

# Basement Extensions: Issues

April 2012



THE ROYAL BOROUGH OF  
KENSINGTON  
AND CHELSEA



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## 1. INTRODUCTION

1.1 The Royal Borough of Kensington and Chelsea was probably the first local authority to produce a comprehensive set of planning policies to control basement development. Its current policies are set out in the Council's Subterranean Development Supplementary Planning Document (2008) and its Core Strategy (2010).

1.2 The Council is now reviewing its policies towards basement development. This is a subject which of particular concern to many residents and stakeholders.

1.3 This paper:

- sets out the existing Council policies
- asks whether you consider these to be effective
- asks whether the policies should remain the same or be changed, and how.

### *Review of existing policy*

1.4 The Council adopted its Core Strategy in December 2010, a document which looks ahead to 2028 and establishes a policy framework for development. Policies CR5, CL2, CE1 and CE2 refer explicitly to basement development.

1.5 The Council has also adopted a supplementary planning document, the Subterranean Development SPD (May 2009), which provides guidance on basement development.

1.6 Central to the Local Plan system<sup>1</sup> is the recognition that planning should readily adapt to changing circumstances. So although both the Core Strategy and the SPD are recent, it is time to evaluate how the policies on basement development are operating in practice.

### *The timetable*

1.7 The review of a part of a Core Strategy has a number of stages. The time table for the review of Core Strategy basement policy is set out below.

Informal issues and options (this stage)	April/May 2012
Draft Policy	September 2012
Publication	December 2012/ January 2013
Submission	March 2013
Examination in Public	May 2013

1.8 This paper is the first stage in the review process. When we have received your views, we will develop a set of draft policies which we will publish for public consultation in September 2012. We will again consider your views before finalising the policies at the end of the year.

1.9 The policies will have to be the subject of an independent examination. This is likely to take place in March 2013. We will revise the Subterranean Development SPD at the same time.

1.10 We expect to have a new set of adopted policies in the Core Strategy and the Subterranean Development SPD by the summer of 2013.

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<sup>1</sup> The term 'Local Development Framework' is now replaced by 'Local Plan' by the National Planning Policy Framework and associated changes to the regulations

## 2. BACKGROUND

### *The scale of basement development within the Borough*

2.1 The Council's [Annual Monitoring Report \(2011\)](#) considered the number of planning applications, and certificates of lawful development, which have been received for development which includes a degree of basement excavation. These figures are set out in table 1 below.

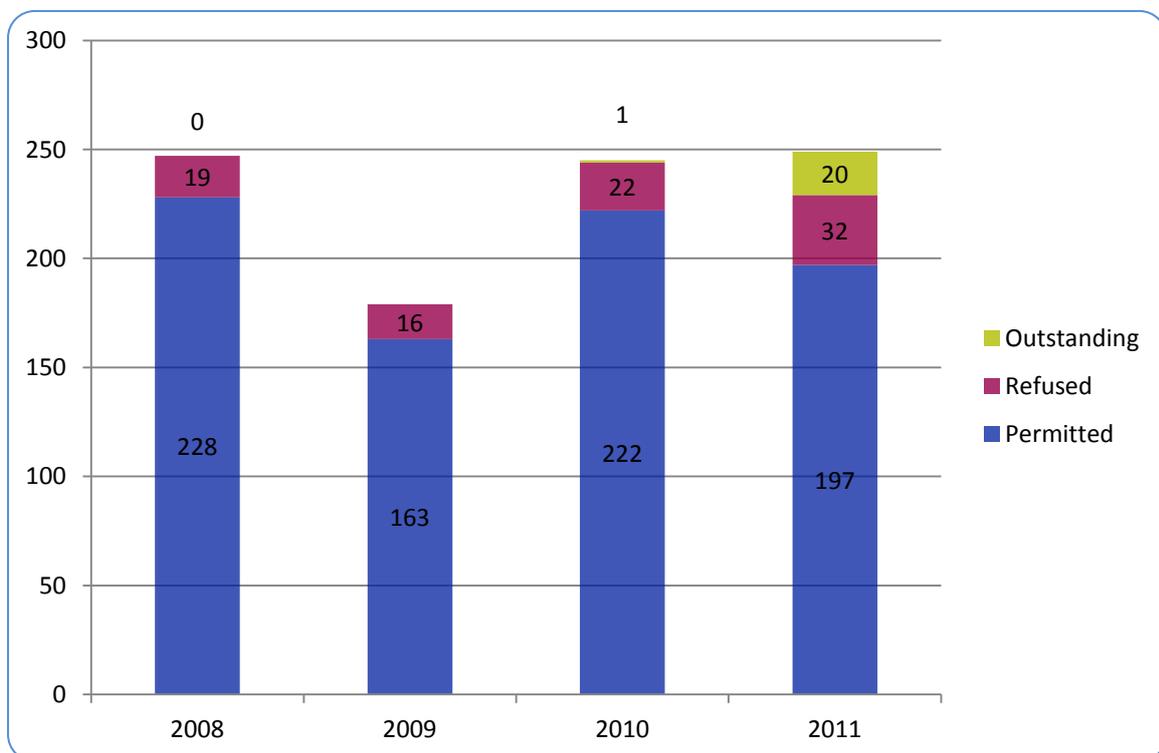


Table 1: Planning applications received - RBKC Annual Monitoring Report

2.2 It is difficult to ascertain exactly how much basement development is being carried out in the Borough, because some does not require planning permission<sup>2</sup> and that there is no requirement for an owner to

<sup>2</sup> Under Schedule 2, Part 1, Class A of the Town and Country Planning (General Permitted Development) Order 1995 single storey basement extensions that project no more than 3 metres into the rear garden of a single family dwelling are usually considered to be permitted development.

apply for a certificate of lawful proposed development<sup>3</sup>.

- 2.3 However, in 2011, we received notification of a further 46 basement schemes which did not require planning permission and were not the subject of certificates of lawful development.

### ***What is the driving force for basement extensions?***

- 2.4 In Kensington and Chelsea, with an exceptional urban realm, extending homes upwards or rearwards may not be acceptable. Extending homes downwards is, therefore, seen by some residents as a practicable option. A well designed basement extension can offer the space needed by a growing family of a size that could not be achieved in conventional extensions. It creates space but is usually invisible, and does not have an impact upon the character of an area or the sense of enclosure or daylight enjoyed by its neighbours. But basement development must be carefully managed if it is to be a good neighbour.

### ***What are the main issues to be taken into account when considering planning application for a basement extension?***

- 2.5 When we consider planning applications we assess the impact of the completed proposal upon the character of the building, the surrounding area and upon the wider environment. A number of factors are considered, including appearance (often basement extensions require light wells), the nature of the use of the basement, impact upon trees and vegetation, upon environmental sustainability and flooding.

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<sup>3</sup> An applicant can apply for a Certificate of Lawful Proposed Development from the Council, which confirms that planning permission is not required for the proposed works.



Map 1: Planning permissions granted for development including a basement extension 2010 and 2011

- 2.6 Basement extensions tend to raise concerns from neighbours about construction noise and traffic and the structural stability of the building and its neighbours. There is pressure for these matters to be addressed through the planning process. However, the Planning Acts were never designed to deal with these issues. The 1974 Environmental Protection Act provides for controls of construction impact, the Highways Act for the use of the highway, and the Party Wall Act for structural stability.
- 2.7 It is important to note that Planning is only concerned about structural stability and basement extensions insofar as it impacts upon interests of planning importance. The responsibility to ensure that the development is structurally sound is that of the developer, using the Building Regulations. Damage to neighbouring structures is controlled by the Party Wall Act. Where the Party Wall Act is not relevant, for example where damage is to a property that does not abut the development, it is for the individuals to seek recourse through the courts.
- 2.8 Despite the fact that these matters do not fall squarely within planning, we currently impose a number of requirements when we receive planning applications. We ask for a construction method statement to be submitted with the application and if we grant planning permission we require a construction traffic management scheme to be submitted and agreed. We also impose conditions requiring supervision by a suitably qualified engineer and seek to ensure that the contractor is a member of the considerate constructors' scheme.
- 2.9 It is essential that those involved are clear as to which regime is relevant for each element of the process. Therefore, as part of this review process, we will look at how residents and stakeholders might

be better informed about noise, disturbance, highways and structural matters outside the planning application process, and we will consider whether there is scope for a more joined-up approach.

#### Question 1:

Are there any other issues which should be addressed by Council, be this through the emerging the Core Strategy or Supplementary Planning Guidance?

#### Evidence

2.10 An extensive study of basement development issues by specialist consultants [Ove Arup](#) was published in 2008. This was specially commissioned by the Council and looked at:

- Underground water, and the impact of basements on the aquifer, ground water flows at the like;
- Possible impact upon the structural stability of surrounding buildings. Including discussion of ground movements, and changes in the stiffness of foundation; and
- Sustainability.

2.11 The study concluded that whilst subterranean development had the potential to harm structural stability and have an impact upon flooding there was no reason why it would have to do so if designed carefully.

2.12 Information from this study enabled the Council to compose its policies on basements, which are set out in the Core Strategy and the Subterranean Development SPD.

2.13 The Council has now asked Ove Arup to update its study to consider further:

- drainage and water table issues
- structural impacts
- the appropriate depth of soil and the appropriate amount of garden to leave undeveloped.

2.14 The findings will be fed into the next stage of this policy development.

### 3. CURRENT POLICY

3.1 Our policies towards basement development are set out below. The Core Strategy and the Subterranean SPD can be accessed from the Council's [website](#), from the Planning Policy page.

#### *External appearance*

3.2 Given its nature, a basement extension will have less of a direct visual impact than its conventional equivalent. That it is not to say that a basement will not have direct physical manifestations, such as light wells, plant or roof lights. Both the SPD and the Core Strategy have policies which are intended to deal with these issues.

#### *Current policy approach: Core Strategy*

3.3 The design of all new development, and that includes basement developments, is currently assessed using a number of policies within the Core Strategy, principally those within the *Renewing Legacy* chapter. Policies CL1 and CL2 are of particular relevance.

#### *Policy CL1: Context and Character*

*The Council will require all development to respect the existing context, character and appearance, taking opportunities available to improve the quality and character of buildings and the area and way it functions, including being inclusive for all.*

#### *Policy CL2: New Buildings, Extensions and Modifications to Existing Buildings*

*The Council will require all extensions and modifications to be of the highest architectural quality, taking opportunities to improve the quality and character of buildings and the area.*

3.4 Both policies include a number of general criteria, relating to architectural design and the like which explain how the Council will deliver this ambition.

*Current policy approach: SPD*

Para 2.3.2

*The Council will discourage light wells and railings that are visible from the street in areas where these are not a feature of that street and discourage large light wells in rear gardens.*

Para 8.2.1

*Council will aim to ensure that any features associated with subterranean development visible from the street or surrounding properties, are well designed to be discreet.*

Para 8.3.1

*Light wells that are visible from the street will not be permitted where they are not a characteristic feature of that street. Light wells visible from surrounding properties will be considered on their merits.*

Para 8.3.2

*Light wells must not exceed a depth of 1 storey below ground level; be no wider than the width of the existing development; and not exceed more than 1.2m from the external perimeter wall of the above ground building.  
Excessively large light wells will not be permitted in any garden space.*

**Question 2:**

Do you consider that the existing policies concerning the visual impact of basement extensions are adequately covered within the Core Strategy and SPD?

If not, what changes would you like to see, and why?

## Listed buildings

3.5 The Council recognises that there is a particular concern regarding the impact of basement development on the special interest of listed buildings. A basement extension would have a significant impact on the hierarchy of the historic floor levels. Council policy is, therefore, restrictive with regard the creation of basements beneath listed buildings. There is more flexibility beneath gardens of listed buildings where the connecting passage between the existing and the proposed structure is sensitively designed.

### *Current policy approach: Core Strategy*

#### *Policy CL2(g)(i): New Buildings, Extensions and Modifications to Existing Buildings*

*The Council will require that it is demonstrated that [for subterranean development] the proposal does not involve excavation underneath a listed building;*

### *Current policy approach: SPD*

#### *Para 2.2.3*

*The Council will normally resist proposals for subterranean development under listed buildings or directly attached to existing basements, cellars or vaults of listed buildings.*

#### **Question 3:**

Do you consider that the existing policies and guidance concerning basement extensions and their impact upon listed buildings provide sufficient control to mitigate any adverse impact?

If not, what changes would you like to see, and why?

## Archaeology

3.6 Archaeological remains constitute the principal surviving evidence of the Borough's past, but are a finite and fragile resource. The destruction of such remains by development should be avoided to ensure the Borough's past is not lost forever. This is reflected by Council policy.

### Current policy approach: Core Strategy

#### Policy CL4: Heritage Assets - Listed buildings, Scheduled Ancient Monuments and Archaeology

*The Council will require development to preserve or enhance the special architectural or historic interest of listed buildings and scheduled ancient monuments and their settings, and the conservation and protection of sites of archaeological interest.*

*To deliver this the Council will (h) resist development which would threaten the conservation, protection or setting of archaeological remains.*

### Current policy approach: SPD

#### Para 2.4.1

*The Council will require pre-application consultation with the Greater London Archaeological Advisory Service (GLAAS) for any applications for excavation in [appropriate] areas.*

#### **Question 4:**

Do you consider that existing policies and guidance concerning basement extensions and archaeology provide sufficient safeguards to mitigate any adverse impact?

If not, what changes would you like to see, and why?

## **Parks, gardens and open spaces**

3.7 The Borough has a long history and tradition of high quality parks and gardens. There is concern that building beneath these spaces can have a detrimental impact upon them.

### *Current policy approach: Core Strategy*

#### Policy CR5: Parks, Gardens, Open Spaces and Waterways

*The Council will protect, enhance and make the most of existing parks, gardens and open spaces and require new high quality outdoor spaces to be provided.*

*To deliver this the Council will:*

*(c) resist development that has an adverse effect upon garden squares including proposals for subterranean development, and to promote the enhancement of garden squares.*

#### **Question 5:**

Do you consider that the existing policy concerning subterranean development beneath garden squares is appropriate?

If not, what changes would you like to see, and why?

## **Basement extensions and protection from surface water flooding events**

3.8 Given their nature basements are more susceptible to both surface water and sewerage flooding than conventional extensions.

3.9 The Environment Agency models tidal flooding, or flooding that may occur where the River Thames or its tributaries were to breach their defences. The Environment Agency's tidal [flood risk zones map](#) are

available to view in the Environment Agency's website, [www.environmental-agency.gov.uk](http://www.environmental-agency.gov.uk). These are the areas which are most at risk from the Thames flooding.

3.10 The maintenance of the sewerage infrastructure is the responsibility of Thames Water, which is undertaking a project to fit water pumps and non return valves to those properties in the greatest risk from sewerage flooding. Thames Water encourages the fitting of such technology to all newly built basement extensions.

### *Current policy approach: Core Strategy*

#### *CE2 Flooding*

*The Council will require development to adapt to fluvial flooding and mitigate the effects of, and adapt to, surface water and sewer flooding.*

*To deliver this the Council will:*

- a) Resist vulnerable development, including self-contained basement dwellings, in Flood Risk Zone 3 as defined in the Strategic Flood Risk Assessment.*
- b) Require a site-specific Flood Risk Assessment, including an 'Exception test' for all development in Flood Risk Zone 2 and 3 as defined in the Strategic Flood Risk Assessment, for sites in areas with critical drainage problems and for all sites greater than 1 hectare;*
- c) Where required undertake the sequential test for planning applications within Flood Risk Zones 2 and 3, and for sites in areas with critical drainage problems.*

### *Current policy approach: SPD*

3.11 The Core Strategy approach to river flooding is reiterated with reference to self contained basement dwellings within section 4 of the SPD. The SPD also make reference to sewage flooding.

#### Para 4.4.1

*The Council will attach the following informative to all planning applications for subterranean development.*

*Please be aware that sewer flooding has previously occurred in parts of the borough, such as Holland and Norland Wards, and any risk of this type of flooding must be mitigated against and is the responsibility of the owner and/or occupier. Thames Water encourages the use of water pumps, non-return valves and other suitable devices to avoid the risk of backflow, on the assumption that the sewerage network may surcharge to ground level during storm conditions. You are required to consider Part H of the Building Regulations 2000 for all proposals for subterranean development. You are also advised to let Thames Water know if your property has previously suffered from sewerage flooding or as soon as possible if this occurs in the future.*

#### **Question 6:**

Do you consider that the existing policies concerning the basement extensions and protection from river flooding and surface water flood events are adequately covered within the Core Strategy and SPD?

If not, what changes would you like to see, and why?

### *Trees, landscaping and drainage*

3.12 The Royal Borough is densely developed and therefore sets great store by its trees, gardens and greenery. Gardens also play an important part in reducing the amount of water run-off from hard surfaces. Uncontrolled basement development under gardens can cause the loss of trees and of grassed/ planting areas.

3.13 The provision of an adequate layer of soil above basements, and a permeable layer next to them, helps to ensure that trees and greenery can be retained or re-provided, and allows for water to drain into the subsoil ('sustainable urban drainage') rather than placing greater demands on the drainage system.

### *Current policy approach: Core Strategy*

#### *Policy CR6: Trees and landscape*

*The Council will require the protection of existing trees and the provision of new trees that complement existing or create new, high quality green areas which deliver amenity and biodiversity benefits.*

#### *Policy CL2(g). New buildings, extensions and modifications to existing buildings*

*The Council will require that it is demonstrated that [for subterranean development]*

*iii. there is no loss of trees of townscape or amenity value;*

*iv. adequate soil depth and material is provided to ensure sustainable growth.*

### *Current policy approach: SPD*

3.14 The SPD provides guidance as to what the Council considers to be needed to protect the green and leafy appearance of the borough and to allow for effective sustainable drainage.

#### *Para 9.1.1*

*The Council will require that no mature trees are removed, felled, uprooted, topped, damaged or harmed in the long term, especially those with Tree Preservation Orders, in Conservation Areas or within the curtilage of a Listed Building, to make way for a subterranean development under a garden.*

#### *Para 9.2.1*

*The Council will require the following for all basement proposals under gardens*

- *1m of permeable soil above the top cover of the basement;*
- *No more than 85% coverage of the garden space (between the boundary walls and existing building), with the remainder of the space used for drainage, planting and 'tree pits'; and*
- *The provision of drainage technology to facilitate the movement of water over and around the basement, to ensure it does not collect on the top of the basement and facilitate sustainable urban drainage systems.*

#### *Para 4.3.1*

*Where 1m of soil above a subterranean development is not required and the garden area is larger than 5m<sup>2</sup> (measured from the side of dwelling to the appropriate boundary walls) the Council will require a soak away or other type of sustainable urban drainage system.*

**Question 7:**

Do you consider that the content of the existing policies concerning basement extensions and trees, vegetation and sustainable drainage are sufficient to mitigate any adverse impact?

If not, what changes would you like to see, and why?

***Mitigating environmental impacts***

3.15 The excavation, construction, transportation of construction waste and use of a subterranean development produces a significant amount of CO<sub>2</sub> which contributes to climate change.

3.16 The Council has adopted policies to address the large environmental footprint of basement extensions. The method chosen is to require that the whole dwelling is retrofitted to high environmental standards.

***Current policy approach: Core Strategy***

**Policy CE1: Climate Change**

*The Council recognises the Government's targets to reduce national carbon dioxide emissions by 26% against 1990 levels by 2020 in order to meet a 60% reduction by 2050 and will require development to make a significant contribution towards this target.*

*To deliver this the Council will*

*c. require an assessment to demonstrate that the entire dwelling where subterranean extensions are proposed meets EcoHomes Very Good (at design and post construction) with 40% of the credits achieved under the Energy, Water and Materials sections, or comparable when BREEAM for refurbishment is published;*

3.17 This approach is reiterated within section 5 of the SPD.

### Question 8:

Do you consider that the existing policy within the Core Strategy satisfactory mitigates the environmental impact of the construction and occupation of basement extensions?

If not, what changes would you like to see, and why?

### *Structural stability*

3.18 At present, the Council requires the submission of a Construction Method Statement (CMS) at validation stage. The purpose of the CMS is not intended to spell out one particular engineering solution, but to demonstrate that the proposed development is capable of being carried out without having such a significant effect on structural stability that the quality of the street environment, listed buildings, conservation areas and neighbours' living conditions, all planning considerations, are permanently harmed.

### *Current policy approach: Core Strategy*

3.19 The Core Strategy sets out the requirement that structural stability is demonstrated at the validation stage of an application.

### *Policy CL2(g)(i): New Buildings, Extensions and Modifications to Existing Buildings*

*The Council will require that it is demonstrated that [for subterranean development] the stability of the existing or neighbouring building is safeguarded.*

### *Current policy approach: SPD*

3.20 The SPD outlines the nature of the Construction Method Statement required to demonstrate that the development can be undertaken successfully.

Para 6.1.2

*The Council will require a Construction Method Statement (CMS) to be submitted with all planning applications and Listed Building Consent applications for subterranean development.*

Para 6.1.3

*The CMS will need to address the following.*

- whether the geology is capable of supporting the loads and construction techniques to be imposed;*
- the impact of the basement development, and associated construction and temporary works, on the structural integrity and natural ability for movement of existing and surrounding structures, utilities, infrastructure and man-made cavities, such as tunnels; whether the development will initiate slope instability which may threaten its neighbours; the impact of the basement development on drainage, sewage, surface water and ground water, flows and levels;*
- how any geological, hydrological and structural concerns have been satisfactorily addressed;*
- the engineering details of the scheme, including proposals for the excavation and construction;*
- the impact of the proposed basement development on the structural stability of the existing and adjoining buildings, especially listed buildings;*
- the impact of the proposed basement development on existing and proposed trees;*
- the sequence for the temporary works, which mitigates the effects on neighbours; and*
- the details and design of the preferred method of Temporary Works*

Para 2.12

*The Council will require that the construction and structural*

*stability of the subterranean development, including where appropriate any demolition, excavation or temporary work, incorporates the advice of a Chartered Civil Engineer (MICE) or Chartered Structural Engineer (MI Struct.E).*

**Question 9:**

Notwithstanding the limitations that the planning system has with regard structural stability do you consider that the approach within the Core Strategy is satisfactory?

If not, what changes would you like to see, and why?

***Reducing the impacts of construction.***

- 3.21 Most kinds of construction cause noise and disturbance, but the excavation and construction of basement development can be more disruptive than most because of the duration and extent of the work and the proximity to neighbours. This nuisance may include noise, vibration, dust; impact on pedestrian movement and the disturbance associated with the moving of spoil and of construction materials.
- 3.22 The provisions of the Control of Pollution Act (1974) are the principal mechanisms by which construction noise and vibration is controlled. These are separate from the planning system. Control of dust in the construction phase is dealt with by the Environmental Protection Act (1990).
- 3.23 The impact of construction traffic on the surrounding area is normally controlled by the use of Construction Traffic Method Plan (CTMP). Currently when planning permission is granted a CTMP is required to be submitted to, and agreed by, the Council. A CTMP normally includes such details as hours of operation, phasing, lorry movements

and the like.

3.24 The Council requires that all contractors have to be a member of the Considerate Contractors' Scheme, a national initiative intended to reduce the potential impact of development on those in the vicinity.

#### *Current policy approach: Core Strategy*

##### *Policy CE5: Air Quality*

*The Council will carefully control the impact of development on air quality, including the consideration of pollution from vehicles, construction and the heating and cooling of buildings. The Council will require development to be carried out in a way that minimises the impact on air quality and mitigate exceedences of air pollutants.*

3.25 There are no specific policies within the Core Strategy relating to the wider construction impact on the construction phase.

#### *Current policy approach: SPD*

##### *Para 7.1.3*

*For all planning applications for subterranean development the council will use the following informatives to inform applicant of their duties under the Control of Pollution legislation.*

*You are reminded that, if not properly managed, construction works can lead to negative impacts on the local environment, reducing residential amenity and the safe function of the highway. The Council can prosecute developers and their contractors if work is not managed properly. For advice on how to manage construction works in the Royal Borough please see the Council's website. From this page you will also find guidance on what to include in Construction Traffic Management Plans (where these are required).*

*Please be aware that construction and demolition will be controlled by the Council under Section 60 and 61 of the Control of Pollution Act 1974. In particular, building work which can be heard at the boundary of the site should not be carried out on Sundays and Bank Holidays and shall only be carried out between the following hours:- 8:00 am to 6:30 pm Monday to Friday and 8:00 am to 1:00 pm on Saturdays and not at any time on Sundays or Bank Holidays.*

**Para 7.1.4**

*Where appropriate the Council will .... require the contractor to be a member of the Considerate Contractors Scheme*

**Para 7.1.5**

*The Council will require the submission of a Construction Traffic Management Plan [for subterranean development.]*

**Question 10:**

Do you consider that the existing policy approach within the Core Strategy and SPD satisfactory takes into account of the impact of the construction phase of basement extensions?

If not, what changes would you like to see, and why?

**Question 11:**

Do you have any other comments to make?