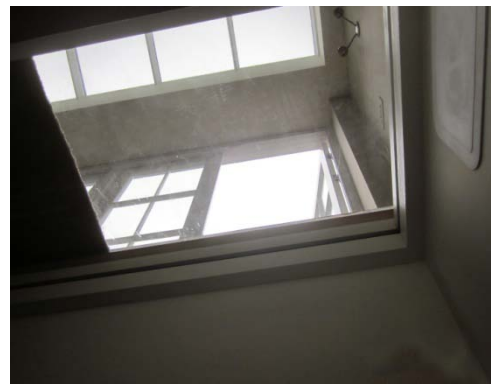
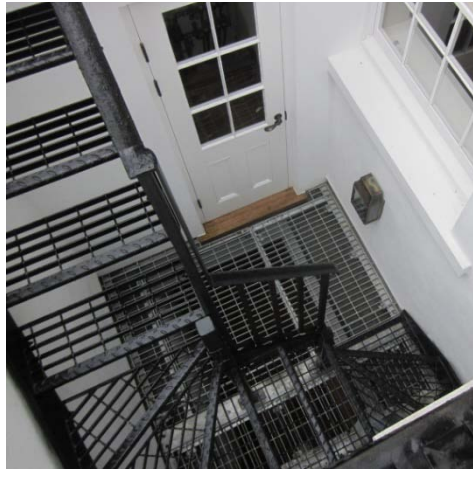


BASEMENTS

DEVELOPING WESTMINSTER'S LOCAL PLAN



Booklet No. 3
LDF Consultation - CMP Revision
October 2013

This booklet sets out the council's proposed approach to Basements through consideration of issues raised through consultation, and how these can be addressed through planning policy. This booklet includes only one specific policy:

CM28.7 Basements

Whilst all policies will need to be taken into account, some aspects of this topic are included in separate booklets, namely:

Flooding

Health, Safety and Wellbeing (Construction Management)

Heritage, Views and Tall Buildings

Design

INTRODUCTION

CLLR ROBERT DAVIS

In recent years, there has been a sharp rise in the number of planning applications for basement development across Westminster.

Basement extensions can offer a discreet way of providing additional accommodation where space to extend above ground is limited.

Excavation can, however, be a complicated undertaking. It poses different challenges to other types of extensions and many residents have expressed concerns about the impacts of this form of development.

As part of our emerging local plan, the council is therefore developing a new planning policy to specifically address basement development. The policy aims to ensure that, in future, basement extensions are only permitted where they will be sensitive to the surrounding area and are designed and undertaken using specialist expertise.

In developing this policy it is also important to recognise the limited powers the council has to address the impacts of basement development through planning legislation. We need to ensure our policy complies with national requirements, is based on detailed evidence and will not be open to challenge at planning appeal and inquiry.

This consultation paper sets out the background to the new policy and recommendations for our policy approach. At the same time, we are consulting on a separate Interim Guidance Note, which provides more general guidance and includes advice on wider council powers to address construction impacts and structural issues.

We are now inviting your comments on our approach and look forward to working with you to ensure that the new planning policy provides a robust and effective tool for managing future proposals for basement development.



Councillor Robert Davis DL
Deputy Leader, Westminster City Council
Cabinet Member for Built Environment



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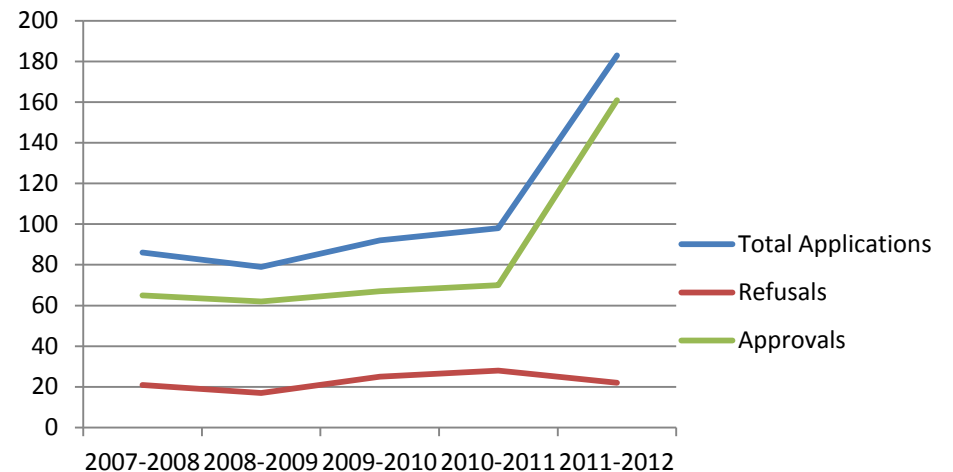
GROWING DEMAND

In recent years, basement extensions have become an increasingly popular form of development in Westminster. The numbers of basement extensions to residential properties continue to rise, with 161 new basements approved in Westminster in 2011-2012. These have been permitted all over Westminster, but there are particular concentrations in certain residential areas, especially Belgravia, Knightsbridge, Bayswater and St John's Wood (see map on next page).

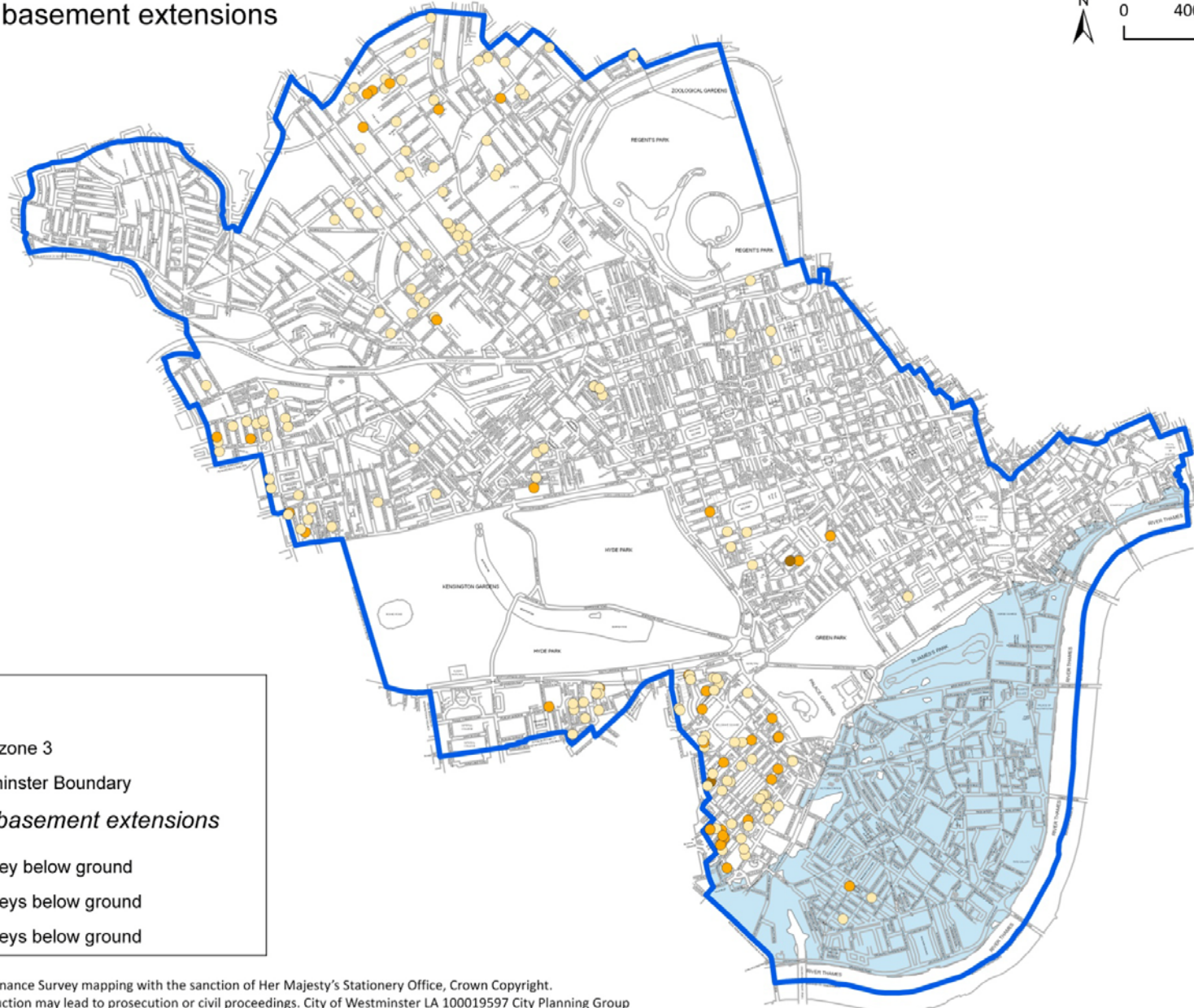
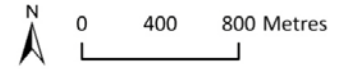
Once constructed, such extensions are often largely concealed from public view and can offer a discreet way of providing additional accommodation where there is limited space available for development.

Excavation does, however, pose a number of significant challenges which are different to above ground extensions. The council is therefore developing a new planning policy to specifically address this form of development. The policy will focus on basement extensions to existing residential properties.

Basement extensions in Westminster in the last five years



Permitted basement extensions



Key

- Flood zone 3
- Westminster Boundary

Permitted basement extensions

- 1 storey below ground
- 2 storeys below ground
- 3 storeys below ground

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Background: What you have told us

The City Council consulted on two drafts of basements policy as part of an initial options paper and the draft *City Management Plan* in 2012. Almost all respondents welcomed the introduction of a policy on basement extensions. Some of the main issues raised were as follows:

- There was much support among local residents for proposals to restrict the extent and depth of basement excavation but many developers and other land owners did not consider that these proposals are appropriate or justified.
- There was considerable disagreement as to what length of garden should remain undeveloped and it was felt that the proposed 50% limit did not respond to differing circumstances across the city.
- Most respondents welcomed a requirement for a minimum soil depth on top of basements, but there was disagreement over depth as some others felt increased soil depth may result in more disruption to neighbours.
- There was general agreement that important trees and heritage assets should be protected.
- There was concern that large scale excavation threatens the stability of neighbouring buildings and causes damage and may affect groundwater.
- Construction works for basements have a disproportionate impact on adjoining occupiers, especially if several developments are happening at the same time..
- There was a suggestion that 'bonds' to secure performance and any damage to neighbouring properties should be provided.

“We are not against anyone improving and extending their homes... but the new brand of home extension in the shape of vast excavation work needs addressing urgently.”

St Johns Wood Society

“Subterranean development is an innovative way to secure additional space from the City’s finite land resource and allow for wider benefits such as removal of at grade parking, provision of higher density development, amenity space and removal of plant from visible areas..”

CMP consultee

“The city management plan should take much greater account of the impact of developments on the environment, on stability, on neighbours....”

CMP Consultee

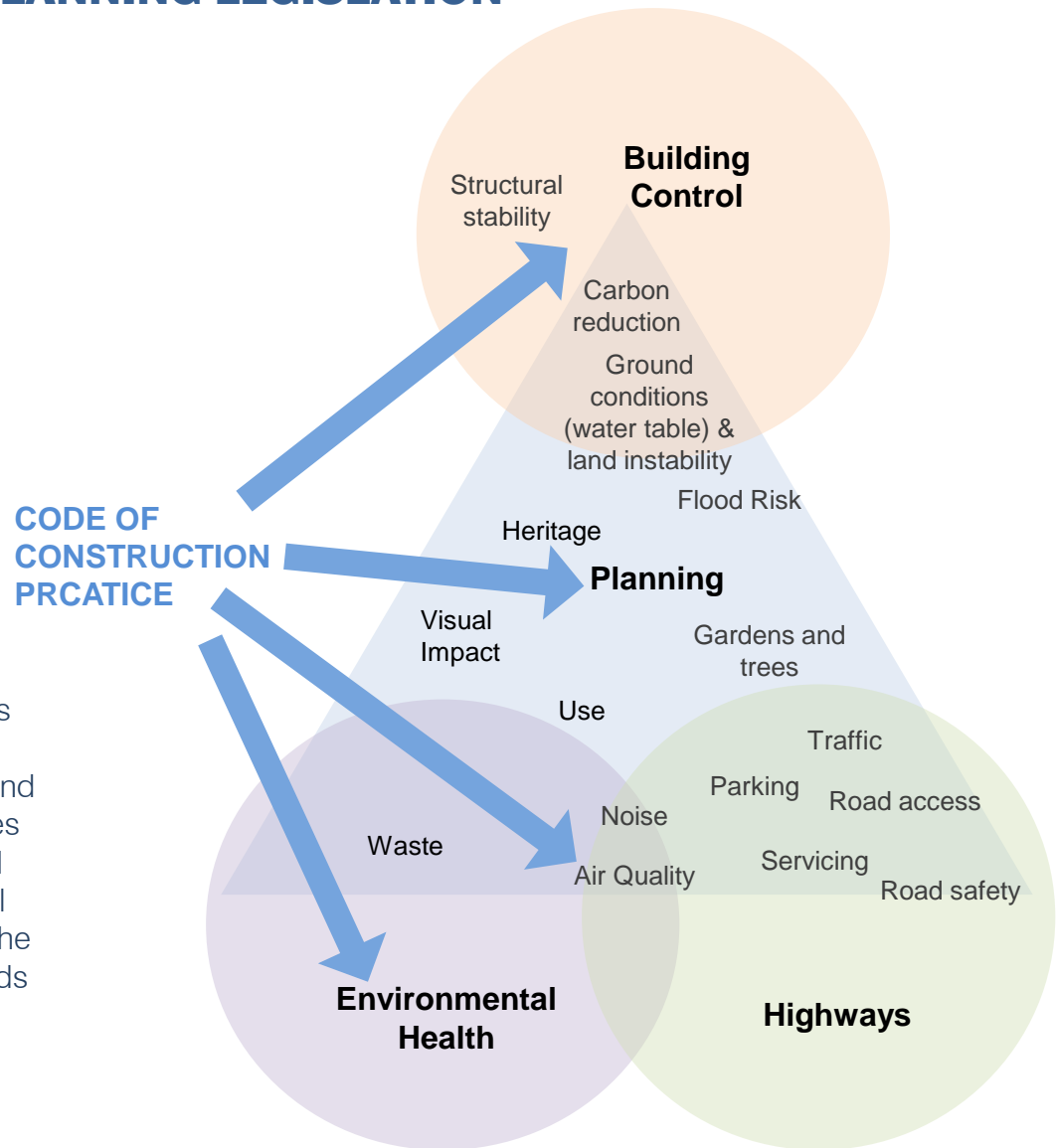
UNDERSTANDING THE LIMITS OF PLANNING LEGISLATION

Basement extensions do not always require planning permission, for example if they are directly under the footprint of an unlisted house or extend under a limited part of the garden and don't involve any external alterations.

Where permission is required, planning policy and decision-making is focused on the design phase of development and by law must address only the issues which can be considered under planning legislation, known as 'material considerations' and must not duplicate other regimes. In general terms this means focusing on the appearance and uses of buildings and land.

Other council services are involved in managing and enforcing issues encountered in other phases of development and a range of other legislation can be used by both owners and the council at different stages in the building process. Building Control enforces minimum standards and controls engineering design and structural stability; Environmental Health enforces issues related to the Environmental Protection Act and Control of Pollution Act (such as noise and dust); the Party Wall Act safeguards the interests of adjoining owners; and the Highways Act ensures the efficient and safe use of roads and highways.

As such, not all issues which have been raised in consultation can be addressed by the planning policy itself. The council will, however, seek other ways to address residents concerns, in particular bringing all the management of different processes together in the emerging *code of construction practice* (see managing the impacts of construction for further info).



Main planning issues considered when assessing basement development and their relationship to other functions, with Construction Management as an issue which cuts across different functions.

INSIGHTS

WHAT SHOULD WE CONTROL?

Gardens and Trees

Gardens contribute significantly to the local context and character of Westminster and support biodiversity, trees, green corridors and networks. Gardens also play an important role in reducing the amount of water run-off from hard surfaces, allowing rain to drain naturally into the subsoil, which helps reduce flood risk and mitigate the effects of climate change.

We want to ensure that all new basements protect important trees and maintain and enhance garden setting and biodiversity, as well as ensuring surface water drainage is maintained, without increasing surface water flows onto adjoining properties.

The London Plan¹ also identifies the important role of back gardens in addressing the above issues and as a much cherished part of the London townscape which contributes to quality of life.

To ensure gardens maintain these functions, new basement development should not usually occupy the entire garden area, leaving a margin of undeveloped garden land and should also have adequate soil depth and volume above the basement itself.

Policy is therefore seeking to limit the extent of garden which can be developed, but this must also respond to different circumstances in different parts of Westminster, recognising that different standards will be appropriate to a small courtyard space and a large garden in St John's Wood.

Soil Depth above basements

In addition to allowing part of the garden to remain undeveloped, soil above basements is required to allow for planting and maintain sustainable urban drainage.

Research² suggests that overall soil volumes need to be considered when determining the depth of soil required above basements, and council tree officers advise that the soil depth required will not be the same on every site.

In circumstances where adequate soil volume can be achieved for trees to grow and thrive to maturity, soil depth should be no less than 1.0m, plus a drainage layer between the top of the basement roof and the soil. This equates to a total depth of build up above the basement of 1.2-1.5m, depending on the thickness of the drainage material.

In circumstances where the lateral extent of root growth will be impeded by the presence of physical barriers in the soil (such as building foundations, walls, and underground services), or inhospitable rooting conditions (such as the presence of impermeable surfaces), soil depths should be increased to up to 1.5m (plus drainage layer), in order to provide sufficient soil volume for trees to grow and thrive to maturity.

¹London Plan (2011) Policy 3.5 Quality and Design of Housing

²Urban J. *Up by the Roots. Healthy Soils and Trees in the Built Environment.* International Society of Arboriculture

INSIGHTS: WHAT SHOULD WE CONTROL?

Flooding, Land Stability and Ground Conditions

A number of consultation responses raised concerns about the impact of basements on stability of adjoining properties and issues of flooding and ground water.

To inform our approach, the council therefore commissioned consultant engineers Alan Baxter Associates to prepare detailed advice on technical issues in relation to basement construction, considering flood risk and ground conditions in Westminster, how these may affect structural stability and whether there are engineering solutions to overcome them.

Their report identifies different types of ground conditions encountered across Westminster and suggests how these different conditions should inform differing construction approaches which will require detailed site-specific assessment by a qualified structural engineer. It identifies that there will always be some settlement involved where excavation takes place but, if appropriate construction techniques are adopted, this need not cause long-term damage.

Cellars and basements are more vulnerable to flooding than conventional extensions. Such flooding can arise from a number of different sources, including the overflowing of drains and nearby watercourses, groundwater flooding and surface water flooding. This can usually be overcome with appropriate design, including flood resistance and flood resilience measures.

In most circumstances, groundwater will be unaffected by basement construction, as long as it is appropriately constructed but cumulatively impacts will need to be monitored and the structural engineer will need to assess this.

The risk of surface water flooding can be reduced by adopting the measures described in the gardens and trees section above and the flooding policy sets out further guidance.



The Party Wall Act

The Party Wall Act is in place to control development on each side of a party wall and maintain its integrity and function. This is always a private matter between neighbours which does not involve the council but it can be used by neighbours to address issues where damage occurs. For example, the Party Wall Surveyor can request that a sum of money is held in 'Escrow' meaning a sum is kept as security for example in case there is a need to step in and complete the works to a party wall to repair damage.

INSIGHTS

WHAT SHOULD WE CONTROL?

Depth of Excavation

The Baxter's report identifies that deeper basements are more technically demanding to construct and where they are located very close to neighbouring properties they have an increased potential to cause greater movements, although different engineering solutions can be adopted to overcome these.

Basement development also has a significant environmental impact. Basement construction generates a significant amount of waste; it has a high embodied carbon content and the use of basement spaces can be energy intensive, particularly where underground rooms house swimming pools and media rooms.

One way to minimise excavation waste and risks associated with basement construction is to take a precautionary approach and restrict the depth of basement extensions to one additional storey (each storey is approximately 3m floor to ceiling).

Limiting the depth of basement accommodation will also provide better accommodation, allowing natural lighting and ventilation to be used to a greater extent. Reducing the amount of excavation required will also minimise disruption to adjoining occupiers.

In addition to the above, the domestic scale and function is part of the character of much of Westminster. The intensity of basement use can change this character, in particular in smaller scale buildings and mews streets.



INSIGHTS

WHAT SHOULD WE CONTROL?

Visual Impacts and Heritage Assets

External alterations associated with basement developments can also affect local character, conservation areas and the garden setting. Lightwells, skylights, plant and other external features therefore need careful design.

It is also important to take account of the impact on other heritage assets, especially listed buildings and archaeology, which may be vulnerable to damage when excavation takes place.

The Baxter's report identifies that there is no greater structural risk to historic buildings, and indeed older buildings tend to be more able to accommodate ground movements than more modern rigid structures. However, any such work needs to be done sensitively, using minimum intervention, so as not to affect delicate historic fabric and finishes and to take account of significance of historic features and plan form.



MANAGING THE IMPACT OF CONSTRUCTION

Basement construction can be a lengthy process and tends to create noise, vibration, dust, and air pollution which can significantly affect neighbouring properties. Many concerns raised by residents relate to management of the construction phases of development, especially where numerous developments are taking place at one time on one street.

As set out previously, planning has limited powers to control the construction process and its impacts by itself. We are obliged to consider each case individually, and cannot impose restrictions on numbers of developments taking place at one time through the planning process or control when they will start. However, the planning system does intersect with a number of other regimes which, taken together, allow the council to closely monitor and control the processes and impacts associated with basement development using a large body of environmental and safety requirements.

We currently ask for a construction management plan with applications for basement development but planning cannot monitor and enforce all of the issues this covers. To address this, in addition to the planning policy, we are also developing a revised and updated Code of Construction Practice (CoCP) which sets out the council's standards and procedures for managing and reducing environmental impacts of construction projects. We are proposing to widen the scope of the current CoCP to cover not only large infrastructure projects, but also other types of development with significant construction impacts, including basements. This will help create a clear link between planning and other relevant processes, ensuring these work together and are followed through. This will also consider how to mitigate cumulative impact of more than one development taking place on one street.

For large scale development, compliance with the existing CoCP is secured by a planning condition on the approved planning application, with monitoring then funded via legal agreement with the applicant. Contractors have to prepare an Environmental Management Plan (EMP) to demonstrate how they will comply with the CoCP requirements. This same process could be used to better manage and monitor construction impacts of basement development.



“Large scale excavations are appallingly disruptive to neighbours. We have suffered dreadfully from the excavation of a whole garden.”

City Management Plan Consultation response (2011)

WHEN WILL THE POLICY APPLY? NON-RESIDENTIAL BASEMENTS

Many very large scale developments in Westminster also incorporate substantial basements. Often commercial projects, in general these large scale new build projects are constructed at the same time as, and integral with, the above-ground structure and are usually of a size and cost that attracts the participation of design engineers and major contractors who have experience of large-scale construction work. Many of the issues discussed in this booklet are already addressed in other policy and requirements that apply to major development. The basements policy will therefore primarily relate to basement extensions to existing residential properties. The policy will, however, also be relevant to excavation beneath other commercial properties where excavation works will have similar impacts on adjoining residential properties.



RECOMMENDED APPROACH: BASEMENTS

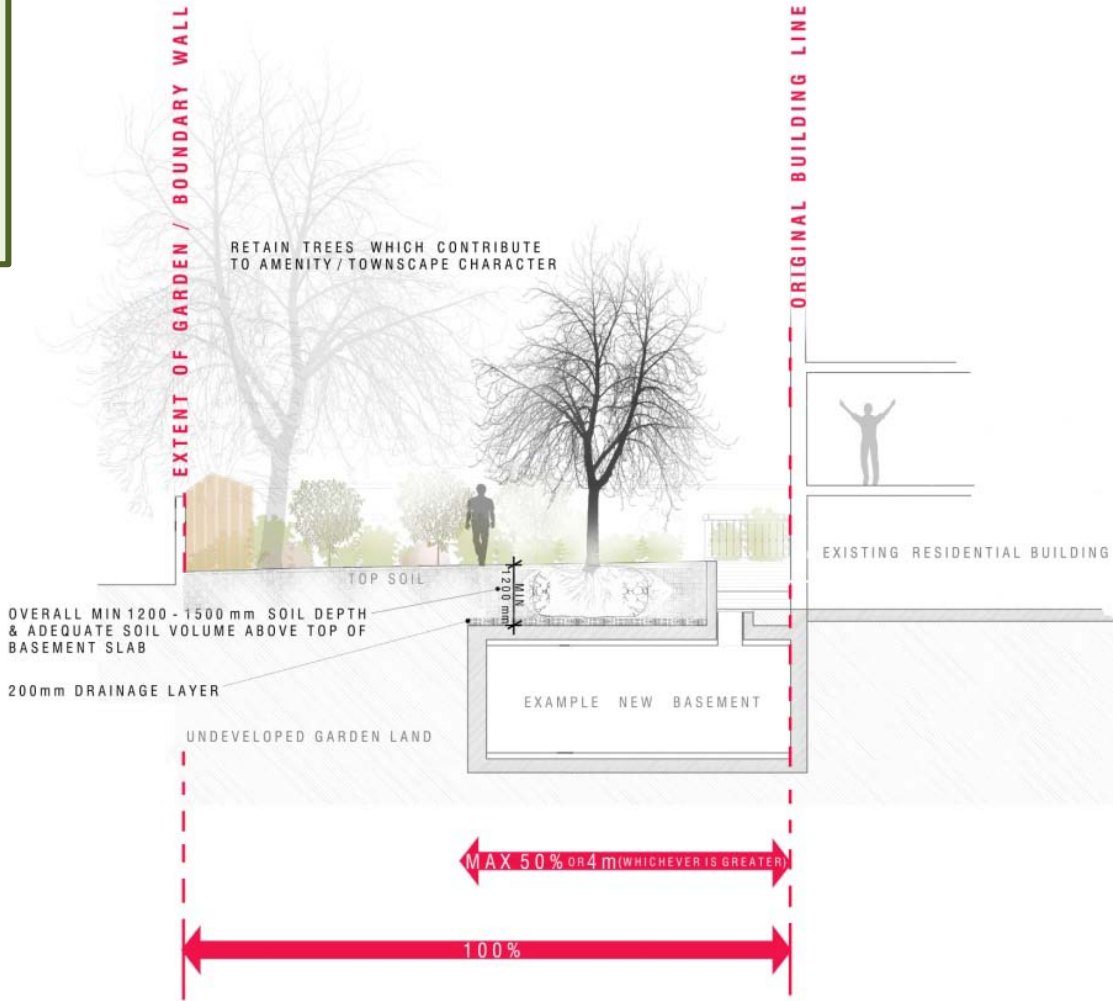
NEW POLICY CM28.7: BASEMENT DEVELOPMENT
 Basement development to residential buildings or buildings originally built for residential purposes will:

1. Provide satisfactory landscaping, incorporating soft landscaping, permeable surfacing, and a **minimum of 1.2m soil depth and adequate soil volume** above the top cover of the basement;
2. **Not extend under more than 50% or 4m** (whichever is the larger) of garden land, and not result in the loss of trees of townscape, ecological or amenity value;

Policy continues on next page...

1 Adequate Soil Depth: The minimum adequate soil depth is 1.2m (including drainage layer). However, the amount of soil needed to support growth will vary from site to site. In some circumstances 1.5m will be required and in all circumstances adequate overall soil volume will be required.

2 Undeveloped Garden Land: Garden land for the purposes of this policy is the private space occupied with the house between the original building and boundary walls, including any paved areas, extensions and garden buildings. What proportion is appropriate will be different on different sites. In Westminster, there are many smaller and courtyard gardens, where a significant proportion of the garden could be developed without the need for planning permission. Standards need to take account of permitted development rights, which in some locations may allow extensions under 4m or more of the garden. In larger gardens, 50% will ensure a substantial area of garden remains undeveloped and the soil depth required above the basement itself will allow for a landscaped garden setting across the garden as a whole. See diagram for further info.



RECOMMENDED APPROACH: BASEMENTS contd.

Policy CM28.7 continued from previous page

3. Not involve the excavation of more than one storey below the lowest original floor level, **unless exceptional circumstances have been demonstrated**;
4. be naturally ventilated and lit wherever practicable, especially where **habitable accommodation** is being provided;
5. have no adverse visual impact on the existing building, garden setting or the surrounding area, ensuring lightwells, plant, vents, skylights and means of escape are sensitively designed and discreetly sited; and
6. protect heritage assets including significant archaeological deposits and, in the case of listed buildings, not unbalance the buildings' original hierarchy of spaces, where this contributes to significance

Applicants will be required to demonstrate that basement development will safeguard structural stability and will not increase flood risk on the site or beyond. All applications will be accompanied by a **structural methodology statement and appropriate self-certification**. A construction management plan demonstrating adherence to the Council's Code of Construction Practice will also be required.

Non-residential development adjoining residential properties and new build residential incorporating basements will also be subject to the criteria set out above where there is potential for similar impact on those adjoining properties.

New or extended basement areas under the adjacent highway will:

1. retain a minimum vertical depth below the footway or carriageway of 900mm; and
2. not encroach more than 1.8m under any part of the adjacent highway.

3 Depth of extensions:

One storey is approximately 2.7m (floor to ceiling height). Evidence⁴ shows that extensions of more than one storey carry a greater risk of damage to adjoining properties and are more complex in certain circumstances and locations. The intensity of basement use may also be unacceptable in some locations, for example in mews. Deeper basements may be considered outside small-scale domestic streets, if applicants can provide a greater level of justification to demonstrate basements can be constructed without harm to the built or natural environment and that the greater technical risks associated with such basement development have been addressed.

4 Habitable Accommodation:

could include rooms for staff accommodation. Requirements for natural lighting and ventilation will need to be balanced against requirements to minimise visual impact, under Point 5 of the policy.

Ground conditions and land instability: The National Planning Policy Framework (2012) states that planning should ensure that development is suitable for its site, taking into account ground conditions and land instability, and ensure that adequate site investigation information, prepared by a competent person has been presented to demonstrate these impacts have been understood, including any cumulative impacts. We will therefore require information to be prepared and signed off by a Chartered Civil Engineer (MICE) or Structural Engineer (MI Struct.E) including detailed site-specific analysis and geo-hydrology information. Conditions may be applied to ensure a structural engineer visits the site during the course of works.

Have Your Say

This booklet is part of the informal consultation for developing the statutory policies in Westminster's local plan. It builds on previous consultation on the City Management Plan. Further information can be found [here](#).

This booklet only includes the proposed policy. However, Westminster's local plan will include supporting text based on the text within this booklet This includes:

- Introductory text, setting out the background to the topic.
- Policy application: guidance as to how the policy will be applied, including details of how things will be measured or calculated etc.
- Reasoned justification: this is an explanation required by law to accompany a policy, setting out why a policy is applied.
- Glossary definitions: the statutory definitions used for terms that are included in the policies.

If you wish to discuss the issues raised in this booklet with somebody, please telephone 020 7641 2503.

To comment on anything in this booklet, please email ldf@westminster.gov.uk or write to us at:

City Planning
11th Floor
Westminster City Hall
64 Victoria Street
London SE1 6QP

Your comments will form part of the statutory record of consultation and will be made available on our website and to the public. Your contact details will not be made available, but we will use them to stay in touch with you about future policy development. If you do not want us to stay in touch, please let us know in your response.

Reading List

Alan Baxter's Associates [Residential Basements Report for Westminster City Council](#) (2013)

British Standard 5837: 2012
Trees in relation to design, demolition and construction

CLG [National Planning Policy Framework \(2012\)](#)

Eight Associates [Life Cycle Carbon Analysis of Extensions and Subterranean Development in RBK&C](#) (2010)

Halcrow [Preliminary Flood Risk Assessment for the City of Westminster](#).

Urban, J. (2008). *Up by the Roots. Healthy Soils and Trees in the Built Environment*. International Society of Arboriculture.

Westminster City Council *Interim Guidance Note On Basements* (The City Council is also consulting on a more detailed guidance note on basements which sets out how we currently determine applications for basement development, until this new policy can be adopted.)