (e.g. schools, theatres) from the impact of noise and vibration resulting from construction sites is essential to the Westminster's continuing reputation as a "City for All".

To be able to achieve this, the developer's nominated representative must control and limit noise and vibration levels, as far as is reasonably practicable, by applying Best Practicable Means (BPM) to all activities.

5.2 REGULATORY OVERVIEW

Noise and vibration are covered by the same legislative controls. The principal controls are contained within the COPA (Part III). In addition, statutory nuisance provisions contained within the Environmental Protection Act 1990 (ss.79-82) also apply to noise.

London Authorities Noise Action Forum (LANAF) have produced a 'London Good Practice Guide: Noise & Vibration Control for Demolition and Construction[3]'. The guide provides good practice measures to control noise and vibration on site based on a 'risk assessment' approach.

British Standard 5228: Noise and vibration control on construction sites and open sites (BSI 2014) is recognised by Statutory Order as the accepted guidance for noise control during construction work.

In addition, the planning permission for the development may include specific conditions relating to noise control, and consideration to minimising noise and vibration from construction should be given at planning application stage.

Where works are carried out close to, or on, a party wall, The Party Wall Act 1996 may apply. The Contractor must consider all aspects of this Act and allow sufficient time to comply with it.

[3] https://www.cieh.org/media/1251/london-good-practice-guide-noise-vibration-control-for-demolition-and-construction.pdf

5.3 NOISE AND VIBRATION CONTROL

The developer's nominated representative will be required to produce a **site-specific** noise and vibration management plan, which forms part of the SEMP or CMP. The plan must set out the location of noise and vibration sensitive receptors, how the site is to control and limit noise and vibration arising from construction activities, as far as is reasonably practicable, so that all receptors are protected from excessive noise and vibration levels. The contractor will apply Best Practicable Means (BPM), as defined under Section 72 of the Control of Pollution Act (COPA) 1974, to all activities that create noise and vibration and provide suitable mitigation to reduce their impact to local community as far as it practicable.

The following points should be included in the **site-specific** noise and vibration management plan

- All sites are required provide a site plan showing the location of the site, the site setup and the noise sensitive receptors
- Level 1 and Level 2 projects will need to complete a LANAF risk assessment that sets out the good practice measures for controlling noise and vibration onsite.
- Proposed working hours
- Overview of the proposed demolition and construction methodology and best practicable means and mitigation measures, which will be implemented onsite to mitigate and reduce impacts to neighbours
- Level 1 and Level 2 projects will need to provide a baseline noise survey and noise predictions for the different phases of the development
- All Projects are required to monitor noise and vibration and have a procedure in place for recording and reporting monitoring results
- Procedures for remedial action in the event of any exceedances and non-compliance

Further specific guidance relating to the content of a noise and vibration management plan is available on Westminster's website.

Site Plan

A site plan should be provided that provides the location of the site, site setup, including location of welfare facilities, storage areas and access points. The location of noise and vibration sensitive receptors should be included.

5.4 LONDON AUTHORITIES NOISE ACTION FORUM GOOD PRACTICE GUIDE RISK ASSESSMENT

The developer or contractor for Level 1 and Level 2 projects will complete a risk assessment as set out in the LANAF London Good Practice Guide Noise and Vibration Control for Demolition and Construction. The required noise, vibration mitigation measures and any working practices identified

by the risk assessment, commensurate to risk should be included within the noise and vibration management plan

It is recognised that the noise and vibration impacts will vary from site to site depending on its scale, therefore there is no requirement for level 3 and basement projects to complete the risk assessment.

The principles of the guide should apply to all developments in WCC as their associated construction and demolition activity will contribute to noise and vibration unless properly managed and mitigated. It is therefore recommended that the appropriate mitigation measures set out in the guide should be incorporated into working practices.

In assessing the impact of any operations, the developer's nominated representative will comply with the recommendations set out in BS 5228 (Noise and Vibration Control on Construction and Open Sites) as well as the outputs of the LANAF risk assessment.

5.5 WORKING HOURS

You must carry out any building work which can be heard at the boundary of the site only:

- between 08.00 and 18.00 Monday to Friday;
- between 08.00 and 13.00 on Saturday; and
- not at all on Sundays, bank holidays and public holidays.

You must carry out piling, excavation and demolition work only:

- between 08.00 and 18.00 Monday to Friday; and
- not at all on Saturdays, Sundays, bank holidays and public holidays.

Noisy work must not take place outside these hours unless otherwise agreed through a Control of Pollution Act 1974 section 61 prior consent in special circumstances (for example, to meet police traffic restrictions, in an emergency or in the interests of public safety).

There is no formal definition of high impact noisy works although the following phases and noisy work packages are considered to meet the criteria.

Phases:

- Demolition
- Earthworks
- Piling[4]

Noisy work packages:

- Cutting using power tools
- Breaking out using power tools
- The use of impact fasteners

[4] Auger/rotary piling methods may not be considered high impact noisy works. Developers are requested to seek advice from WCC to confirm their requirements.

- The loading of heavy materials

In addition to the work packages listed above Works and processes that may be considered 'high Impact noisy activities' can be defined on the following basis:

- Noise data within Table C of BS5228 indicates that if the equipment was used continuously for two hours it would likely produce noise levels in excess of 70 decibels (LAeq,10hr) at the nearest occupied premises.
- Work packages that produce significant structure-borne noise and vibration in adjoining properties, that is difficult to suppress, will be classed as 'high impact noisy activity'.

Restrictions on High Impact Noisy activities

The Council requires time restrictions on 'high impact noisy activities' to reduce impacts to noise sensitive receptors. Sites located close to noise sensitive receptors are expected to agree periods where high impact noisy works are restricted. These times should be coordinated with other sites in the vicinity to ensure such periods align. As far as reasonably practicable, earthwork, demolition and piling as well as the above noisy work packages shall not be permitted during the restricted periods. The developer's nominated representative will ensure that the contractors adhere to these agreed restricted working hours.

Should the developer's nominated representative propose any additional or alternative working hours for operational and or health and safety reasons, prior agreement with the Council must be obtained. These proposals will be considered on a site-by-site basis.

In the case of work required in response to an emergency and or health and safety needs, the Council and local residents will be advised as soon as is reasonably practicable that the works are taking place and their likely duration.

All construction related traffic will abide by the agreed hours of working for each site unless otherwise agreed with the Council.

5.6 DEMOLITION CONSTRUCTION AND PILING METHOD STATEMENTS

For Level 1, Level 2 and basement projects, a site method statement (in accordance with the principles described in BS 5228) must be prepared as part of the noise vibration management plan. Method statements should be prepared for all activities onsite, although should include all demolition, piling, construction activities were applicable. All method statements are required to include the proposed noise control methods and will incorporate a programme of works demonstrating when these activities are likely to occur.

Method statements specifically for Level 1 and Level 2 projects are required to include the type of plant likely to be used onsite, along with its location within the site boundary.

5.7 BASELINE NOISE SURVEY, NOISE PREDICTIONS AND NOISE MONITORING

Baseline noise survey

For Level 1 and 2 projects a baseline noise survey should be completed prior to any construction activities commencing to establish ambient noise levels around the site and at targeted locations such as noise sensitive receptors. The City Council may also undertake noise level monitoring prior to commencement of development as a cross check for developers' readings and to establish ambient noise levels.

Where this is not practicable the developer will need to confirm that the survey will be completed prior to works commencing and will form part of the Section 61 application.

Noise Predictions

Level 1 and level 2 projects will be required to predict noise generated from the proposed site activities and compare their predictions against the baseline data.

The baseline data combined with the predictions should be used to outline the potential impacts from site activities and enable the site to set appropriate noise trigger and action levels to prevent significant noise impacts. Action and trigger levels should be incorporated into a continuous noise monitoring system combined with a real-time alarm system.

Noise Monitoring

Level 1 and 2 projects will be required to install continuous noise monitoring system, combined with a real-time alarm system, with details to be agreed on an individual basis. The monitoring locations must be agreed with the Council prior to installation. Measured noise trigger and action thresholds will be based on significant noise criteria relative to the baseline as set out in BS5228.

Noise action levels are the maximum to be allowed, therefore developers or their named representative will be required to take steps to ensure lower noise levels than the specified limits, as far as it is practicable.

All measurements shall be made with a sound level meter complying with BS EN 61672: 2003 (Electro acoustics - Sound level meters - Specifications). Noise levels will be monitored by the nominated representative during the course of the works and compared with the agreed noise trigger and action levels. The Council shall be given access to all noise readings if required and the contractor will provide a report to the Council monthly.

All personnel undertaking noise monitoring shall be sufficiently competent; as a minimum such personnel shall be a full or associate member of the Institute of Acoustics or experienced in managing

construction noise and vibration, demonstrated by a summary of training and competence in environmental noise measurements unless otherwise agreed with Westminster City Council.

Basement projects typically are not required to install a continuous noise monitoring system, combined with a real-time alarm system. Basement developments should contact Westminster City Council to discuss their monitoring requirements.

For all site's regular proactive informal subjective assessment checks and monitoring of noise levels is also expected. The frequency of these assessments should be increased looking at the proposed work programme to identifying work packages that are likely to cause significant noise and vibration impacts and where complaints of noise and vibration are received.

5.8 VIBRATION AND VIBRATION MONITORING

The Council will primarily ensure that the contractor takes appropriate measures to protect the residents, users of nearby buildings and passers-by from nuisance or harm.

Receptors which may be particularly sensitive to vibration (including, commercial, educational and community) will be subject to individual consideration by the Local Authority, considering the contents of British Standards on Construction Site Noise and Vibration BS5228 Part 2 Vibration. The contractor will be obliged to comply with the vibration levels established by agreement with the Council on a site-by-site basis.

The contractor will comply with BS 6472: 2008 (Evaluation of Human Exposure to Vibration in Buildings). The standards for vibration assessment are defined in this British Standard.

Suitable guidance upon the levels of vibration, which may cause building damage, can be found in BS 7385-2:1993 although the developer should consult a suitably qualified structural engineer to ensure that any potential vibration generated from site activities does not result in building damage. Complaints of building damage is a civil matter between the affected party and the developer.

Vibration Monitoring

All level 1 and 2 sites will be required to install continuous nuisance vibration monitoring system, combined with a real-time alarm alerting system, with specific details to be agreed on an individual basis unless otherwise agreed with WCC. The location of monitors is to be agreed with WCC prior to installation although should be placed in locations that are sensitive to vibration for example party boundaries. All personnel undertaking vibration monitoring shall be sufficiently competent; as minimum such personnel shall be a full or associate member of the Institute of Acoustics unless otherwise agreed with Westminster City Council in writing.

All personnel undertaking vibration monitoring shall be sufficiently competent; as a minimum such personnel shall be a full or associate member of the Institute of Acoustics or experienced in managing

construction noise and vibration, demonstrated by a summary of training and competence in environmental noise measurements unless otherwise agreed with Westminster City Council.

Basement projects typically are not required to install a continuous nuisance vibration monitoring system, combined with a real-time alarm system. Basement developments should contact Westminster City Council to discuss any monitoring requirements.

For all site's regular proactive informal subjective assessment checks and monitoring of vibration levels is also expected. The frequency of these assessments should be increased looking at the proposed work programme to identifying work packages that are likely to cause significant noise and vibration impacts and where complaints of noise and vibration are received.

Reporting

All projects that are required to install continuous noise and vibration monitoring system, will be required to report all data monthly unless otherwise agreed with WCC or set out within any Control of Pollution Act 1974, Section 61 or 60.

The Council understands that occasionally sites will receive noise and vibration complaints from parties impacted by site activities and there may be periods where noise levels will be in excess of pre-agreed levels. The developer's nominated representative will ensure that there is a system/procedure in place to record any incidents onsite, complaints, periods noncompliance and any ameliorative action taken. Incidents, complaints, non-compliance and any action taken will need to be reported to the Council and the specific requirements need to be agreed prior to starting works onsite.

5.9 APPLICATION FOR PRIOR APPROVAL (SECTION 61 COPA 1974)

The developer or developer's contractor for Level 1 and level 2 sites will have to apply to the Council and obtain prior consent under the Control of Pollution Act 1974, Section 61. Basements and Level 3 sites will not normally require prior consent unless they are proposing noisy works outside of the normal working hours. Developers for level 3 and basement projects should contact the WCC prior to submission to confirm if prior consent is required.

All applications for prior consent will include:

- Details of the work to be undertaken, including proposed hours of work.
- Baseline noise survey prior to any works commencing.
- List of proposed equipment to be used onsite.
- Activity noise predictions at the near noise sensitive receptors.
- Outline steps to minimise and mitigate noise impacts.
- Noise monitoring strategy including action and trigger levels.
- Procedure in the event that action, and or trigger levels are exceeded.
- Stakeholder complaints procedure.

Specific guidance relating to section 61 applications is available on Westminster's website.

An action in statutory nuisance can be brought by a member of the public even if the works are being carried out in accordance with a prior approval or a notice.

Section 60 CoPA 1974 notice

All contractors that are responsible for basement developments who do not have a Section 61 in place will be issued with a Section 60 Notice under Control of Pollution Act 1974 prior to works commencing onsite. A Section 60 notice sets the site working hours and ensure that best practice working methods to control noise and vibration are maintained on site.

6 DUST AND AIR POLLUTION

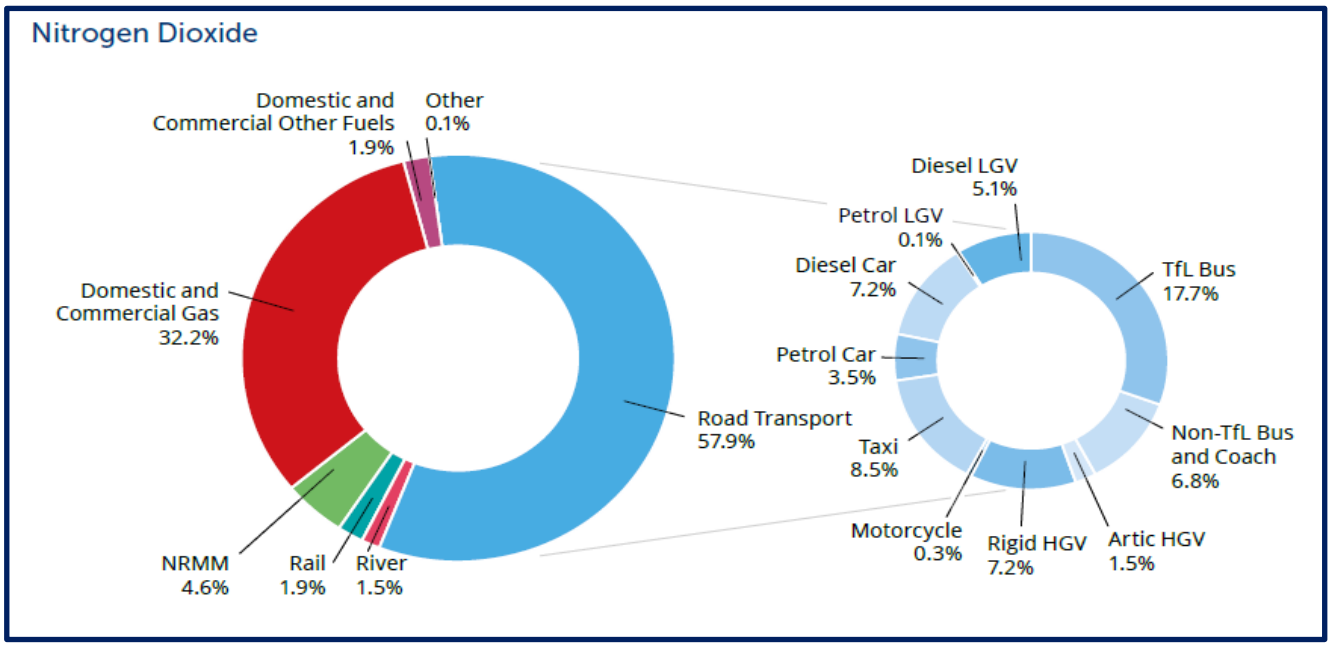
This chapter covers the management of dust and air pollution. Emissions to the atmosphere of gaseous and particulate pollutants from vehicles and plant used on site and dust from construction activities will be controlled and limited as far as is reasonably practicable.

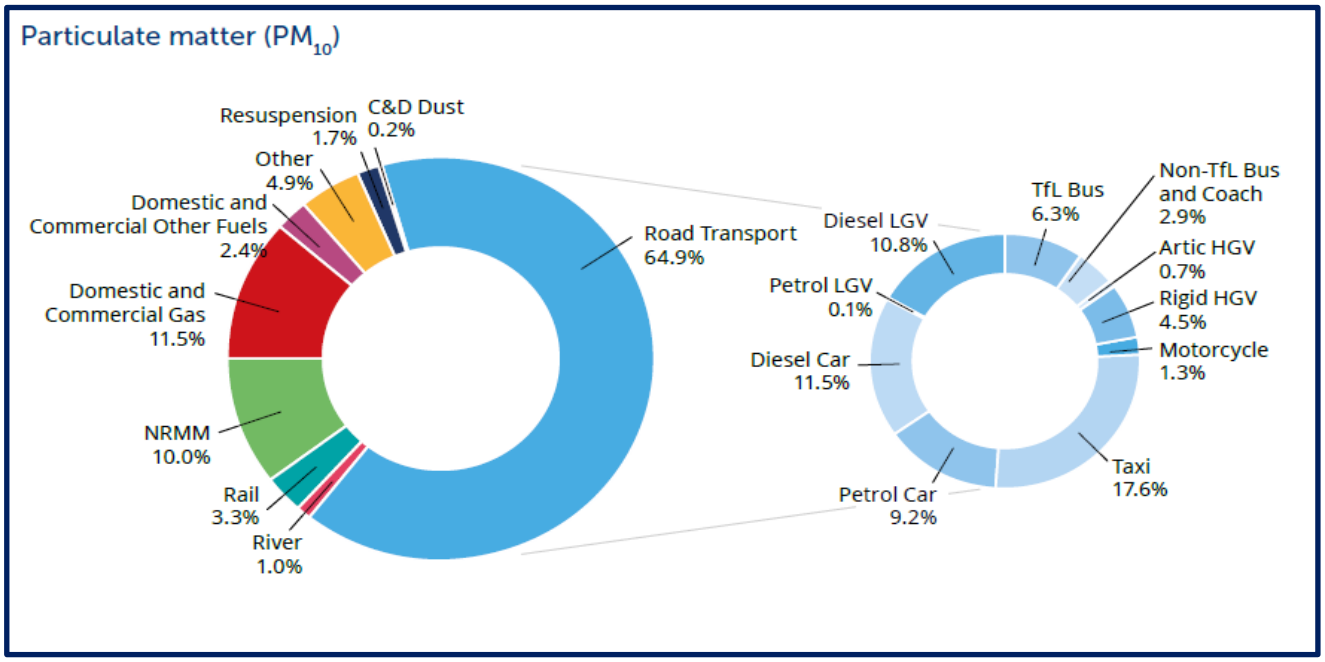
6.1 OBJECTIVES

There are many development sites and infrastructure projects operating across the City, that can result in the generation of dust and particles (PM10 and PM2.5) from site activities and Nitrogen Oxides (NOx) from exhaust emissions from onsite and offsite construction machinery. Westminster has designated a borough wide Air quality Management area for both PM10 and Nitrogen Dioxide (NO2) as measured concentration of these air pollutants are in excess of the National Air Quality Objectives

The graphs below show the source apportionment for Nitrogen Dioxide and Particulate Matter in Westminster. Demolition, construction and new development contributes to a number of these sources, from road transport emissions to emissions related to Non Road Mobile Machinery (NRMM).

In the future, the proportion of emission related to private transport usage is expected to decline as policies such as the Ultra Low Emission Zone and the uptake of ultralow emission vehicles (including electric vehicles); as a result the proportion of emissions related to the built environment and to construction and development may increase. This chapter provides requirements for developers to help them ensure that the impacts of construction are managed, so that any emissions of dust particles and NOx are minimised, to reduce any impacts on local air quality and amenity.





6.2 REGULATORY OVERVIEW

The main regulatory controls over dust are the 'statutory nuisance' provisions contained in the Environmental Protection Act 1990. Dust can give rise to a statutory nuisance if it is considered to be 'prejudicial to health or a nuisance'. Smoke can also result in a statutory nuisance. Dark smoke for example from burning waste or materials on site is not permissible and is controlled by the Clean Air Act 1993.

The Environment Act 1995 required that, under the Local Air Quality Management (LAQM) regime, every local authority review the air quality within its area. Where air quality objectives are not achieved, an Air Quality Management Area (AQMA) had to be designated and an Air Quality Action Plan (AQAP) implemented. Westminster has designated a borough wide AQMA for fine particulate matter and nitrogen dioxide. The Council's Air Quality Action Plan is available on Westminster's website.

The Pollution Prevention and Control Act 1999 and The Environmental Permitting (England and Wales) Regulations 2016 require site operators to hold environmental permits for specific site operations and equipment. Conditions in the permit set best practice methods to control emissions to air.

Vehicle emissions are regulated through the Road Vehicles (Construction and Use) (Amendment) Regulations 2012, the Motor Vehicles (Type Approval) (Great Britain) Regulations 2009 made under the Road Traffic Act 1988, and The Non-Road Mobile Machinery (Emission of Gaseous and Particulate Matter) Regulations 1999 as amended. Further amendments implement the European Directives on vehicle emissions known as the EURO standards. The EURO standards set emission limits for several pollutants from different types of vehicles. Construction vehicles will be required to comply with relevant EURO standards and Transport for London's Low Emission Zone and the Ultra-Low Emissions Zone controls.

Vehicle emissions are also controlled through the MOT. All vehicles used by contractors must comply with MOT emission standards at all times. Vehicle owners can be prosecuted if their vehicle is proven to have emissions in excess of the standards. The Vehicle Excise Duty (Reduced Pollution) (Amendment) Regulations 2003 enable HGVs meeting certain particulate emission standards to qualify for a Reduced Pollution Certificate.

Non road vehicles emissions are regulated through the Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) Regulations 1999 (SI 1999/1053) and its amendments. The Regulations apply to new engines to be installed in non-road mobile machinery, intended and suited to move, or to be moved on the ground, either on or off the road.

Mayor of London Special Policy Guidance (SPG) The Control of Dust and Emissions from Construction and Demolition Activities, sets out measures that sites can implement to reduce and monitor their impacts to Local Air Quality. Good practice measures to control dust, PM10 and NOx are based on a risk assessment approach.

6.3 DUST AND AIR POLLUTION CONTROL

The developer's nominated representative will be required to produce a **site-specific** Air Quality Dust Management Plan (AQDMP), which forms part of the SEMP or CMP. The plan must set out how the site is to control, limit and monitor dust and air pollution from demolition and construction activities, as far as is reasonably practicable, so that any impacts to residents and other dust sensitive receptors are minimised.

Specific guidance relating to the content of an Air Quality Dust Management Plan is available on Westminster's website.

Training

All staff should provide training on onsite pollution policy, perhaps as part of induction training. For Level 1 & 2 projects at least one named individual or post should be given the responsibility for implementing dust and emission monitoring and control measures across the site and implementing any required remediation measures. All personnel undertaking dust PM10 monitoring shall be sufficiently competent; as a minimum such personnel shall be a full or associate member of the Institute of Air quality Management unless otherwise agreed with the Council in writing.

6.4 AIR QUALITY DUST MANAGEMENT PLAN

All sites must ensure that all best practice mitigation measures are taken to avoid creating dust and air pollution and comply with the latest version of the Mayor of London's Supplementary Planning Guidance on 'The Control of Dust and Emissions during Construction and Demolition'. Consideration as to how this will be achieved should be given at the earliest possible stage of project planning.

All projects must provide a site plan that locates the site, the site setup, including location of welfare facilities, storage areas and access points. The location of dust sensitive receptors should be included.

All sites should provide an overview of the proposed demolition and construction methodology and best practice mitigation measures, which will be implemented onsite to mitigate and reduce any impacts to neighbours.

The Air Quality Dust Management Plan should include an Air Quality (Dust) Risk Assessment (as set out in the Mayor's Planning Guidance), a timetable of construction and demolition activities, proposed dust and emissions control measures and the dust and air quality monitoring procedures. These measures will be based on those set out in the Mayor's Supplementary Planning Guidance.

The approved AQDMP will be complied with thereafter and should be kept under review to address any changes in the demolition / construction timetable or associated dust, PM10 and nitrogen dioxide emitting activities.

It is recognised that the magnitude of impacts will vary from project to project depending on its scale, therefore there is no requirement for level 3 and basement projects to undertake the risk assessment although the appropriate mitigation measures set out in the Mayors Guidance should be incorporated into an air quality dust management plan.

6.5 ON ROAD VEHICLE EMISSIONS

Measures that will be required for limiting emissions from on road vehicles onsite will include the following as appropriate and as far as reasonably practicable:

All projects are required to:

- Ensure that all on road vehicles comply with the relevant Euro standards as set out by TFL London Low Emission Zone and Ultra Low Emission Zone.
- Where practicable encourage the use of ultralow emission vehicles to make deliveries. Level 1 projects are strongly encouraged to set targets for the use of ultralow emission vehicles; the requirements for ultralow vehicle usage for the High Speed 2 project (see here for details) is one example developers can follow.
- Encourage site workers to travel to and from site using sustainable transport methods
- Consolidate deliveries to avoid unnecessary vehicle trips, maximise vehicle utilisation by ensuring full loading and efficient routing
- Ensuring that the engines of all vehicles are not left running unnecessarily to prevent exhaust emissions (and noise). It is an offence under Regulation 98 of the Road Vehicles (Construction and Use) Regulations 1986 to leave a vehicle engine idling unnecessarily whilst stationery and Westminster has authorised its Traffic Marshalls to issue Fixed Penalty Notices to drivers who allow their vehicle engines to run unnecessarily while the vehicle is stationary. A driver may be asked to

switch off their engine if it is believed a stationary idling offence (under reg.98 of the Road Vehicles (Construction and Use) (Amended) Regulations 2003 (SI 1986/1806) is being committed.
- Site haul routes away from the site boundary and potentially sensitive receptors such as houses, schools and hospitals.

6.6 ONSITE VEHICLES AND EQUIPMENT

All projects are required to incorporate measures to limit emissions from onsite vehicles and equipment will include the following as appropriate and as far as reasonably practicable:

- Where possible sites should ensure that a suitable electrical supply is available prior to commencing to avoid the use of generators.
- Sites should use electrical/battery powered equipment to avoid the use of diesel and petrol.
- Where electrically powered equipment is not available sites should use low emission vehicles and plant fitted with catalysts, diesel particulate filters or similar devices.
- Plant and equipment should only be operated using ultra low sulphur fuels.
- All plant should be well maintained, with routine servicing of plant and vehicles to be completed in accordance with the manufacturer's recommendations and records maintained for the work undertaken.

6.7 NON-ROAD MOBILE MACHINERY (NRMM)

All NRMM of net power between 37kW and 560kW operating on Level 1, 2 and basement projects will be required to meet the standards based upon the engine emissions standards in EU Directive 97/68/EC and its subsequent amendments. This will apply to both variable and constant speed engines for both NOx and PM10.

The GLA currently operates the NRMM standards for sites across London. Full details of the current requirements and future changes to emissions standards for NRMM can be found on the GLA website.

However, developers are required to meet the **Central Activity Zone (CAZ)** requirements irrespective of where in Westminster their development is located. As a result, the standards set out in the GLA policy should be interpreted as follows for sites in Westminster (GLA wording with italics representing Westminster-specific policy):

- The current standards are stage IV for construction machinery operating in the Central Activities Zone and Opportunity Areas (including Canary Wharf) *and Westminster,* and stage IIIB in the rest of London.
- Stages IIIB and IV have not been defined for machines with constant speed engines, such as generators. This means that these machines will need to meet stage V.
- Stage IV has also not been directly defined for variable speed engines smaller than 56 kW. In most

cases these engines will need to meet stage V if they are in the Central Activities Zone and Opportunity Areas (OAs), *and in Westminster*.

Emission standards for NRMM are set to improve over time therefore all level 1, 2 and Basement projects will have to meet the future Central Activities Zone and Opportunity Areas emission limits when required, regardless of location within Westminster.

Machinery that does not meet the emissions standard will need to retrofit additional pollution control equipment as an alternative to replacing the machine or the engine.

There are a variety of retrofit systems available and some are more effective than others. To ensure the systems fitted are suitable for the NRMM Low Emission Zone we will only accept retrofits listed on the Energy Saving Trust website.

In limited circumstances exemptions for individual machines that do not meet the required emission standards and cannot not been retrofitted will need to apply for an exemption. Applications for an exception should be made and agreed with the Greater London Authority, although WCC requires where practicable, all projects to meet the emissions limits set out above.

All Level 1, 2 and Basement projects must be registered on the London NRMM Register.

6.8 MONITORING

All level 1 and 2 projects will be required to install continuous Air quality PM10 Monitoring systems, combined with a real-time alarm system, with the specific details to be agreed on a site-by-site basis with the Council. The location of monitors is to be agreed prior to installation although should be placed in locations that are sensitive to dust and PM10. Level 1 and 2 projects will be required to set and agree trigger and action thresholds of PM10 and have a procedure agreed with the Council should these thresholds be exceeded.

Level 1 projects will be required to install continuous air quality PM2.5 monitoring system, combined with a real-time alarm system. Trigger and action thresholds will need to be agreed with the council.

Trigger and action levels are set out below.

	Threshold PM10	**Threshold** PM2.5	**Average period**
Action	190μg/m^3	To Be Agreed	1 hour mean
Trigger	150μg/m^3	To Be Agreed	15-min mean

All measurements made on automatic continuous PM10 monitors that comply with the MCERTS Indicative Ambient Particulate Monitors standard or be subject to independent verification of

performance as a minimum.

Basement projects typically are not required to install a continuous Dust PM10 monitoring system combined with a real-time alarm system. Basement developments should contact Westminster City Council to discuss any monitoring requirements.

All sites should undertake regular proactive informal visual assessment checks and monitoring of dust and report the findings to the Council. The frequency of these assessments should be increased looking at the proposed work programme to identifying work packages that are likely to cause significant dust and PM10/PM2.5 emissions, where there are prolonged dry and or windy conditions and where complaints of dust and PM10/PM2.5 are received.

In the event that the trigger level is for PM10 and or PM2.5 is being breached the developers should review the current working practices and mitigation measures to ensure best practice measures are in place.

In the event that the Action level is for PM10 and or PM2.5 is being breached developers should stop work immediately and ensure best practice measures are in place before restarting.

Reporting

All projects that are required to install continuous Air quality PM10/PM2.5 monitoring system, will be required to report all data monthly unless otherwise agreed with the Council. Where Site action levels have been exceeded these should be reported along with the suspected cause of exceedances, and details of measures taken to prevent the exceedance reoccurring to the Council within **two working days.**

All projects are required to maintain a log of complaints related to dust and to air pollution that should be made available on request by the Council.

6.9 OTHER SITE EMISSIONS TO AIR

The developer's nominated representative must ensure compliance with the provisions of the Clean Air Act 1993, the Health and Safety at Work etc Act 1974, the Environmental Protection Act 1990 and the Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) Regulations 1999 (SI 1999/1053).

The developer's nominated representative must also ensure compliance with the Control of Substances Hazardous to Health (COSHH) Regulations 2002, as amended. The developer/contractor must comply with HSE Guidance Note EH 40 on Workplace Exposure Limits (current version is EH40/2005, the second edition of which was published in 2011).

The developer/contractor must ensure compliance with the lead-in-air standards, which are set out in

Appendix 1 of the Health and Safety Commission Approved Code of Practice: The Control of Lead at Works Regulations 2002.

The developer's nominated representative must ensure that all necessary precautions are taken to prevent the occurrence of smoke emissions or fumes from site plant or stored fuel oils for safety reasons and to prevent such emissions or fumes drifting into sensitive receptor areas. In particular, plant should be well maintained, and measures taken to ensure that it is not left running for long periods when not directly in use

The developer's representative is required to ensure that any process and or equipment that require an environmental permit under The Pollution Prevention and Control Act 1999 and The Environmental Permitting (England and Wales) Regulations 2016 are operated in accordance with the conditions of that permit.

6.10 SPECIAL PRECAUTIONS FOR ASBESTOS

For sites with potentially asbestos-containing materials, a separate Air Quality Statement will need to be produced by a specialist asbestos treatment contractor.

Special precautions must be taken if materials containing asbestos are encountered. The contractor must comply with The Control of Asbestos Regulations 2012 – (SI 2012/632). The Regulations prohibit the importation, supply and use of all forms of asbestos and introduce a duty to manage asbestos in non-domestic premises. HSE provide a step-by-step online guide to understanding this duty called 'Managing my Asbestos'.

The contractor must adhere to the exposure limits and measurement methods for asbestos, which are set out in the Health and Safety Executive (HSE) Guidance Note EH10 Asbestos Exposure Limits and Measurements of Airborne Dust Concentrations 2001. The contractor must comply with:

- The most recent versions of relevant Health and Safety Commission Approved Codes of Practice (ACOP) on asbestos (at the time of writing there is a proposal to consolidate 'The management of asbestos in non-domestic premises' (L127) and 'Work with materials containing asbestos' (L143) into a single revised ACOP).
- The COSHH Regulations 2002 (SI 2002/2677).

Measures for managing asbestos in alteration, demolition and excavation works will include:

a) employing competent contractors to carry out alteration and demolition works;

b) contractors implementing a procedure for dealing with suspect materials exposed requiring sampling and analysis by an independent specialist consultant;

c) formal exchange of information before start of work, including relevant information from the Asbestos Register to clearly identify location of asbestos-containing materials; and

d) method statements for any works in the vicinity of asbestos-containing materials to avoid any disturbance to such materials which are not to be removed.

Measures for managing work involving asbestos-containing materials encountered in construction will include:

a) appointment of a specialist consultant independent of the asbestos treatment contractor;

b) ensuring any work with asbestos-containing materials is notified to the Health & Safety Executive;

c) ensuring any work with asbestos-containing materials is carried out by licensed specialist asbestos treatment contractors in accordance with Asbestos (Licensing) Regulations 1983 (SI 1983/1649) as amended in 1998 (SI 1998/3233);

d) requiring method statement defining detailed control measures to be produced by the specialist asbestos treatment contractor and approved by the independent specialist consultant;

e) air sample monitoring by the independent specialist consultant of work to ensure required air quality standards are achieved; and

f) disposal of asbestos-containing materials to licensed waste sites in accordance with Special Wastes Regulations 1996 (SI 1976/972).

7 WASTE MANAGEMENT

This chapter covers waste management requirements. Any waste arising from the site must be properly segregated, recorded and dealt with in accordance with associated legislation. Opportunities for re-using or recycling construction and demolition waste should be explored and implemented as far as reasonably practicable.

7.1 OBJECTIVES

Waste from construction, demolition and excavation (CDE) is by far the biggest waste stream in London with well over 18million tonnes produced annually. Its impact on the environment through handling, transport, treatment and disposal is significant. Efforts should be made by contractors to ensure this is minimised and mitigated.

The contractor will be required to carry out the works so that the amount of spoil and waste (including wastewater draining into groundwater, production waters and run-off) to be disposed of is minimised, and that any waste arising from the site is properly segregated, categorised and dealt with in accordance with the waste hierarchy (see below) and relevant legislation and guidance.

The developer's nominated representative will ensure compliance with the duty of care placed on all parties to take responsibility for protecting the interests and safety of others from the potential impacts of handling, storing, transporting, treating and depositing of CDE.

Facilities that treat CDE should be regularly audited and the developer and its contractors should have knowledge of how the facilities used operate which includes how the operators ensure compliance with waste management legislation and regulators. This should ideally be in place before waste from the project is sent to the facility. Transport contractors should have proven track record in dealing with CDE and be to provide all necessary licences, permits and waste handling documentation (e.g. waste transfer notes etc.) prior to work on the project starting.

Ensure that a robust waste management plan including realistic and measurable KPIs is in place for the project. The waste management plan should be reviewed as appropriate and measures are taken to ensure continuous improvement of performance.

7.2 REGULATORY OVERVIEW

The revised The Waste (England and Wales) Regulations 2011 provides the legislative framework for the collection, transport, recovery and disposal of waste. It introduced a waste management hierarchy according to which waste is to be managed. When waste is generated, the directive states that it is dealt

with in a hierarchical fashion, favouring waste prevention (reduction) as the priority, then re-use, then recycling, then recovery such as energy recovery, and last of all disposal (usually to landfill).

Waste hierarchy

The transport, handling, treatment and disposal of waste requires a permit under UK legislation with the principal objective of preventing harm to human health and the environment. These requirements are applied in England through the Environmental Permitting (England and Wales) Regulations 2010. Every consignment of waste removed from the project site requires a Waste Transfer Note (WTN) to be issued. Multiple consignments are usually covered by a single WTN that covers a specific time period.

Key relevant requirements are as follows:

- Waste, once segregated into various streams, must be collected and stored separately, so that it can be re-used or recycled as much as possible.
- Waste must be disposed of at a facility/site licensed to accept such waste (the nearer to site the better to follow the proximity principle).
- Waste may be transported off-site only by (sub) contractors with a waste carrier's registration.
- Ensure a detailed waste management administration is kept that allows tracking of waste flows, including all Waste Transfer Notes issued when waste changes ownership.
- Transport and disposal of hazardous waste is subject to separate legislation which requires specialist handling and treatment/disposal arrangements.

Legislation classes CDE as 'controlled waste' and hence the duty of care provisions as set out in Section 34 of the Environmental Protection Act 1990 apply. Under this legislation, it is an offence to handle or dispose of controlled waste without a waste management licence or, in contravention of a licence, handle or dispose of waste in a manner likely to cause pollution or harm to health. In addition, under the Control of Pollution (Amendment) Act 1989, it is an offence to transport controlled waste unless registered with the Environment Agency. It is part of the duty of care to ensure that all waste carriers

(including sub-contractors) employed are registered.

The duty of care applies to everyone who produces, imports, carries, keeps, treats or disposes of controlled waste. Materials suitable for direct reuse or recycling such as scrap metal or broken out concrete, are also classified as waste and will be subject to the waste management legislation and the duty of care. Please see The Duty of Care Code of Practice.

Please contact the Environment Agency if further guidance is required.

The Producer Responsibility Obligations (Packaging Waste) 2007 (as amended), state that companies who manufacture, convert, pack/fill, sell or import more than 50 tonnes of packaging or packaging material per year, and have a turnover of more than £2m per year, must register with the environmental regulator (e.g. Environment Agency) and a registered packaging compliance scheme. Those registering with the regulator must achieve targets for recycling and recovering packaging waste and submit an annual certificate of compliance. A new extended producer responsibility (EPR) scheme for packaging waste is being introduced under the Resources and Waste Strategy (RWS) which will replace the current scheme. It will include EPR for certain elements of CDE which will change how this waste can be handled and disposed of.

The RWS, as enabled by the Environment Bill 2019, will bring major changes to the way waste is managed in the UK.

A scheme similar to packaging applies to all waste electrical and electronic equipment (WEEE). The Waste Electrical and Electronic Equipment Regulations 2013 (as amended) is the underpinning UK legislation.

You are required to ensure that any waste electrical and electronic equipment (WEEE) originating on-site is kept segregated and collected for recycling by a licensed contractor or WEEE compliance scheme.

The Pollution Prevention and Control (PPC) Regulations 2000 (SI 2000/1973) were replaced by on 6 April 2008 by the Environmental Permitting Regulations 2007 (EPR), which in turn were replaced by the EPR 2010.

The new Regulations bring together the PPC, Waste Management and groundwater and discharge consents licensing and permitting into one regulatory system.

Some wastes are considered to present a particularly high risk to health or the environment and require special handling and treatment. The Hazardous Waste Regulations, which came into force in July 2005, set out the regime for the control and tracking of hazardous waste in England and Wales. Under these Regulations, a process of registration of hazardous waste producers and a new system for recording the movement of waste was introduced.

Specific licensing, handling and disposal arrangements apply to asbestos waste.

The identification and cleanup of contaminated land and soil is governed by the Environmental Protection Act 1990 (Part IIA) and statutory regulations issued under the Act. The accompanying Contaminated Land (England) Regulations 2000 as amended (SI 2000/227) state the conditions under which land is defined as contaminated. The contractor will develop mitigation measures in accordance with these regulations.

The Environmental Protection Act 1990 (Part IIA) came into force in April 2000 by enactment of Section 57 of the Environment Act 1995. The regime provides an explicit statutory definition of contaminated land, focusing on risks arising in the context of the current use and circumstances of land. It also provides detailed rules for assigning liabilities for contaminated land, based on the "polluter pays" principle.

The developer's nominated representatives must comply with the Construction (Design and Management) Regulations 1994 (SI 1994/3140) and the Construction (Design and Management) Regulations 2015 (SI 2015/51) to ensure that adequate measures of health, safety and welfare for those directly or indirectly associated with the works are maintained at all times.

The Aggregates Levy was introduced in April 2002 to reduce the demand on virgin aggregate resources and therefore reduce the environmental impact of the aggregate extractive industry. The levy is aimed primarily at commercial aggregate producers and includes mining, quarrying and dredging. Individual developments must be judged against the terms provided in the HM Customs and Excise Notice AGL1 (April 2011, or as updated) to determine whether the works fall within the scope of the levy.

The Landfill Tax was introduced in 1996 by the Treasury as an environmental tax to help reduce the amount of waste going to landfill. Landfill tax is charged on every tonne of waste disposed of to landfill in the UK. Inert waste, such as soil, rubble etc., is charged at a lower rate than biologically active waste which is charged at the standard rate.

7.3 SITE WASTE MANAGEMENT PLANS

Central government revoked the Site Waste Management Plan Regulations 2008 on 1st December 2013. These required a site waste management plan (SWMP) to be produced for construction projects with a cost greater than £300,000 excluding VAT (this includes all planning, design, management or other work involved in a project until the end of the construction phase). The aim was to reduce the amount of waste produced on construction sites and to prevent fly-tipping.

The City Council promotes efficient resource management including waste minimisation, reuse and recycling. The Council will therefore continue to require production of an SWMP for all construction and demolition projects with a cost greater than £300,000. A SWMP will also be required for all basement developments. The SWMP should form a part of the SEMP.

All Level 1 and 2 projects, and any basement development, should develop a SWMP that:

- Sets project specific waste targets aiming for less than 13.3m3 or 11.1 tonnes per 100sqm (gross

internal floor area) with an aspiration towards achieving a more stringent target of less than 7.5m3 or 6.5 tonnes per 100sqm where feasible.

- Minimises the amount of waste sent to landfill, ensuring that at least 95% of non- hazardous construction and demolition waste (in m3) is diverted from landfill (this will also enable the scheme to score BREEAM waste credits).

Guidance on producing a SWMP, including a SWMP template, is provided by the Waste and Resources Action Programme (WRAP).

WRAP's Halving Waste to Landfill commitment to significantly reduced the amount of CDE sent to landfill through a successfully stimulated industry wide discussion on CDE. By 2012 over 800 companies had signed the commitment to reduce waste diverting 5 million tonnes of waste per year from landfill and saving £400 million per year.

The section below on reuse of construction materials highlights key waste reduction and reuse measures to consider in the SWMP. The SMARTStart waste benchmarking/monitoring tool provides a simple method for recording information about the materials that leave the site as waste.

More information is also available via the Green Construction Board (GCB) which is the sustainability workstream of the Construction Leadership Council (CLC).

7.4 MANAGING CDE

Waste storage

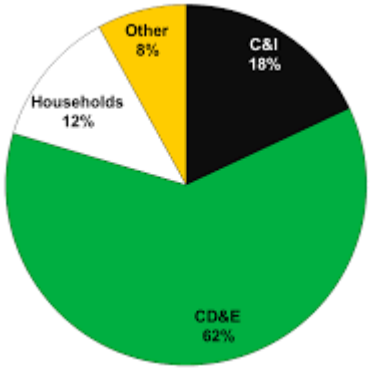
CDE should be managed on-site as much as possible avoiding the need for off-site treatment or disposal. The developer's nominated representative must agree arrangements for storage and disposal of all waste including CDE with the City Council prior to commencement of the development. Large sites might benefit from an on-site waste transfer station, subject to a regulator (e.g. Environment Agency) licences. Adequate storage provision should also include contingency capacity to cope with interruptions in the haulage/transport of waste off-site. There are special requirements when hazardous waste such as asbestos are to be stored prior to collection and disposal.

Health and Safety Guidance 51 provides guidance on the storage of flammable liquids.

Consolidation of vehicle movement and reducing transport emissions

CDE is the largest waste stream generated in UK and the London context is no exception.

Most waste related traffic movements in London carry CDE and its impact on air pollution, traffic safety and congestion is significant. London's poor air quality issues are mainly caused by traffic emissions. The City Council encourages site contractors to use innovative approaches around consolidating waste



and delivery related vehicle movements, avoiding duplicate vehicle movements and inefficient single load trips. The City Council encourages contractors to use alternative modes of hauling CDE where possible, for example using barges or trains. For further information see:

- Crossrail will move five million tonnes of earth via river - Crossrail
- Maximising Excavated Waste Removal via a Barge Best Practice Hub (ccsbestpractice.org.uk)

Road-based transport options for CDE should use zero (tailpipe) emissions vehicles. Where this is not possible (yet) low emission vehicles that comply with local air quality regulation should be used. Contractors and developers are encouraged to keep sustainable transport options under review throughout the project duration.

Waste prevention and reduction

The prevention of waste is the best performing option from an environmental perspective and outperforms waste recycling, recovery and disposal options. The construction industry is well known for its significant use of resources and associated carbon emissions. Much environmental gain can be derived from reducing the quantities of waste produced by projects. How this is achieved will vary from project to project, but a robust data collection and management system is key in ensuring areas of improvement around this are identified.

Measures to reduce waste arising during construction or demolition should include the following, where practicable. Developers and contractors should work together to:

- plan early and define targets and processes in a SWMP;
- allocate sufficient space to be able to separate materials and store them separately;
- allocate sufficient storage space for materials which can be reused to avoid disposal;
- avoid over-ordering of materials;
- avoid damage on delivery by using a walled laid-out storage and off-loading area;
- use prefabrication, if feasible;
- avoid repetitive handling;
- salvage topsoil for re-use; and
- reduce municipal waste from temporary welfare accommodation on site by avoiding single use or

excessively packaged items.

Packaging materials supplied to a construction site might include pallets, cardboard boxes, plastic wrapping, barrels and containers. Waste generation and waste disposal costs can be reduced if a supplier is selected that seeks to avoid excessive use of packaging and is prepared to take back reusable packaging and surplus materials for reuse.

It is important to audit waste management practices on site, and contractors should monitor waste practices throughout the construction phase as part of their SEMP.

There are specific guides available on waste reduction in the construction sector:

- Improving waste management on construction site – best practice guide 0.pdf (zerowastescotland.org.uk)
- ZAW-Report-Final-Draft-25-February-2020.pdf (constructionleadershipcouncil.co.uk)
- Case-Study-Crossrail.pdf (ccsbestpractice.org.uk)

Reuse of waste

The London Plan 2021 sets a target of 95% for recycling/reuse/recovery of construction and demolition (C&D) waste and the beneficial use[5] of 95% excavation (E) waste. City Plan policy 37 requires developers to achieve these targets.

The developer's nominated representative should ensure, in partnership with its contractor(s) that, wherever possible, waste is used on-site avoiding the need for transportation elsewhere. Where this is not possible waste should be segregated into designated streams that can be easily reused, recycled or recovered in order to maximise reuse and recycling of CDE within the development.

Demolition arisings and waste will provide significant opportunity to reuse, recycle, recover when it is segregated into designated material streams on-site. The following measures should, wherever practicable, be implemented in respect of demolition activities on site:

- construct projects which can be easily dismantled, reused and recycled after their useful life and reduce the number of harmful chemicals used in construction materials. Construct with reused or recycled materials whenever possible.
- where possible concrete, brick from walls, foundations, terraces, bases etc. should be reused directly when possible. When this is not possible it should be crushed (subject to the appropriate licences) and reused for temporary site roads and/or capping of permanent roads
- suitable inert earth spoil should be stockpiled for reuse in landscaping or general fill; (see https://www.claire.co.uk/home/about-us)

[5] , beneficial use of excavation waste includes using the material as a resource within the construction of the proposed development, or in other local construction projects, or using the material in habitat creation, flood defences or landfill restoration. In line with circular economy principles, the management of excavation waste should be focused on-site or within local projects.

- bituminous road surfacing should be crushed for reuse as temporary footpaths on site;
- existing boundary fence panels should be reused as hardstandings;
- suitable metal components should be segregated for reuse either on-site or elsewhere
- existing strip-out materials should be segregated for resale/reuse off-site.

The reuse of materials will also reduce the number of vehicle movements to the site.

There is further guidance and information on the reuse of CDE available from:

- About | Circuit (circuit-project.eu)

Recycling of waste

CDE often has great potential for recycling after reuse options have been exhausted. Recycling on-site can offer real benefits, not only through better planning and compliance with regulations but also savings in waste disposal charges. There are also several waste and recycling related laws which require organisations to account for their waste, and government initiatives to encourage recycling. This leads to savings on material costs as well as waste disposal charges. For most sites recycling CDE is a relatively simple process and involves segregating waste by designating separate areas or skips/containers for different wastes.

The following measures should, wherever practicable, be implemented on site in respect of recycling CDE:

- Segregate materials for recycling using bespoke areas or containers, which as a minimum should include timber/ wood, plastics, metals, batteries, electrical and electronic appliances, and cardboard packaging;
- Metals are a valuable secondary resource which often attract rebates from the scrap metal recycling industry. Recycling metals has a significant carbon emission advantage.
- Clean wood waste is a sought-after material for the panel board industry, lower grade wood waste is in demand for use in biomass energy generation
- Removed vegetation should be sent for composting;
- Ensure materials are only handled, transported and processed by licensed waste management companies that can provide a full audit trial of the final end-destinations of materials removed
- Ensure recyclable materials are preprocessed within Greater London in line with the London Environment Strategy.
- Apply circular economy principles, including closed-loop recycling, ensuring that recycled materials are used during construction projects by default in order to create a robust market demand for secondary materials made from London's waste. Examples can be found from City of London recycling to be part of riverside refurbishment | Resource Magazine

Recovery of waste

Waste which cannot be reused or recycled should be sent for recovery which uses processes that obtain

further value from the waste e.g. recovering the residual energy content via energy from waste incineration (EFW). For some waste materials recovery is the only viable and sustainable option. The following wastes are examples of what should be considered inside the scope of (energy) recovery:

- Residual waste left after sorting CDE via material recovery facilities (MRF)
- Materials of poor-quality preventing reuse or recycling
- Materials for which no robust and reliable end-markets exist
- Materials that can only be exported for recycling to developing nations where its subsequent processing leads to environmental and ethical issues
- Difficult to recycle composite materials (use of these materials in construction projects should be avoided in the first place)
- Materials containing chemicals that should not re-enter the material use cycle (e.g. legacy materials).
- Wood waste unsuitable for recycling in the panel board industry or for equestrian surfacing e.g. wood treated with certain chemicals
- Certain hazardous waste streams requiring thermal destruction

Ensure waste is only sent to appropriately licensed and R1 rated combustion facilities for energy recovery. When wood waste is sent to biomass fueled power stations for energy generation ensure that the facility is licensed to accept the wood waste category concerned. Never send waste to facilities without a waste management licence and/or integrated pollution and prevention control licence (IPPC), see:

- The R1 Energy Efficiency Formula (ciwm.co.uk)
- Environmental permitting guidance: Integrated pollution prevention and control (IPPC) directive, part A(1) installations and part A(1) mobile plant) - GOV.UK (www.gov.uk)

Disposal of waste

For certain types of waste or residues, disposal (landfill) is the only available option when reuse, recycling or recovery are not suitable. For a few waste streams, such as certain types of contaminated soil, hazardous waste and asbestos, landfill is also the only legally compliant method of disposal. Some wastes, such as plasterboard and liquid waste, are banned from being sent to landfill.

Landfill disposal should be the very last option for waste when all other options or treatment routes have been exhausted. Landfill disposal will continue to play an important role in ensuring certain waste streams are disposed of without harm to the environment. A well-run landfill site ensures that waste is contained permanently, and the possible by-products of its decomposition are captured.

Every tonne of waste disposed of to landfill in the UK attracts landfill tax which increases every year. Inert waste attracts a lower rate of landfill tax than biologically active waste. Landfill tax has allowed the UK to move away from using landfill for mass-disposal of waste and towards higher performing waste treatment options.

Ensure that the landfill receiving your waste is appropriately licensed to accept what you intend to dispose of since acceptance criteria vary per site. Landfill void capacity in the Southeast is diminishing and transport distances to the remaining sites can be significant.

Monitoring of waste

developers or their nominated representative should provide the council with monitoring data on the tonnages and proportion of CDE waste reused, recycled, recovered, put to beneficial use, or disposed of to landfill.

7.5 CONTAMINATED LAND

General

The Contaminated Land Regulations (2006) (as amended) allow the Environment Agency and local authorities to take enforcement action against those responsible for having caused or knowingly permitted the substances, or any of the substances, by reason of which the contaminated land in question is contaminated land (defined in Part IIA of the Environmental Protection Act 1990), to be in, on or under that land; or the owner of that land.

A desk study of any site to be developed should be carried out in order to identify possible areas of contaminated land. The results of the desk study will be used to determine the necessity for any site investigation works and the scope of such works.

The scope of any site investigation works carried out must be enough to determine as far as is reasonably practicable the site conditions and allow for the proper analysis of the ground in terms of contamination and the works which are to be undertaken to remediate the contamination.

Prior to and during construction operations at certain sites it may be necessary to monitor emission of methane gas and other volatile or hazardous gaseous emissions. Should this be the case, the developer's nominated representative will be required to establish a programme of testing for methane and other hazardous gases by a specialist practitioner.

Where contaminated wastes are found to be present, handling and disposal procedures must be proposed by the nominated representative and agreed by the City Council. The contractor will be required to comply with these procedures during site development. Where contaminated wastes are found to be present, the nominated representative will
ensure that a Workers' Safety Information Sheet covering hygiene, work practices, clothing requirements etc. is prominently displayed in rest/mess rooms and washrooms.

Definitions contained within the Contaminated Land (England) Regulations 2006 (SI 2000/227) (as amended), indicate conditions which are deemed to be contaminated and which must be developed in accordance with the Environmental Protection Act (Part IIA) 1990.

The contractor will not be permitted to transport contaminated materials on canals unless appropriate handling facilities and infrastructure are agreed with the Canal & River Trust and provided by the developer.

Empty containers that originally contained Hazardous Waste (waste which is harmful to human health or the environment) must themselves be treated as Hazardous Waste unless they hold less than 0.1% of their original contents. If the contents are of a very toxic or carcinogenic nature, that limit is further reduced to 0.01%. Detailed guidance on the definition and classification of Hazardous Waste is provided in Technical Guidance WM2 from the Environment agency (2013).

Excavation Materials from Contaminated Land

The developer/contractor must comply with any separate special procedures covering the development of contaminated sites.

The contractor must comply with the provisions of the Environmental Protection Act 1990, and the Hazardous Waste (England and Wales) Regulations 2005 (as amended). The removal and disposal of contaminated materials must be conducted under a strict consignment note system. Disposal sites must be agreed with the Environmental Agency.

The contractor must take measures to prevent the contamination of surface watercourses and groundwater during excavation works (see requirements of Chapter 10).

Demolition involving hazardous materials

The developer/contractor must comply with the provisions of the Environmental Protection Act 1990 and, if applicable, the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

The developer/contractor must comply with the COSHH Regulations 2002 as amended and HSE Guidance Note EH 40/99 Occupational Exposure Limits 2002 to ensure that contaminated materials are handled and disposed of safely and properly.

The developer/contractor must comply with HSE Guidance Note GS 29/1 Health and Safety in Demolition Work: Part 1 (Preparation and Planning), Part 2 (Legislation) Part 3 (Techniques), and

Part 4 (Health Hazards) and shall ensure that contaminated materials are handled and disposed of safely and properly.

If the works involve the removal of asbestos or the demolition of premises containing asbestos, the developer/contractor shall comply with the Control of Asbestos Regulations 2006 and the HSE Approved Code of Practice and Guidance Note L28 "Work with Asbestos Insulation, Asbestos Coating and Asbestos Insulating Board". The regulations include detailed advice on waste disposal:

- in the case of crocidolite, the receptacles shall be marked "contains crocidolite/blue asbestos"
- asbestos waste must be double sealed in receptacles which prevent the escape of dust
- the receptacle must be labelled in accordance with the details in the regulations

The disposal of waste materials containing asbestos to a licensed landfill site for final disposal must be arranged in advance. Disposal sites shall be agreed by the developer/contractor with the City Council and the Environment Agency. Please note that not all landfill sites are licensed to accept asbestos for disposal. Ensure that any waste transfer station receiving asbestos waste, prior to landfill disposal, is suitably licensed to handle this waste. The developer/contractor must obtain a licence from HSE to remove asbestos insulation or coating.

If materials containing lead are encountered, the developer/contractor must comply with The Control of Lead at Work Regulations 2002 (SI 2002/2676) and the associated Health and Safety Commission (HSC) Approved Code of Practice to ensure that the health, safety and welfare of those directly and indirectly exposed to lead is not compromised and that contaminated materials are handled and disposed of safely and properly.

8 WATER POLLUTION AND FLOOD RISK

This chapter covers requirements for protecting surface and groundwater from pollution and other impacts; minimising the amounts of wastewater that need to be discharged; and ensuring that flood risk is managed safely throughout the construction period.

8.1 OBJECTIVES

The developer's nominated representative must work with all involved on a site to develop and implement effective working methods to protect surface and groundwater from pollution and other adverse impacts including changes to water levels, flows and general water quality; and to protect against flooding. This will be completed in accordance with relevant legislative requirements and appropriate industry guidance.

8.2 REGULATORY OVERVIEW

Water Resources Act 1991

The Water Resources Act 1991 (s.85) establishes that it is an offence to knowingly discharge any poisonous, noxious or polluting matter (liquid or solid) or solid waste matter to any controlled waters (including either surface or groundwater) without a discharge consent issued by the Environment Agency (under Part III Ch. II of the Water Resources Act 1991). Polluting materials include silt, cement, concrete, oil, petroleum spirit, sewage or other debris and waste materials. 'Controlled waters' include all watercourses and water contained in underground strata. Road drains and surface water gullies generally discharge into controlled waters and should be treated as such.

In addition, general good site management practice is essential to protect surface water and groundwater from accidental contamination.

Under the Water Industry Act 1991, it is an offence to discharge trade effluent to the public sewer or to a sewage treatment works without the consent of the Water Authority.

Petroleum Regulations

There is a range of legislative measures that control the storage, transport and use of petroleum products in order to ensure safety to both people and property and the environment.

Storage of flammable petroleum spirits (including diesel oil, petrol, benzene) is regulated by licences issued by the London Fire and Emergency Planning Authority under provisions in the Petroleum (Consolidation) Act 1928 (as amended by Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) and Petroleum (Transfer of Licences) Act 1936. A petroleum licence is required for storage of petroleum spirits at quantities above 15 litres. In seeking a licence to store quantities of petroleum spirit the applicant must demonstrate to the relevant authority that acceptable methods of storage will be put in place. Acceptable methods of storage are regulated under a range of legislative and guidance measures. These are summarised in Table 3 below.

TABLE 3: GUIDANCE ON THE STORAGE OF PETROLEUM PRODUCTS

Title of Legislation / Guidance	Available From
Petroleum (Consolidation) Act 1928	Stationary Office/ www.legislation.gov.uk
Petroleum (Transfer of Licences) Act 1936	Stationary Office/ www.legislation.gov.uk
Petroleum Spirit (Plastic Containers) Regulations 1982	Stationary Office/ www.legislation.gov.uk
Petroleum Spirit (Motor Vehicles) Regulations 1929	Stationary Office/ www.legislation.gov.uk
Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1992	Health and Safety Executive (HSE)
Health and Safety Guidance Note HS(G)51 The Storage of Flammable Liquids in Containers	Health and Safety Executive (HSE)
Health and Safety Guidance Note HS(G)140 The Safe Use and Handling of Flammable Liquids	Health and Safety Executive (HSE)

Control of Pollution (Oil Storage) Regulations 2001

The Control of Pollution (Oil Storage) Regulations 2001 came into force in March 2003 with the objective of minimising the pollution of controlled waters resulting from spillage or leaking of oil. The Regulations impose a requirement on anyone storing more than 200 litres of oil-based liquids outdoors to have in place storage facilities that comply with a comprehensive range of requirements, including but not limited to:

- The oil container must be of sufficient strength to ensure it is unlikely to leak.
- The container must be situated within a secondary containment system (SCS), which will prevent the release of any leaked oil.

For further detail on the requirements of the regulations it is advised that guidance is sought from the Environment Agency.

8.3 MARINE MANAGEMENT

Marine Planning

The Marine Management Organisation (MMO) is the marine planning authority for England, responsible for preparing marine plans for English inshore and offshore waters. At its landward extent, a marine plan will apply up to the mean high-water springs mark, which includes the tidal extent of any rivers. As marine plan boundaries extend up to the level of the mean high-water spring tides mark, there will be an overlap with terrestrial plans which generally extend to the mean low water springs mark. Marine plans will inform and guide decision makers on development in marine and coastal areas. The MMO is currently in the process of developing marine plans for the south inshore and offshore plan areas and has a requirement to develop plans for the remaining 7 marine plan areas by 2021.

For marine and coastal areas where a marine plan is not currently in place, the Marine Policy Statement provides guidance on any planning activity that includes a section of coastline or tidal river. All public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area must do so in accordance with the Marine and Coastal Access Act and the UK Marine Policy Statement unless relevant considerations indicate otherwise. Further online guidance can be obtained from the Marine Management Organisation and the Planning Advisory Service soundness self-assessment checklist.

Marine Licensing

Activities taking place below the mean high-water mark may require a marine licence in accordance with the Marine and Coastal Access Act (MCAA) 2009. Such activities include the construction, alteration or improvement of any works, dredging, or a deposit or removal of a substance or object below the mean high-water springs mark or in any tidal river to the extent of the tidal influence. You can also apply to the MMO for consent under the Electricity Act 1989 (as amended) for offshore generating stations between 1 and 100 megawatts in England and parts of Wales. The MMO is also the authority responsible for processing and determining harbour orders in England, and for some ports in Wales, and for granting consent under various local Acts and orders regarding harbours. A wildlife licence is also required for activities that that would affect a UK or European protected marine species.

8.4 DISPOSAL OF SEEPAGE, WASTEWATER AND GROUND WATER

Whenever possible, the contractor must seek to minimise the amounts of wastewater that need to be discharged and find alternative means of disposal. Such alternatives might include discharge to the foul sewer, subject to trade effluent obligations (Water Industry Act 1991), or disposal through a licensed waste management contractor in accordance with duty of care obligations. On the assumption that some wastewaters will require management, the following commitments must be applied throughout the works:

- Any seepage and wastewater arising from the works must be collected and discharged via a settlement tank. The standards for wastewater treatment prior to discharge must be agreed in

advance with the City Council and, where applicable, satisfy the Environment Agency's requirements.

- Soakaway discharge must only be permitted where the effluent is proved to be of a quality that is acceptable to the Environment Agency. Contaminated water or water of an uncertain quality must be discharged into sewers by tankers or other approved means of disposal.

- Prior to any excavation below the water table, including any site de watering, the developer's nominated representative must inform the Environment Agency of the works to be conducted. The de-watering and disposal measures must be agreed in advance with the Environment Agency and where required, an Abstraction Licence shall be obtained.

- The contractor must also comply with BS6031: 2009 Code of Practice for Earthworks, regarding the general control of site drainage.

- The contractor must ensure that any water that has come into contact with contaminated materials must be disposed of in accordance with the Water Industries Act 1991 (if discharged to sewer) and the Water Resources Act (if discharged to controlled waters) and all other related regulations and to the satisfaction of the Environment Agency and Thames Water (see Section 8.5). Any discharge to the River Thames, including the construction of surface water outfalls requires approval from the Port of London Authority (PLA).

- The developer's nominated representative will have to apply for consents and approvals as follows:

  - A consignment note system must be applied to all liquid wastes that are removed by a licensed waste carrier in a road tanker in accordance with all relevant waste management legislation and duty of care regulations.
  - For any discharge of wastewater into a surface watercourse, a discharge consent must be sought, if required, from the Environment Agency.
  - For any discharge of wastewater into a sewer, a Trade Effluent Consent must be sought, if required, from Thames Water.

- The developer's nominated representative must make provisions to ensure that all hazardous substances including oil drums or containers on site are controlled in accordance with Control of Substances Hazardous to Health Regulations, are labelled appropriately and have a suitable secondary containment system (SCS) in place and that no oil or other contaminants are allowed to reach water courses or groundwater.

- Foul water and sewage effluents produced by the construction workforce on-site must be contained in temporary foul drainage facilities that are to be installed and subsequently disposed of off-site by a licensed waste contractor.

- The developer's nominated representative must ensure continuous compliance with all the above conditions under the monitoring of the site project management staff (in compliance with Environment Agency regulations).

8.5 FLOODING

The developer's nominated representative must work with the contractor and others involved in the site to ensure as far as reasonably practicable that flood risk (river/tidal, surface water, sewer surcharging and groundwater) is managed safely throughout the construction period.

The contractor will seek to control flood risk to appropriate levels set by the Environment Agency, using mitigation, compensation and/or monitoring where required.

For sites located close to the River Thames the site owner will be responsible for providing and maintaining continuous flood defence provision, for both permanent and temporary works. This is a requirement of the Thames River Protection of Floods Amendment Act 1879 and is essential to ensure that both the sites themselves and third-party land and assets in the surrounding area are protected from flooding. Flood defence consent will be required from the Environment Agency for any works on the bed or banks of a river or construction of any structure likely to impede the flow under the Land Drainage Act 1991. Consent is required to ensure works do not increase flood risk, damage flood defences, or harm the environment, fisheries, or wildlife.

The developer's nominated representative, in conjunction with the contractor, should also consider and implement appropriate measures to manage the potential risks of flooding from fluvial rivers, localised perched groundwater, overland surface water flows and sewer surcharging, in accordance with the details provided within the Flood Risk Assessment (where this has been completed). This should include consideration of potential flow paths within the site which could become active in the event of extreme rainfall and/or sewer surcharging, particularly during temporary works. Overland flow paths will be determined by site topography, therefore vulnerable operations and materials should be located within elevated parts of the site, away from potential flow paths. If this is not possible, other appropriate protection measures should be incorporated.

8.6 TEMPORARY AND PERMANENT CONNECTIONS TO SEWERS

The following general requirements will have to be met:

- All redundant sewer communication pipe work must be sealed off at the sewer. The remaining pipe work should be removed or filled with a suitable weak concrete, cement grout or other suitable material. This is to prevent any infestation by rodents and avoid the risk of future possible subsidence.
- All retained sewer communication pipes should be tested and a CCTV survey carried out to ensure they are suitable for the new development and in good condition.
- In order to prevent rodents or sewer gases reaching the site, temporary sewer communication pipes must be provided with a 'cascade' cast iron interceptor trap to British Standard specification.

It is strongly recommended that all underground drainage systems are installed using pipes made of a

robust material such as cast iron, and that inspection chambers etc. are properly sealed with bolted down covers. This will prevent later problems from damage by vibration or rodent access.

Wherever it is possible the drainage system serving the proposed development or refurbishment should gravitate to the sewer. This will eliminate the need for pumping of foul drainage to the sewer and the associated problems which often occur with this type of installation.

8.7 DRAINAGE ROUTES TO CANALS

The Land Drainage Act 1991 requires flood defence consent for any works on the bed and banks of a river or construction of any structure likely to impede the flow (see section on flooding above). Drainage to canals or other waterways will not be permitted without prior agreement with the Canal & River Trust. The Canal and River Trust will require identification of the source and quality of the water and will liaise with the Environment Agency.

8.8 SPILL AND LEAK PROTECTION

Where development sites are adjacent to canals or other waterways, suitable precautions must be taken to prevent the entry of pollutants into the waterway to the satisfaction of the Environmental Inspector in liaison with the Canal and River Trust. It should be noted that oil stores within 10 metres of a watercourse must be considered "at significant risk" under the Control of Pollution (Oil Storage) Regulations 2001. Specific measures, such as placing oil stores at a distance from the canal and putting in place additional secondary containment system (SCS) measures, must be considered on a site-by-site basis. On sites adjacent to the canal, where there is a potential risk to the canal, emergency procedures to ensure containment and treatment in the event of a spill must be agreed in advance of any works with the City Council and the Canal and River Trust.

8.9 DRAINAGE OF WATERWAYS

Where it is proposed that canals or other waterways be drained in connection with construction, the developer's nominated representative must agree with the City Council and the Canal & River Trust details of the methodology to be employed prior to commencement of the development. Particular attention must be given to regular pest control treatment (particularly rats and flies); removal of sludge and other debris after drainage; prevention of leakage and ingress of surface water to minimise risk from legionella organisms; minimising smell nuisance from sludge and algae by measures including deodorising, hosing down etc. Safety measures must also be taken to protect both the general public and employees and to prevent fly tipping and illegal access.

8.10 WATER TRANSPORT

For construction sites located close to waterways, developers are strongly encouraged to assess the viability and feasibility for construction materials to be delivered or removed by this means, rather than by road. The benefit of this is the reduction in the number of trips made by HGVs on local roads,

reducing local emissions.

If spoil removal and material delivery is to be made by barge, the developer's nominated representative must take appropriate measures to ensure that construction materials and spoil or other waste materials are not deposited either deliberately or by accident into surface water courses.

9 URBAN ECOLOGY Green Infrastructure and Wildlife

This chapter outlines how disturbance to areas of nature conservation interest, protected species and priority species should be avoided or minimised. It also covers tree protection and tree replacement.

9.1 OBJECTIVES

Green infrastructure in cities provides a number of benefits including reduced sickness absence and improved productivity, increases in property values, a reduction in air pollutants, biodiversity benefits, reduced pressure on drainage and flood defences and a mechanism to counteract the urban heat island effect, leading to a more sustainable and liveable city.

The developer's nominated representative must work with contractors and others on the site to ensure compliance with the relevant statutory provisions in respect of the protection of areas of nature conservation interest, protected species and priority species named on UK, London or Westminster Biodiversity Action Plans. In particular, any disturbance to such areas and such species must be controlled and limit as far as reasonably practicable

Where species are protected by specific legislation the developer's nominated representative, contractor and others on the site must follow approved guidance to comply with those requirements and allow sufficient time for any licences or consents to be obtained.

9.2 REGULATORY OVERVIEW

The table below lists the most significant pieces of legislation relating to wildlife and habitat conservation within and around the City of Westminster.

TABLE 4: LEGISLATION RELATING TO WILDLIFE AND HABITAT CONSERVATION

Legislation	Description
National Parks and Access to the Countryside Act 1949	Much of what this Act set out to achieve in designating and protecting sites for nature conservation and Areas of Outstanding Natural Beauty and addressing Public Rights of Way and access to open land, is now provided for to a greater extent under subsequent legislation, summarised below. This remains the primary legislation under which Local Nature Reserves are designated, of which there is currently one in Westminster, St John's Wood.
Wildlife and Countryside Act 1981, (as amended)	This is the principal mechanism for the legislative protection of wildlife in Great Britain. This Act provides varying degrees of protection to listed species of flora and fauna according to a number of schedules, controls and the release of non-native species and deals with Public Rights of Way. Subject to exceptions, this Act prohibits some or all of killing, injuring, disturbing, taking, sale/barter or possession of (protected) species and associated breeding and sheltering places. Nesting birds are protected under this Act; hence it is advisable that site clearance is undertaken outside of the bird breeding season.
Wild Mammals (Protection) Act 1996	This Act provides protection for wild mammals against acts of deliberate harm, i.e. with intent to inflict unnecessary suffering. This includes acts of crushing or asphyxiation, hence may apply during site clearance for development where burrowing mammals such as foxes and rabbits are present
Town and Country Planning Act 1990, Town and Country Planning (Trees) Regulations 1999, Town and Country Planning (Tree preservation) (England) Regulations 2012	These Regulations provide for local authorities to protect trees by means of 'tree preservation orders'. Consent of the local planning authority is required before any tree protected by an Order may be cut down, topped, lopped, uprooted, damaged or destroyed. Certain trees are exempted from this requirement (e.g. those that are dead or have become dangerous). These regulations also provide for the protection of trees in Conservation Areas
Countryside and Rights of Way Act 2000	This Act amends and strengthens existing legislation, including the wildlife enforcement provisions of the Wildlife and Countryside Act

	1981. Schedule 12 strengthens the legal protection for threatened species, making certain offences 'arrestable', creating a new offence of reckless disturbance (to a protected animal, its nest, its place of rest or shelter), confers greater powers to police and wildlife inspectors, and enables heavier penalties on conviction of wildlife offences.
The Environmental Damage (Prevention and Remediation) Regulations 2009	These Regulations impose further obligations on operators, requiring them to prevent, limit or remediate environmental damage. Steps must be taken to prevent damage to species and
The Conservation of Habitat and Species Regulations 2010 (the Habitats Regulations)	Regulations made since 1994 [Conservation (Natural Habitats &c.) Regulations, 1994]. It provides for the protection of sites in the UK that support habitats and species in need of conservation across Europe, and provides full protection of species of European importance regardless of whether or not they occur within designated sites. The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4.

In addition, previously listed policies including the NPPF, Westminster's City Plan, London Environment Strategy 2018, and the national 25 Year Environment Plan include details relevant to green infrastructure and wildlife.

9.3 WILDLIFE MITIGATION MEASURES

Mitigation measures to protect the wildlife and habitats associated with areas of nature conservation interest (sites designated as either a Local Nature Reserve or a Site of Interest for Conservation) or sites containing protected or priority species will be agreed with the City Council on a site by site basis and will include the following general principles:

(a) Where practicable, demolition and site clearance works should be carried out outside of the bird breeding season (March to August inclusive).

(b) Potential wildlife habitats to be disturbed by construction work should be surveyed by a qualified ecologist at the appropriate time of year and immediately prior to commencement of works. Multiple surveys may be necessary and will include checking for presence of protected and priority species, surveying buildings for roosting and nesting by bats and birds, and consideration of the impact of noise, vibration and light spillage at night. The ecologist will be required to make recommendations on mitigation measures and restoration work to ensure that the site is of an equivalent or richer ecological status after work ceases.

(c) Opportunities to enhance existing habitats and create new habitats for priority species should be maximized.

(d) Where protected species are identified either prior to the works, through surveys, or during the works, the developer's nominated representative must contact English Nature to agree appropriate measures. This may include post-development monitoring to check mitigation measures have been successful.

(e) Where soil is stripped and intended to be reinstated, this must be appropriately stored to maintain soil structure and quality, and be of sufficient condition to promote aeration, drainage and root growth.

(f) Areas of existing trees or vegetation to be retained must be suitably protected before any materials or machinery is brought on site.

(g) If invasive non-native plant species are discovered on site, these must not be allowed to spread onto adjacent land. Control measures employed must prevent accidental spread by moving contaminated soil to another location or through the incorrect transportation and handling of contaminated material and plant cuttings.

(h) Standards of dust and air pollution control, as set out in Chapter 7, must be applied at all construction sites to protect adjacent wildlife habitats.

(i) Site lighting design, position and direction must include measures to prevent unnecessary disturbance to wildlife and ecologically sensitive areas.

(j) Suitable precautions must be taken to prevent the entry of pollutants into any bodies of water (see also requirements of Chapter 10).

(k) All construction site workers must be made aware of any ecological issues associated with the site. Areas of existing trees or vegetation to be retained, and those to be removed, should be clearly indicated on a plan.

9.4 PROTECTION OF TREES

The developer's nominated representative must ensure that the specific requirements agreed with the City Council or as subsequently agreed on site are followed. The site set up, demolition and construction methodologies and transport management plan must all be in accord with any tree protection conditions or approved methodology. No trees shall be interfered with except with prior agreement, and regard shall be had to the Council's Tree Strategy, Trees and the Public Realm (2011).

Many privately owned trees in Westminster are protected by Tree Preservation Orders or by virtue of their location in a conservation area. In the majority of cases pre-commencement tree protection conditions will have been imposed and the approved details must be complied with.

The tree protection details should include the following:

A tree survey, arboricultural implications assessment and details of tree protection measures where

your proposals will affect trees within the application site or on land adjacent to the site (including street trees). This information should be prepared by a suitably qualified arboriculturist in accordance with the recommendations of BS5837: 2012 (Trees in relation to design, demolition and construction– Recommendations), and must include:

1. A scaled plan that shows the position and crown spread of every tree with a stem diameter of over 75mm measured over the bark at 1.5 m above ground level, and shrub masses and hedges on the application site and adjacent land. For individual trees, the crown spread taken at four cardinal points (section 4 of BS5837: 2012).

2. A schedule of tree details as recommended at paragraph 4.4.2.5 -.4.4.3.9 of BS5837: 2012, and their categorisation as per paragraph 4.5 and table 1 of BS5837: 2012

3. Details of the root protection areas (RPAs) of the trees as per paragraph 4.6 of BS5837: 2012 and details of any proposed alterations to the existing ground levels or any other works to be undertaken within the RPA of any tree within the tree survey plan and schedule. This includes any proposals for service trenches.

4. Details of all proposed tree surgery and removal, and the reasons for the proposed works.

5. Tree constraints (the RPA and any other relevant constraints as set out in paragraph 5.2 of BS5837: 2012 plotted around each of the trees on relevant drawings, including proposed site layout plans.

6. An arboricultural impact assessment that evaluates the direct and indirect effects of the proposed design and where necessary recommends mitigation.

7. A tree protection plan superimposed on a layout plan, based on the topographical survey, and details of all tree protection measures for every tree proposed to be retained for the duration of the course of the development, and showing all hard surfacing and other existing structures within the RPA. (section 5.5 of BS5837: 2012).

8. An Arboricultural Method Statement in accordance with Sections 6, 7 and 8 of BS5837: 2012, describing how you will protect each tree that you are going to keep before and during the development.

9. Details of the size, species and location of replacement trees proposed for any trees shown to be removed.

9.5 TREE REPLACEMENT

Whilst every reasonable attempt must be made to preserve all mature trees, any tree that is cut down or dies as a consequence of the construction must be replaced by a suitably sized transplant determined by the Council in an agreed location. There may be cases where more than one new tree will be required to adequately compensate for the loss of amenity. Any site for new planting must be thoroughly prepared prior to planting. Aftercare including irrigation must be implemented to all set horticultural and arboricultural standards for suitable periods. Any tree which dies within five years must be replaced with suitable new trees. If any tree is removed to facilitate development, replacement planting will be

secured via planning conditions. Any protected tree which dies as a result of development must be replaced.

The supply, storage, handling, planting and maintenance of new planting will be undertaken in accordance with appropriate British Standards, including BS 5837 “Trees in relation to design, demolition and construction – Recommendations”; BS 8545 “Young trees – from the nursery to independence in the landscape”; BS 3998 “Tree Work. Recommendations”; and BS 4428 “Code of practice for general landscape operations (excluding hard surfaces)”.

9.6 SOIL

Where soil is stripped and intended to be reinstated, this must be appropriately stored to maintain soil structure and quality, and be of sufficient condition to promote aeration, drainage and root growth, in order to support new tree planting.

10 HERITAGE ASSETS

The chapter sets out requirements for assessing and planning for the archaeological implications of proposals. Impacts on listed buildings and conservation areas also need to be avoided or minimised and all historic fabric or features of significance must be protected.

10.1 OBJECTIVES

Where development may affect land with archaeological significance or potential, the developer's nominated representative must properly assess and plan for the archaeological implications of their proposals.

The contractor shall ensure that the destruction of archaeological remains will be avoided wherever possible and should never take place without prior archaeological excavation and record.

The developer's nominated representative shall ensure that the results and finds from archaeological investigations arising from their development will be analysed, interpreted, presented to the public and curated for future use.

The developer's nominated representative shall ensure that the Code of Practice of The British Archaeologists and Developers Liaison Group is followed by contractors and others involved with the site.

The contractor must comply with all conditions, permissions and requirements of the relevant legislation in respect of listed buildings and conservation areas in order to ensure that no harm is caused to listed buildings, conservation areas and other heritage assets as a result of construction works.

10.2 REGULATORY OVERVIEW

Ancient Monuments And Archaeological Areas Act 1979

The Ancient Monuments and Archaeological Areas Act 1979, as amended by the National Heritage Act 1983, provides for the designation of certain ancient monuments as 'Scheduled Monuments' by the Secretary of State. Westminster has two scheduled ancient monuments: the Chapter House and Pyx Chamber at Westminster Abbey, and the Jewel Tower.

The Act defines an ancient monument as "any Scheduled Monument; and any other monument which in the opinion of the Secretary of State is of public interest by reason of the historic, architectural, traditional, artistic or archaeological interest attaching to it" (Section 61(12)). In order to carry out works to these monuments the consent of the Secretary of State is required, although a special provision of

the Act gives certain activities 'class consent'. The specific consent of the Secretary of State has to be given for:

(a) any works resulting in the demolition or destruction of or any damage to a Scheduled Monument;

(b) any works for the purpose of removing or repairing a Scheduled Monument or any part of it or of making any alteration or additions thereto; and

(c) any flooding or tipping operation on land in, on or under which there is a Scheduled Monument.

Town And Country Planning Act 1990

Although some nationally important monuments (see Section 12.2.1 above) are protected under the provisions of the Ancient Monuments and Archaeological Areas Act 1979, the only protection afforded to other sites is under the planning law.

In the Town and Country Planning General Permitted Development Order 1995 a site of archaeological interest is defined as "land which is included in the schedule of monuments compiled by the Secretary of State under Section 1 of the Ancient Monuments and Archaeological Areas Act 1979 (schedule of monuments), or is within an area of land which is designated as an area of archaeological importance under Section 33 of that Act (designation of areas of archaeological importance), or which is within a site registered in any record adopted by resolution by a county Council and known as the County Sites and Monuments Record". In London this will be any site recorded in the Greater London Historic Environment Record (GLHER), including Westminster's Areas of Archaeological Priority.

The Planning (Listed Buildings and Conservation Areas) Act 1990

This Act and subsequent amendments provide for the designation of any buildings judged to be of special architectural or historic interest on the list of such buildings, compiled by the Secretary of State.

Listing by the Secretary of State provides statutory protection for listed buildings and their settings from insensitive alteration, demolition and redevelopment. Provisions of the Act are implemented by the Planning (Listed Buildings and Conservation Areas) Regulations 1990 and subsequent amendments.

Listing applies to the whole of the building, including the interior. It also includes any object or structure fixed to the building; or any object or structure within the curtilage of the building which, although not fixed to the building, forms part of the land and has done so since before 1st July 1948.

A 'Listed Building' cannot be altered, demolished or extended in any way that affects its character, without the consent of the local planning authority.

Historic England must be notified of certain categories of application affecting listed buildings and conservation areas, but the local planning authority should usually be contacted for advice in the first instance. The Council's website includes a map and database of listed buildings.

Undertaking works to a listed building without consent is a criminal offence, and prosecution for unauthorised works to a listed building can result in imprisonment or an unlimited fine. This offence is committed by both those carrying out the work (the contractor/builder) and those who cause the works to be carried out (those instructing the builder).

'Conservation Areas' are designated by the local authority to protect areas of architectural or historic interest. Current Conservation Areas designated in Westminster can be found on the Council's website. Conservation area designation introduces a general control over the demolition of unlisted buildings. Any work planned to a tree in a conservation area must also be notified to the local planning authority six weeks in advance so that they may assess whether to make a tree preservation order.

Miscellaneous Acts

If any artefacts defined in the Treasure Act 1996 (e.g. human remains, finds of gold and silver) are discovered, the contractor shall follow the procedures under the Treasure Act Code of Conduct 1997 to address the discovery.

There are many other Acts and pieces of secondary legislation which contain points of significance to archaeology, as indicated in Appendix A. The Historic Parks and Gardens are listed in the National Heritage List for England.

Archaeology

Where an archaeological condition has been placed on the planning consent, or scheduled monument consent has been obtained, no development shall take place until the developer has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, prepared by a professional archaeologist, which has been submitted by the developer and approved in writing by the City Council in consultation with the Greater London Archaeological Advice Service (GLAAS).

Any archaeological intervention must be carried out by an Institute for Archaeologists (IfA) registered archaeological organization in accordance with the terms of a written specification, as above.

Prior to agreement of the final project design, access to the site by the archaeological organization must be agreed with the contractor, land- owner(s), relevant agents and, if thought appropriate, the highway authority and the Police.

Reasonable access to the site must be granted by the contractor to the planning and archaeological representatives of the City Council and GLAAS. It may be necessary through a number of site visits to ensure that archaeological works are being carried out to proper professional standards and in accordance with the agreements made.

The developer must provide all information reasonably obtainable on contamination and the location

of live services before archaeological site works commence.

In order to define the exact area of archaeological interest, and to protect it from unauthorised works during the development of the remainder of the site, no development shall take place until a scheme for the fencing of the area identified has been submitted to and approved by the City Council in consultation with GLAAS. The scheme shall include details of the height, materials and location of the fencing. The fencing shall be erected in accordance with the approved details and shall be maintained in situ until the archaeological investigation is complete.

The developer's nominated representative shall afford access at all reasonable times to any archaeologist recognised by the City Council or GLAAS and shall allow them to observe the excavations and retrieve and record remains of archaeological interest which are disturbed. Fourteen days notice in writing shall be given to the City Council prior to the commencement of the development.

Planning conditions may also require a level of community involvement in any archaeological excavation, ranging from provision of viewing points and interpretation materials to public access to the sites through open days.

Even where no archaeological investigation is required by condition, developers and contractors are advised to be vigilant for archaeological deposits. This is particularly important if in an area of special archaeological priority or area of known archaeological potential. The Council has published supplementary planning guidance on Archaeology and Planning within Westminster which includes details of areas of special archaeological priority in Westminster. If any archaeological deposits are uncovered during the course of works, then the developer's nominated representative should alert GLAAS and Historic England immediately.

Planning Policy Guidance

The Government's policy for the historic environment is set out in the National Planning Policy Framework (NPPF). Westminster Council has produced a number of guidance notes on topics of relevance including:

- Repairs and Alterations to Listed Buildings SPG
- Development and Demolition in Conservation Areas SPG
- Architectural Theft and the Protection of Historic Buildings in Westminster.

10.3 OTHER CONSIDERATIONS

The developer must ensure that all works affecting listed buildings, whether they are repairs or alterations, will be carried out in a correct manner, under proper supervision, by specialist labour where appropriate.

The developer and contractor must ensure that alterations, extensions and other structural works to listed buildings will be carried out sensitively without putting any significant or historic fabric at risk.

Contractors should also ensure any temporary supports and scaffolds are installed sensitively to minimise impact on original fabric.

Should, during the course of approved works, part of a listed building be found to be insecure or unstable or otherwise affected by the works, the developer's nominated representative must ensure that such measures as may be necessary to ensure the preservation of the building are taken. They should ensure the site is secure and contact a City Council Design and Conservation officer for advice before undertaking any further works.

Where they are of architectural or historic interest, the developer must ensure the retention and protection of all original internal and external decorative features. Particular care must be taken to ensure the site is secured when empty and protect fixtures such as fireplaces which may be vulnerable to theft.

Where historic fabric such as floorboards or roof slates are to be temporarily removed and reinstated as part of works, these should be recorded or numbered, carefully removed and securely stored on site. Temporary removal of valuable items should not be undertaken during construction works unless this has been agreed as part of a consent process.

A design and conservation officer should be consulted if any, even minor, changes to the approved scheme become necessary during the course of works.

Care should be taken to protect other features which contribute to the character of conservation areas and/or setting of listed buildings or other heritage assets, such as boundary walls. This includes historic floorscapes such as granite setts in mews which can be vulnerable to damage from heavy vehicles and skips during construction works.

11 PROTECTION OF EXISTING INSTALLATIONS

This chapter outlines the procedures to be adopted prior to construction, to protect existing infrastructure such as foundations, buildings, structures, walls roadways, sewers, cables and other services, apparatus and installations. Requirements for condition surveys are also covered.

11.1 OBJECTIVES

The developer's nominated representative shall work with contractors and others involved with the site to ensure all practical steps are taken to protect existing buildings and infrastructure. The contractor will be required to make his own investigations and to take all appropriate actions concerning existing foundations, buildings, structures, walls, roadways, sewers, cables and other services, apparatus and installations.

Contractors involved in basement developments should have regard to the section on managing the impacts of construction in the City Council's Supplementary Planning Document on Basement Development or subsequent replacement version.

11.2 REGULATORY OVERVIEW

Building Control enforces minimum standards and issues associated with engineering design and structural stability and ensuring construction work undertaken is professional and competent and accords with the Building Regulations.

The Party Wall Act is in place to control development on each side of a party wall and maintain its integrity and function.

The provisions of the Control of Pollution Act (1974) are the principal mechanisms by which construction vibration is controlled.

11.3 SAFEGUARDING

The developer's nominated representative and the contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the

construction period. The contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers, railways and other apparatus during and immediately after the construction period.

Details of any necessary protective works, including their design and the method of implementation will be established and agreement sought with the building owner, prior to protective works being carried out.

11.4 SURVEYS BEFORE CONSTRUCTION OF WORKS

Before commencing any piling, foundation excavation, or ground improvement works at the development site, the contractor shall use established methods to identify the risk of damage to buildings, structures and major utilities. The assessment shall identify those properties which may be at risk from ground movement (settlement or heave) arising from the construction of the scheme.

An appropriate structural or condition survey will be undertaken (at the contractor's expense) prior to commencement of construction works for any buildings and infrastructure predicted to be potentially subject to ground settlement above threshold values which could possibly lead to damage.

Such surveys shall be carried out generally by agreement with the property owner, and by agreement with the Environment Agency for all such structures within 16 meters of tidal flood defenses, or within 8 meters of non-tidal flood defenses.

11.5 MONITORING

Monitoring of ground settlement will be carried out from the start of, during and after construction, where required by the City Council, to check that the recorded ground movement is within designed limits and therefore acceptable.

Monitoring of buildings/infrastructure will be carried out on case-by-case basis, depending upon the assessment of risk of damage. Monitoring will begin prior to commencement of construction work to enable base-line values to be determined accurately, and will continue until settlement due to the works, as shown by the monitoring, has effectively ceased.

Monitoring results will be made available for inspection by the relevant property owner, and, in the case of scheduled or listed buildings, by Heritage England. The developer's nominated representative will work with the contractor to develop an emergency response plan which will include appropriate trigger levels for action.

11.6 SURVEY AFTER CONSTRUCTION OF WORKS

After the construction works have been completed and at any time up to two years after the opening of the scheme, an interested party may, upon providing the City Council or the developer's nominated representative with reasonable evidence of damage, request that a second structural or condition survey is undertaken. This shall take the same form as the first survey and shall be undertaken by the same firm of Chartered Surveyors or Engineers (provided that firm is still in practice) at the contractor's expense.

11.7 COSMETIC DAMAGE

Minor cosmetic damage may, on occasion, occur as a consequence of construction. Where this is the case, provision will be made by the developer for repairing any material damage (that occurring in risk Categories Slight and above), as appropriate.

12 Acknowledgements and Further Information

Westminster City Council thanks all those developers and industry bodies whose collaborative working with the council since the introduction of the first version of the Code of Construction Practice in 2016 has helped inform and shape this revised edition. Additionally, the council wishes to thank all those who responded to the 2021 public consultation on the Code of Construction Practice for their feedback which has helped inform the final Code.

Further information, including guidance materials for developers, the public consultation report for this document, and links to Westminster's key planning documents and materials, can be found on the council's website: https://www.westminster.gov.uk/code-construction-practice

Please note that this Code of Construction Practice is intended to be a live document, and will be periodically updated to take into account new guidance, best practice, or requirements for developers.

This version last amended December 2021.

APPENDIX A: CHECKLISTS

CHECKLIST A: CODE OF CONSTRUCTION PRACTICE - LEVEL 1 AND LEVEL 2 DEVELOPMENTS

The following information is required to confirm compliance with the Code of Construction Practice dated February 2022 ("CoCP") for the following project:

Project name*: ……

Project address*: ……
……..

Planning reference no.*: ……
*: Please provide the information in block letters

NOTICE: THIS IS A LEGALLY BINDING DOCUMENT
which creates a legally enforceable relationship between the Signatory below and Westminster City Council. **It is essential that the person signing this document on behalf of the Developer has the authority to do so on the Developer's behalf, thus creating legal obligations on behalf of the Developer**.

There are two main documents that must be provided to the council. These are:

- Site Environmental Management Plan (SEMP)
- Application for consent under Section 61 of the Control of Pollution Act 1974

The list below provides the specific details of what is required within each document. Please place a tick against every item in each category to confirm that relevant information will be provided to demonstrate compliance with the Code of Construction Practice. If the item is not considered applicable, please explain why. This form should be returned to the Council's Environmental Inspectorate team at: cocp@westminster.gov.uk

Relevant Document	Item to be included	Yes (please tick)	Not applicable, please explain why
Site Environmental Management Plan Part A	**General site information**		
	Programme of works (demolition and construction)		
	Working hours		
	Demolition and construction (e.g. piling) methodology		
	Site Plan, including storage areas		
	Environmental management structure		
	Roles and responsibilities		
	Statement to confirm sign up to Considerate Constructors Scheme		
	Summary of main works		
	Liaison with the local neighbourhood		
	Liaison with other sites to manage cumulative impacts		
	Tree Protection Measures		
Site Environmental Management Plan Part B	**Traffic, Transport and Highways Management Plan**		
	Plan showing location of any potential vulnerable road users on access/egress route and adjacent to site		
	Construction traffic arrangements, access/egress to/from site		
	Measures to ensure cycle safety		
	Use of highway (for skips, scaffolding, gantries, pitlanes, etc.)		
	Hoarding proposal incl. lighting of the hoarding		
	Need for road closures, parking suspension / transport of abnormal loads		
	Potential for river transport/removal of spoil		
Site Environmental Management Plan Part C	**Environmental Management Plan**		
	Plan showing location of any potentially sensitive receptors		
	Noise and vibration management plan		
	Noise site risk assessment (LANAF methodology)		

	Noise and vibration mitigation measure		
	Dust risk assessment		
	Air quality dust management plan		
	Dust and air pollution mitigation measures		
	Monitoring proposals, to include: Plans showing noise/vibration and dust monitoring location; trigger / action values and analysis methods; procedures for recording and reporting monitoring results; remedial action in the event of any non-compliance		
	Waste management (to include SWMP, storage, handling, asbestos, contaminated land)		
	Construction site lighting proposal		
Application for Section 61 consent	To include all relevant information as required by the application form including noise predictions		

Please read each of these statements and confirm you have read and understood them by signing below:

- I confirm we have read and understood the Code of Construction Practice
- I confirm the Site Environmental Management Plan (SEMP) will be provided to Westminster City Council with the submission of this Appendix A at least 40 working days and a section 61 CoPA application at least 28 days prior to the commencement of development (to include site preparation works).
- I confirm that work on the development (to include site preparation works) will not commence on site until such time as the SEMP has been approved by Westminster City Councils Highways and Environmental Sciences Team in writing, the Appendix A has been signed off by the CoCP Officer and the relevant planning condition has been discharged.
- I confirm we will comply with the CoCP and the SEMP, and any condition relating to construction management and understand we could be subject to enforcement action should the CoCP and/or SEMP not be complied with.
- I confirm we agree to pay the relevant fees as set out in Appendix D of the CoCP in full for the duration of the development prior to the countersigning of the Appendix A by Westminster's CoCP Officer.
- I confirm that I will inform the Council in writing when the development has been completed by sending the certificate of completion / or when the phase of the development has been completed by appropriate means.

- I confirm I understand this document constitutes an agreement between Westminster City Council and the applicant:

Representative of the developer*:

NAME: ……..
POSITION: ……
ADDRESS: ……..
……

Signature: ……..
Date: ……..
*: Please provide the information in block letters

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Planning Reference Number: ……..

Demolition Phase Approved by Environmental Inspectorate

Dated:
Signed by:

Earthwork & Piling Phase Approved by Environmental Inspectorate

Dated:
Signed by

Construction Phase Approved by Environmental Inspectorate

Dated:
Signed by

APPENDIX A

CHECKLIST B: CODE OF CONSTRUCTION PRACTICE – BASEMENTS

The following information is required to confirm compliance with the Code of Construction Practice dated February 2022 ("CoCP") for the following project:

Project name*: ……

Project address*: ……
……..

Planning reference no.*: ……
*: Please provide the information in block letters

NOTICE: THIS IS A LEGALLY BINDING DOCUMENT
which creates a legally enforceable relationship between the Signatory below and Westminster City Council. **It is essential that the person signing this document on behalf of the Developer has the authority to do so on the Developer's behalf, thus creating legal obligations on behalf of the Developer**.

A Construction Management Plan (CMP) must be provided to Westminster City Council.
The list below provides the specific details of what is required within this document. Please place a tick against every item in each category to confirm that relevant information will be provided within the CMP to demonstrate compliance with the CoCP. If the item is not considered applicable, please explain why. This form should be returned to the Council's Environmental Inspectorate Team at cocp@westminster.gov.uk

Items to be included	Yes (please tick)	Not applicable, please explain why
General site information		
Programme of works (demolition and construction)		
Working hours		
Demolition and construction (e.g. piling) methodology		
Site Plan (including storage area) and monitoring equipment (if required)		
Plan showing location of any potentially sensitive receptors		
Plan showing location of any potential vulnerable road users on access/egress route and adjacent to site		
Liaison with the local neighbourhood including Party Wall agreements		
Liaison with other sites to manage cumulative impacts		
Environmental management structure		
Roles and responsibilities		
Statement to confirm sign up to Considerate Constructors Scheme		
Summary of main works		
Use of the highways (for skips, hoarding etc.)		
Construction traffic arrangements, access/egress to/from site		
Road closures/ abnormal loads		
Noise and vibration management plan		
Air quality dust management plan		
Non-Road Mobile Machinery compliance		
Waste management arrangements		
Tree Protection		

Please read each of these statements and confirm you have read and understood them by signing below:

- I confirm we have read and understood the Code of Construction Practice
- I confirm the Construction Management Plan (CMP) will be provided to Westminster City Council with the submission of this Appendix A at least 40 working days prior to the commencement of development (to include site preparation works).
- I confirm that work on the development (to include site preparation works) will not commence on site until such time as the CMP has been approved by Westminster City Councils Highways and Environmental Sciences Team in writing, the Appendix A has been signed off by the CoCP Officer and the relevant planning condition has been discharged.
- I confirm we will comply with the CoCP and the CMP, and any condition relating to construction management and understand we could be subject to enforcement action should the CoCP and/or CMP not be complied with.

- I confirm we agree to pay the relevant fees as set out in Appendix D of the CoCP in full for the duration of the development prior to the countersigning of the Appendix A by Westminster's CoCP Officer.
- I confirm that I will inform the Council in writing when the development has been completed by sending the certificate of completion / or when the phase of the development has been completed by appropriate means.
- I confirm I understand this document constitutes an agreement between Westminster City Council and the applicant:

Representative of the developer*:

NAME: ……..
Position: ……
ADDRESS: ……..
……

Signature: ……..
Date: ……..
*: Please provide the information in block letters

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Planning Reference Number: ……..

Demolition Phase Approved by Westminster's CoCP Officer

Dated:
Signed by:

Earthwork & Piling Phase Approved by Westminster's CoCP Officer

Dated:
Signed by

Construction Phase Approved by Westminster's CoCP Officer

Dated:
Signed by

APPENDIX B: LEGISLATION AND GUIDANCE

TRAFFIC AND TRANSPORT

Road Vehicles (Construction and Use) Regulations 1986 (as amended)
Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997 (as amended 2002)

NOISE AND VIBRATION

Legislation:
Control of Pollution Act 1974, Section 61
Construction Plant and Equipment (harmonisation of noise emission standards) Regulations (1989)
Environment Act 1995, as amended
Environmental Protection Act 1990, as amended
Noise Act 1996
The Control of Noise at Work Regulations 2005 (Statutory Instrument (SI) 2005/1643)
Pollution Prevention and Control Act 1999
Environmental Permitting (England and Wales) Regulations 2010, as amended
Public Health Acts 1936 and 1961

British Standards:
BS 5228: 2009 (Parts 1 and 2) Code of Practice for Noise and Vibration Control on Open Construction Sites, British Standards Institution
BS 4142: 1997 Method for rating industrial noise affecting mixed residential and industrial areas, British Standards Institution
BS 6472: 2009 Guide to evaluation of human exposure to vibration in buildings (1 Hz to 80 Hz), British Standards Institution
BS EN 60651: 1994 Specification for sound level meters

General guidelines:
WCC 2010. Westminster Noise Strategy 2010-2015.
GLA 2004.Sounder City. The Mayor's Ambient Noise Strategy. Greater London Authority.

DUST AND AIR POLLUTION

Legislation:
The Air Quality Standards Regulations 2010 (SI 2010/1001)
The Air Quality Limit Values Regulations 2003 (SI 2003/2121)
Environmental Protection Act 1990, as amended
Clean Air Act 1993
Pollution, Prevention and Control Act 1999
Environmental Permitting (England and Wales) Regulations 2010, as amended
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002/2677)
Control of Asbestos Regulations 2006 (SI 2006/2739)
Asbestos (Licensing) Regulations 1983 (SI 1983/1649), as amended in 1998 (SI 1998/3233)

Hazardous Waste (England and Wales) Regulations 2005, as amended

Guidance:
Westminster's Air Quality Action Plan 2019-2024
The Control of Dust and Emissions during construction and demolition – Supplementary Planning Guidance (2014). Mayor of London.
Department for the Environment Food and Rural Affairs. Air Quality Strategy for England, Scotland, Wales and Northern Ireland (July 2007)
Buildings Research Establishment. Controlling particles, vapour and noise pollution from construction sites, parts 1 to 5 (2003)
Asbestos: The survey guide (HSG 264), 2010. Health and Safety Executive

WATER POLLUTION AND FLOODING

Legislation:
Water Resources Act 1991, as amended by the Environment Act 1995
Water Act 2003
The Groundwater Regulations 2009 (SI 2009/2902).
Control of Pollution (Oil Storage) (England) Regulations 2001 (SI 2001/2954)
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002/2677)
The Groundwater (England and Wales) Regulations 2009, No. 2902
The Environmental Permitting (England and Wales) Regulations 2010, as amended
The Water Resources (Environmental Impact Assessment) (England and Wales) Regulations: SI 2003/164
The Environmental Protection (Prescribed Processes and Substances) Regulations: SI 1991/472
Environmental Protection Regulations 2010
Water Industry Act 1991
Anti-Pollution Works Regulations 1999

British standards and other guidance:
British Standard: Code of Practice for Earthworks. BS6031:2009
CIRIA C532 Control of water pollution from construction sites: Guidance for consultants and contractors
CIRIA/EA Joint Guidelines: Concrete Bunds for Oil Storage Tanks
CIRIA/EA Joint Guidelines: Masonry Bunds for Oil Storage Tanks
EA Guidance Note: Piling into Contaminated Sites

WASTE, CONTAMINATED LAND AND ASBESTOS

Legislation:
Environmental Protection Act 1990
Environmental Protection (Duty of Care) Regulations 1991 (as amended in 2003)
The Waste (England and Wales) Regulations 2011
The Environmental Permitting (England and Wales) Regulations 2010
The Landfill (England and Wales) Regulations 2002 (SI 2002/1559), including Schedule 1: Waste Acceptance Criteria (WAC)
The Hazardous Waste (England and Wales) Regulations 2005 (SI 2005/894) (as amended)
The Waste Management Licensing Regulations 1994

Control of Asbestos Regulations 2012 (SI 2012/2675)
Asbestos (Licensing) Regulations 1983 (SI 1983/1649), as amended in 1998 (SI 1998/3233)
EC Landfill Directive 1999 (Council Directive 99/31/EC)
Landfill Tax (Qualifying Material) Order 2011 (SI 2011/1017)
The Landfill (England and Wales) Regulations 2002 (SI 2002/1559),
The Construction (Design and Management Regulations) 2015 (SI 2015/51)
Water Resources Act 1991(WRA 1991)
The Groundwater (England and Wales) Regulations 2009 (SI 2009/2902)
The Animal Health Act 2002, Notifiable Disease Burial Sites
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002/2677), as amended in 2003, 2004
The Contaminated Land (England) Regulations 2000 (as amended 2006 and 2012)
Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991

Guidance:
EA Technical Guidance WM2: Interpretation and Classification of Hazardous Waste (April 2011)
Definition of Waste: Redevelopment Industry Code of Practice (2011). The Contaminated Land (England) Regulations 2006 (SI 2006/1380)
EA Guidance Note: Piling into Contaminated Sites
CIRIA. A guide to safe working on Contaminated Sites, Report 132 (1996)
CIRIA. Contaminated Land Risk Assessment: A Guide to Good Practice, Report C552 (2001)
BSI. Investigation of Potentially Contaminated Sites. Code of Practice BS 10175 (2011)
Defra/EA's Model Procedures for the Management of Land Contamination (Contaminated Land Report 11) (September 2004)
CIRA. Unexploded Ordnance (UXO): A guide for the construction industry (C681) (2009)
Asbestos: Exposure Limits and Measurement of Airborne Dust Concentrations (EH10 and MDHS 39/4). Health and Safety Executive, 1996
Asbestos: The Survey Guide Health & Safety Executive guidance. HSG264 (2010)
Waste Management – The Duty of Care, Code of Practice, HMSO (March 1996)
Site Waste Management Plans – Guidance for Construction Contractors and Clients - Voluntary Code of Practice, Department of Trade & Industry (July 2004)

URBAN ECOLOGY

Legislation:
Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000)
Habitats and Species Regulations 2010
Protection of Badgers Act 1992
The Animal Welfare Act 2006
Town and Country Planning Act 1990
The Town and Country Planning (Tree Preservation)(England) Regulations 2012

Guidance:
Trees in relation to design, demolition and construction. Recommendations: BS5837
Recommendations for Tree Works: BS3998
Trees in the Hard Landscapes: A Guide for Delivery published by the Trees and Designs Action Group

HISTORIC ENVIRONMENT AND ARCHAEOLOGY

Legislation:

Planning (Listed Buildings and Conservation Areas) Act 1990
Ancient Monuments and Archaeological Areas Act 1979
The Burial Act 1857
Treasure Act Code of Conduct 1997
Treasure Act 1996

PROTECTION OF EXISTING INSTALLATIONS

Guidance:

Basement development in Westminster. Interim Planning Guidance Note (October 2013)

APPENDIX C: GLOSSARY

Level 1 project: Large/strategic proposals include proposals for 100 or more new or additional residential units or for the creation/ change of use of 10,000 sqm or more floorspace. Level 2 projects may be 'upgraded' to Level 1 projects due to the sensitivity of the local environment, which can include proximity of noise sensitive receptors or cumulative impacts.

Level 2 project: Developments involving the creation of 10 or more new build residential units, or buildings where the floorspace to be created is 1000 sqm or more or any basement developments. Level 3 projects may be 'upgraded' to Level 2 projects due to the sensitivity of the local environment, which can include proximity of noise sensitive receptors or cumulative impacts.

Level 3 project: All developments falling outside of the definitions of level 1 and 2 projects. Major Refurbishments: While generally not covered by the Code of Construction Practice, those which are of such a scale that the impacts are equivalent to those arising from a new build, e.g. where there is extensive demolition and rebuilding, significant new construction behind a retained façade etc. The 'Level' will depend on the size thresholds as outlined for Level 1, 2 and 3 projects above.

Major Refurbishments: those which are of such a scale that the impacts are equivalent to those arising from a new build, e.g. where there is extensive demolition and rebuilding, significant new construction behind a retained façade etc. The 'Level' will follow on the size thresholds as outlined for Level 1, 2 and 3 projects above.

Noise Sensitive Receptors: Comprises residential use, educational establishments, hospitals, hotels, hostels, concert halls, theatres, law courts, and broadcasting and recording studios and other commercial uses which require high acoustic quality which is core to their business.

Developer: Is used to mean the person or company promoting a scheme or development, who might be the owner of a site or work under the owner's direction. The developer has ultimate responsibility for the scheme or development.

Developer's Nominated representative or Nominated Representative: a nominated person who will take responsibility for compliance with the CoCP on the behalf of the developer. This person should be someone with the necessary authority to deal with the matters covered by the CoCP on behalf of all those parties working on a site without the need to seek further authority.

Contractor: is used to mean all those working on a site under contract from the developer, whether formally a contractor, sub-contractor or consultant.

Highway Authority: will refer to the City Council with the exception of the Transport for London Route Network, roads within Royal Parks and private roads

List of abbreviations

ALG	Association of London Government (now known as London Councils)
BPG	Best Practice Guidance
BPM	Best Practicable Means
BS	British Standard
CAZ	Central Activities Zone
CCS	Considerate Constructors Scheme
CDE	Construction, Demolition and Excavation
CDM	Construction (Design & Management) Regulations 2015
CoCP	Code of Construction Practice
COPA	Control of Pollution Act 1974
COSHH	Control of Substances Hazardous to Health Regulations 2002
CMP	Construction Management Plan
HSE	Health and Safety Executive
KPI	Key Performance Indicator
LAQM	Local Air Quality Management
LFEPA	London Fire and Emergency Planning Authority
OHSAS	Occupational health and safety management systems
SCS	Secondary Containment System
SEMP	Site Environmental Management Plan
SWMP	Site Waste Management Plan
TRO	Traffic Regulation Order
WCC	Westminster City Council

APPENDIX D: CODE OF CONSTRUCTION CHARGES

Service offered under the Code of Construction Practice: A schedule of fees and services to be offered has been developed in consultation with relevant services. For the Basements and Level 1 and 2 category this includes advice to applicants on their construction management plan, noise and dust mitigation, monitoring and site visits, and their role in community liaison and complaints follow up.

The tables below set out estimates of time spent on services. The charges are based on the different elements listed below (e.g. advice, approval, meetings, etc.), and an estimate of time spent. The fees and charges for the different developments will regular reviewed and published on Westminster Council's website. The actual charge for environmental monitoring will be based on actual costs incurred, which means that if sums paid on account are not spent, they will be repaid to the applicants. The pre CoCP advice is a set fee and will not be refunded. Additionally, these costs do not cover additional licences, that may be required.

BASEMENTS: The charges associated with the Code of Construction Practice in residential basement development schemes are set out below. It is intended that the first phase of this Code of Construction Practice will apply to basement extensions and excavations to residential buildings, and those immediately adjacent to residential buildings.

	Basement excavation – costs and services	**Chargeable element breakdown, to extent not chargeable under other powers (based on hourly rates)**
Environmental Inspectorate service provided	Advice to applicants regarding environmental requirements, construction management plan, noise and dust mitigation measures	Average: 3 meetings and follow up emails 15 hrs
	Advice on site planning with regards to highways and traffic issues	Average: 3 meetings and follow up emails 15 hrs
	Regular site visits to check compliance with agreed requirements	Every fortnight over the duration of the development: 2 hrs per visit Average: 52 hrs / year
	Review of the documents (Construction Management Plan) and agreement	Based on 10 hours

	Community Liaison and complaints follow up	Based on experience: high - 40 hrs med - 20 hrs low - 10 hrs
Estimated time spent (per site), range and average for the service	**102 to 132 hours (depending on the level of complaints received) Average: 117 hours**	

Note that cost ranges outlined above for the Code of Construction Practice do not include licences for the following elements which may not be required in all cases. Therefore, charges are listed separately, and will apply as required.

For information the current levels of licence fees and the CoCP charges can be found on the Council's website.

LEVEL 1 SITES

	Level 1 – major developments – costs and services	**Chargeable element breakdown, to extent not chargeable under other powers (based on hourly rates)**
Environmental Inspectorate service provided	Advice to applicants regarding environmental requirements, Site Environmental Management Plan (SEMP), noise and dust mitigation measures, advice re s61 prior consent	Average: 10 meetings and follow up emails 50 hrs
	Advice on site planning with regards to site access and all highways and traffic issues	Average: 20 meetings and follow up emails 100 hrs
	Regular site visits to check compliance with agreed environmental and highways requirements	Twice a week over the duration of the development: 2 hrs per visit Average: 208 hrs / year
	Review of the documents (SEMP, s61) and agreement	Based on 40 hours
	Community Liaison and complaints follow up	Based on experience: high - 80 hrs med - 40 hrs low - 20 hrs
Estimated time spent (per site), range and average for the service	**418 to 478 hours (depending on the level of complaints received) Average: 448 hours**	

Note that cost ranges outlined above for the Code of Construction Practice do not include licences which may not be required in all cases.

For information the current levels of licence fees and the CoCP charges can be found on the Council's

website.

LEVEL 2 SITES:

	Level 2 – medium size developments – costs and services	**Chargeable element breakdown, to extent not chargeable under other powers (based on hourly rates)**
Environmental Inspectorate service provided	Advice to applicants regarding environmental requirements, Site Environmental Management Plan (SEMP), noise and dust mitigation measures, advice re s61 prior consent	Average: 7 meetings and follow up emails 35 hrs
	Advice on site planning with regards to site access and all highways and traffic issues	Average: 12 meetings and follow up emails 60 hrs
	Regular site visits to check compliance with agreed environmental and highways requirements	Once a week over the duration of the development: 2 hrs per visit Average: 104 hrs / year
	Review of the documents (SEMP, s61) and agreement	Based on 40 hours
	Community Liaison and complaints follow up	Based on experience: high - 80 hrs med - 40 hrs low - 20 hrs
Estimated time spent (per site), range and average for the service	**259 to 319 hours (depending on the level of complaints received and the complexity) Average: 289 hours**	

Note that cost ranges outlined above for the Code of Construction Practice do not include licences which may not be required in all cases.

For information the current levels of licence fees and the CoCP charges can be found on the Council's website.

APPENDIX E:
Pre CoCP Agreement

The Council provides a service in cases where planning permission has not yet been granted and/or where the developer would desire to have discussions and/or meetings about the content and requirement of CoCP documents prior to official submission of Appendix A. This service can be requested **only** by the developer or his nominated representative and an agreement has been signed and a fee paid before the service is delivered.

Package	**Service provided**	**Chargeable hours (based on hourly rates)**	**Timescale**
1	One desktop review of document (CMP) with regards to requirements of the CoCP and high level written advice. This could include traffic arrangements, site access and egress and the use of the highway (skips, hoarding, etc). This does not include meetings or site visits.	Up to 4 hrs	21 days
2	One desktop review of documents (SEMP) and site visit with an officer with regards to requirements of the CoCP. This could include noise and air quality requirements, traffic management and the use of the highway (skips, hoarding, etc). High level written advice of any key area of concern.	7 hrs 112	28 days
3	Two desktop reviews of documents (SEMP) and site meetings / site visits with regards to requirements of the CoCP for sites which need considerable officer time. This could include noise and air quality requirements, monitoring requirements, traffic management, the use of the highway (skip, hoarding, etc) and other relevant topic. High level written advice of any key area of concern.	21 hours	35 days

By signing this document, you are confirming that you are happy to pay the appropriate CoCP fees in cases where planning permission has not yet been granted and/or where you desire to have

discussions and/or meetings about the content and requirement of CoCP documents prior to official submission of Appendix A.

I agree to pay Westminster City Council for officer time spent on the CoCP application process prior to official Appendix A submission, even if planning permission is not granted or if I decide to no longer pursue the planning permission application and/or works on site.

This form should be returned to the Council's Environmental Inspectorate Team at cocp@westminster.gov.uk

Please tick the package that you would like to purchase!

		Please tick
Package 1	4 hrs	
Package 2	7 hrs	
Package 3	21 hrs	

Please note that the fees and charges will be regularly reviewed and published if changed.

NAME:……
COMPANY:……..
Position:….……
ADDRESS: ……..….
Planning Reference:….…….

Signed:….……
Dated:…..……..
On behalf of:……
*: Please provide the information in block letters

NOTICE: THIS IS A LEGALLY BINDING DOCUMENT
It creates a legally enforceable relationship between the above Signatory and Westminster City Council. It is essential that the person signing this document on behalf of the Developer has the authority to do so, thus creating legal obligations on behalf of the Developer.

APPENDIX F – MAP OF TLRN AND SRN