

Greater London Authority, Transport for London,
Wandsworth Council and Lambeth Council

VAUXHALL NINE ELMS BATTERSEA DEVELOPMENT INFRASTRUCTURE FUNDING STUDY

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Final Report - Appendices
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APPENDIX 1

Practical tariff management issues

PRACTICAL TARIFF MANAGEMENT ISSUES

Introduction

This section will discuss how to embed the tariff (and latterly the CIL) charge into the planning framework. This has to be mindful of the need for the tariff to be converted as easily as possible into a CIL. An unsatisfactory outcome would be a CIL resulting in a totally different level of charge to a tariff on the same development.

The following sections go on to consider the administration of the charge and the provision for its review. We start by laying out some of the basic principles.

Basic principles of a tariff/CIL charge

Many of the basic principles that must be followed by a tariff seeking to mirror as closely as is possible, a CIL charge, are provided by the CIL Regulations. We therefore outline what the most relevant elements of the CIL Regulations are.

A further relevant policy document is the London Mayor's Supplementary Planning Guidance (SPG) entitled, *'Use of planning obligations in the funding of Crossrail'*, published in July 2010. This document underpins a charge on new office, retail and hotel space in certain parts of London to contribute towards the funding of the Crossrail project. The VNEB OA has been omitted from the charge area because of the scale and nature of change proposed in the area. As stated at paragraph 4.17 of the SPG:

"...the VNEB Opportunity Area has been omitted from the Central London charging area, on the basis that development in this area will be making contributions (probably at a level at least that set out in this guidance) towards other regionally important transport infrastructure which will enable the quantitative and qualitative optimisation of development in ways that will make a significant contribution towards delivery of the objectives of the London Plan."

However it should be borne in mind that the Crossrail charge is only to address Crossrail costs whereas for VNEB it must address a far wider range of impacts.

De minimis thresholds

We propose that guidance in the CIL Regulations is followed in respect of the thresholds above which contributions to a tariff are sought from development. This threshold - applicable to all types of development - is 100m² of gross internal floorspace (GIA).

Even with the large amount of flatted development, it is not thought that this would exempt any more than a minority of the residential development across the OA. For commercial space, it should be noted that this threshold is below the 500m² threshold applied in the Crossrail SPG. It is considered that the Crossrail threshold is appropriate for other well-established parts of the London Central Activities Zone (CAZ) but less so for an area such as the OA which will undergo such significant change in terms of the number of workers there and their associated impact on the infrastructure of the area. In addition, the Crossrail charge will only address transport needs and the SPG considers that developments below this size in the rest of the CAZ are unlikely to have crowding impacts sufficient to meet the tests of proportionality and reasonableness in Circular 5/05.

In reality, it is expected that very few of the commercial developments in the OA will be below 500m² floorspace.

Following the CIL Regulations, and to ensure that the tariff/CIL is cost effective to collect, we recommend that any final net charge (i.e. after offsets have been taken into account) below a given amount should not be pursued by the charging authority. The cut off point should be set by partners.

How should the tariff be levied?

Following the guidance in the CIL Regulations, the tariff should be levied in pounds per square metre of the net additional floorspace of any given development.

This is the approach taken in the Crossrail SPG, i.e. after taking into account the demolition of existing buildings. However, in the case of new development in the Crossrail tariff areas, this will largely involve the demolition of existing office space and the creation of a larger amount of office floorspace on the same site.

The OA will see a very different type of activity. There will, in reality, be very little 'like-for-like' demolition of space and replacement with the same uses at a higher density. Most of the development will involve considerable changes of use from activities such as warehousing to residential and office. To factor in the loss of the existing space would result in some incorrect tariff charges on certain developments, often with the overall charge being lowered disproportionately. What this would do would relieve development from paying for the full impacts that accrue from it. It is therefore assumed, for the purpose of the tariff, that only the loss of the same type of space as that to be delivered will be accounted for in a net tariff charge.

Over time, the charge should reflect inflation using a suitable index, to be agreed by the partners. One example cited in the CIL Regulations is the BCIS All-in Tender Price Index of Construction Costs.

What is included within the tariff?

Types of development included

Residential, office, retail and hotel development should be liable for the tariff charge. This follows the approach in the Crossrail SPG.

It is proposed that the tariff excludes industrial and warehouse development, to encourage the intensification of use of the Stewarts Road area which remains part of a Strategic Industrial Location (SIL), enabling the maximum number of current occupiers, including logistics businesses, to relocate in the local area. The vision for the rest of the OA is of an area providing higher value employment than is there at present and the current dominant employment is in warehousing and industrial uses. In reality there will be some new industrial and warehousing developments that will be granted planning permission within the OA over the development period. In such circumstances, contributions will be negotiated through the traditional S106 approach.

Affordable housing

Affordable housing needs careful handling. As we have explained elsewhere, the CIL Regulations are clear that this would not be part of a CIL charge. However, it is unclear if this will

be amended in any changes to the CIL Regulations that are to be introduced by the Coalition Government. We are therefore setting a tariff in this document on the basis that affordable housing is included.

Capital and revenue items

It is important to remember that the CIL Regulations are clear that a CIL charge should only cover capital items. All revenue and non-capital items cannot be included.

Therefore, an alternative mechanism is required to ensure that development properly pays for the revenue costs that cannot be addressed by the providers. On this matter, it will be important to clarify what is and isn't permissible in this regard. The service providers in many cases have made clear that they simply do not have the revenue budgets available to maintain and operate a large number of the new built facilities required. In such circumstances, there may be a need for contributions to be made towards certain revenue costs that might be outside the guidance provided in Circular 05/05 (soon to be enshrined in policy). A pragmatic approach must be taken in order to ensure that these costs are covered or alternative arrangements made, because if this is not done then there will be a number of facilities in place that will be unused because they cannot be managed or maintained.

It is thought that such revenue costs under a CIL charge will have to be covered through a Section 106 agreement tied to individual planning permissions. Government guidance on such issues is awaited.

How is the tariff/CIL collected?

Unless otherwise agreed, the tariff should be due for payment on commencement of the development. Where the development is phased, the relevant amount of tariff contribution due shall be paid on commencement of that particular phase.

In reality, a significant proportion of the developments in the OA will incur significant charges because of the high levels of floorspace that are being provided. In such circumstances where the total charge is over a certain amount, it is expected that staged payments will be needed, either for an individual development or for certain phases of a particular development. The number of instalments and size of each payment will depend on the size of the overall contribution and the timescale for the construction of the development. As will be shown later, for the purposes of modelling the cashflow, we have assumed that each development would pay one-third on commencement (Q1), one-third in year 2 (Q5) and one-third in the year of completion (Q9-Q12). Clearly however, each scheme will differ and the staging of payments will need to be agreed accordingly.

Section 70 of the CIL regulations indicate that, where a person has assumed liability to pay CIL, for chargeable amounts greater or equal to £40,000 are due in four instalments at the end of 60, 120, 180 and 240 days beginning with the intended commencement date. In reality, for the reasons stated above, we do not think that this phasing of payments will be realistic or achievable for the OA. It could render many developments unviable and would therefore serve to compromise the delivery of VNEB. We therefore recommend that the GLA, WBC and LBL lobby the Government to include provisions in any amendments to legislation to include provision for flexibility in the phasing of payments with the agreement of the Charging Authority. Such flexibility should only relate to larger payments above a threshold of around £200,000. Given the scale of

developments in the OA and the tariff envisaged, even smaller developments and smaller phases of larger developments are likely to be above this threshold.

Offsets and payments in-kind

It is not possible to be definitive as to which items will be expected to require an offset

It is not possible to be definitive as to which items will be expected to require an offset, which will require an in-kind payment or which will require both. This can only start to become clear through the detailed masterplan process and will not be finalised until detail planning applications are submitted, at which point developers' intentions are made explicit.

Nevertheless, based on the information provided to inform this assessment, the following represents provision of facilities that will incur some form of offset and/or in-kind benefit and where the preferred location of the facility is known (and therefore the relevant landowners can be aware of this):

- 4-form entry primary school, with children's centre, outdoor sports pitches and enlarged indoor sports provision - on land adjacent to Covent Garden Market and the proposed linear park: in-kind benefit.
- Library and archive facility - within BPS development: offset and possible in-kind benefit.
- Construction training centre (using built library facility before it is needed for that purpose): offset and possible in-kind benefit.

Most other social infrastructure requirements will represent some form of benefit in-kind and/or offset. However, no potential location has been identified for these, so it is not possible to identify which developer this could apply to.

It is common in the case of strategic items which are located across a number of landowners' land holdings, for them to be subject to an equalisation agreement or suchlike. The obvious example in the OA is the linear park. However, in this instance the landowners have identified that an equalisation agreement will not be appropriate for the linear park. In only a few instances will the location of the park take up more than a reasonable proportion of their sites. What is meant by 'reasonable' is the amount of land one would normally expect a developer to give over to open space as part of a typical development. For these instances, an amount has been included in the tariff. The remainder of the land cost is considered to be a normal cost incurred as part of the development, so is excluded from the tariff.

There is a problem with this approach that needs to be recognised. To provide a strategic open space, all of the land needs to be made available at the same time. If this is not done then, depending on when developers are willing to bring their sites forward, the park could develop as a patchwork of unconnected pieces of land. This is an inherent risk which an equalisation agreement could avoid. However, as stated before, the developers are committed to delivering the requirements of the OA and those with land that will need to be used for the linear park are including this as a fundamental part of the schemes that they are bringing forward. Many of these schemes are at an advanced stage of planning.

The cost of facilities to be provided which will require an offset must be agreed in advance. The tariff contribution will be due for payment on commencement of the development, so this information will be necessary in order to calculate the final net charge.

Embedding the tariff/CIL in the planning framework

The way in which a tariff charge is adopted differs from a CIL charge. As such, a two-stage process may be required, firstly to adopt the tariff charge and then secondly to bring forward a CIL charge. However, the approach to be adopted will be dependent on any changes to the CIL legislation or alternative tariff arrangements brought forward in legislation by the Coalition Government.

Embedding the Tariff

Given the nature and range of infrastructure to be provided, it is proposed that the statutory framework for any tariff should be brought forward in a joint borough Supplementary Planning Document (SPD).

Embedding a CIL

The London Plan makes clear that the only CIL charge the Mayor is going to implement is in respect of Crossrail, from which development in the OA is exempt.

Whilst a VNEB CIL would relate to the administrative areas of both LBs Wandsworth and Lambeth, it would be most appropriate to bring it forward as a joint Charging Schedule. The principal advantage of such an approach is that the proposed CIL would only be examined once; alternatively the boroughs could request that if they develop charging schedules which also relate to areas outside the OA, they are developed in parallel and examined at the same time. This would allow all objectors to be heard, enable all parties to make an effective contribution at one examination, and enable the Inspector to have a proper overview of the issues. Moreover, this approach is supported by PPS12 which endorses joint working between authorities. Paragraph 4.17 states that:

'Local authorities should explore and exploit opportunities for joint working on core strategies...Critical discussions on infrastructure capacity and planning may be more effectively and efficiently carried out over a larger area than a single local planning authority area...Joint working between local planning authorities can address these issues properly...'

The danger if CILs are developed and examined separately by each borough is that one could be declared sound by the first inspector but then the other declared unsound by the second inspector who may take a differing view. Although unlikely, this is a possibility that would throw the whole timescale for delivery of development in the OA into doubt.

The accountable body

A CIL must be collected by the 'CIL collecting authority'. It is therefore proposed that the tariff is collected by the same body, which should allow a seamless transition to the administration of a CIL charge from a tariff.

It is proposed that the boroughs should be the principal collecting authorities

Section 10 of the CIL regulations stipulate that, even if a CIL is set by the Mayor, that "the London borough council in whose area the development subject to the levy is situated must collect that CIL and accordingly is the collecting authority for that CIL".

It is proposed that the VNEB Strategy Board should be responsible for administering the tariff/CIL

Proposals have been developed for the establishment of a Strategy Board for the Opportunity Area as detailed below. It is proposed that the Strategy Board, made up of senior representatives from the GLA, WBC, LBL, TfL and landowners, should oversee the provision of infrastructure funded by the tariff/CIL.

Below the Strategy Board would be a number of specific committees dealing with specific aspects of the delivery of the OA, consisting of the executive committee members, plus the other members including infrastructure providers. The role of these committees would include assessing infrastructure priorities and agreeing spending plans which would need to be ratified by the executive committee. It would also enable service providers to update other members on progress with their needs assessments (if applicable) and emerging requirements. This would provide an 'early warning system' as to the need for a possible review of the tariff/CIL.

The administration of the tariff/CIL committee should be included in the charge. This is permitted by the CIL Regulations. The Crossrail SPG states that up to 5% of fees collected per annum can be used for this purpose. Such a level might provide an excessive amount for administration, so it is proposed that a figure of £2.5m is adopted to cover the first five years. It should then be reviewed.

Provisions for reviewing the tariff levels

Assuming that a tariff is put in place during 2011, work will need to start almost immediately on converting this into a CIL. As stated above, the transition period permitted by the CIL Regulations which allows a tariff to be used, ends in April 2014. By that date, a CIL charge must be in place or the ability to collect developer contributions will be seriously compromised.

A draft CIL charging schedule, which lists all the infrastructure to be charged for, will need to be produced and consulted upon. Once the final version has been produced it will need to be submitted for examination and then be subject to an Examination in Public (EIP) by an independent inspector. The report of the inspector will be binding. At this point, the CIL charging schedule can be adopted and the authorities can commence charging development under the CIL regime. In all, this is likely to take 18-24 months.

Beyond this, it will be important for the Strategy Board to produce annual updates on progress in order to determine whether a review is necessary. Clearly any review of the CIL will require re-examination by an independent inspector.

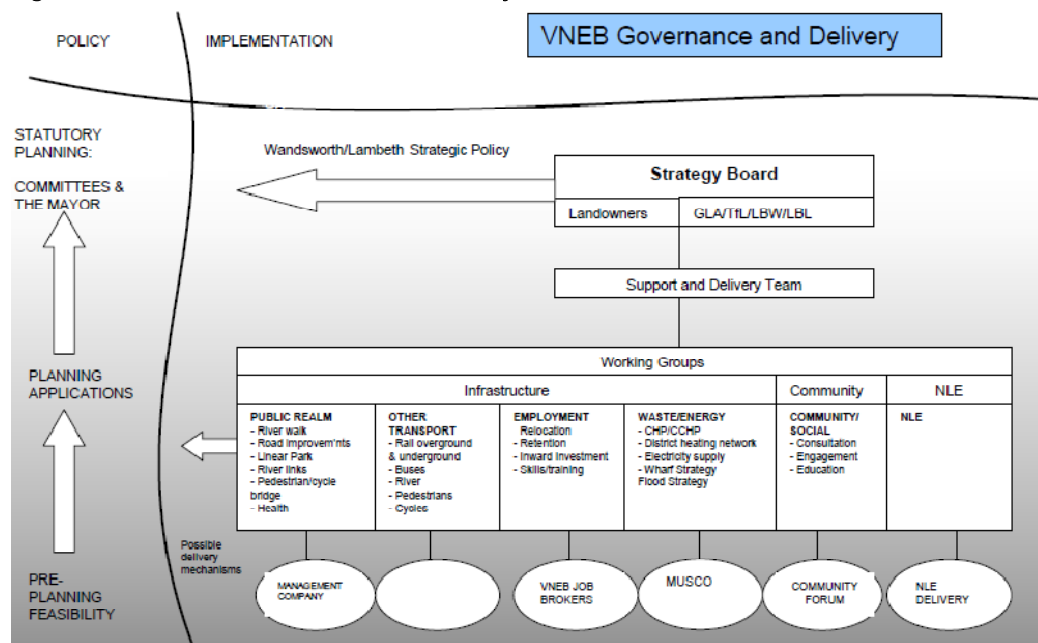
An important issue when a CIL is in place is how to ensure that revenue costs are adequately covered. Such costs cannot be included in the CIL charge so will have to be dealt with by way of a S106 agreement attached to individual planning permissions.

The Strategy Board

Delivering change on the scale anticipated at the OA is a very significant organisational and technical challenge. At the same time, there is considerable developer enthusiasm for what is, as the OAPF points out, one of the last major development opportunities in Central London. In this combination of circumstances, there is a considerable risk being run of piecemeal, uncoordinated development taking place which may fail to maximise the wider opportunities set out in policy.

Local authorities in the area are aware of these risks and are currently planning how best to co-ordinate their future activity together with landowners and developers. A VNEB Governance and Delivery Model, which has been agreed amongst both the public sector and private stakeholders. The first meeting of the Strategy Board is due to take place in October 2010 which will agree the Strategy Board's terms of reference, and organisation of a Support and Delivery Team and proposed Working Groups.¹

Figure 1 VNEB Governance and Delivery



Source: LB Wandsworth

In time, and as these arrangements bed down, it may be that a reasonably funded Development Agency might be required. Similar projects of this scale have developed such arrangements (note that Paddington Basin did without such an agency, but covered a smaller area). There is evidence that a focused agency set up to deliver change can produce impressive results. Responding to many of these challenges - such as raising funds for infrastructure - at growth areas/points elsewhere, delivery agencies have been established to implement the growth point programme. One of the largest delivery agencies - Milton Keynes Partnership - has successfully ensured a relatively high rate of completions and brokered the first Strategic Tariff deal to be negotiated. Ashford's Future has achieved funding of major highways improvements and progression of town centre regeneration in a manner which would probably not have been possible without a dedicated delivery agency.

Whichever model chosen, partners will need to consider how the governance arrangements will:

- Maintain a common purpose among a wide variety of stakeholders in a new and uncertain planning system, whilst providing leadership and a forum for agreement on a delivery programme.
- Ensure the delivery agency or equivalent is adequately resourced
- Provide a robust management capability, which can:

¹ See <http://www.wandsworth.gov.uk/moderngov/mgConvert2PDF.aspx?ID=10639>
<http://www.wandsworth.gov.uk/moderngov/mgConvert2PDF.aspx?ID=10640>

- define, agree with stakeholders and continually update an operational programme reflecting latest market trends
- co-ordinate and optimise the input of stakeholders and all contributing parties, including developers
- provide a masterplanning framework within which individual projects can be implemented.
- Deal with tariff level revision issues
- Actively and energetically promote the programme, in particular to funding bodies
- Implement economic development initiatives.

APPENDIX 2

Development viability analysis

THE RESULTS OF OUR DEVELOPMENT VIABILITY ANALYSIS

We set out below our development viability analysis, which we have displayed in tables.

In each analysis, we have taken the benchmark land value and compared it to land values under different projected levels of tariff. As tariff levels go up, land values go down. Simply put, the point at which *projected* land values fall beneath the *benchmark* land value set identifies the point at which a given tariff level will render development unviable.

We have colour coded these tables as follows.

- **Green** = residual land value above upper benchmark land cost range - development is therefore likely to be viable
- **Yellow** = residual land value is less than 25% lower than benchmark - development is therefore likely to be marginally viable
- **Red** = residual land value greater than 25% below the benchmark - development is therefore likely to be unviable

Residential viability analysis

“Core” Appraisals over the current period (2010-2015)

Table 1 and Table 2 below set out the indicative residual land values for Scheme 1 and Scheme 2 at 40% affordable housing and with no NAHP grant; in effect the ‘core scenario’. These residual land values have been compared to a benchmark land cost of £24.7million per Ha (£10million per acre), £18.5million per Ha (£7.5million per acre) and £7.4million per Ha (£3million per acre) as set out in Table 6.2.

Table 1 Scheme 1 Residual Land Values (Medium Residential) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£4,200,000	£4,100,000	£4,000,000	£3,800,000	£3,600,000	£3,400,000	£3,100,000	£3,300,000
Value Area 2	£3,300,000	£3,200,000	£3,000,000	£2,800,000	£2,600,000	£2,400,000	£2,200,000	£3,300,000
Value Area 3	£2,500,000	£2,400,000	£2,300,000	£2,100,000	£1,900,000	£1,600,000	£1,400,000	£2,500,000
Value Area 4	£0	£-200,000	£-400,000	£-500,000	£-700,000	£-900,000	£-1,200,000	£1,000,000

Table 2 Scheme 2 Residual Land Values (Large Residential) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£17,600,000	£16,600,000	£16,100,000	£15,100,000	£14,100,000	£13,100,000	£12,100,000	£10,600,000
Value Area 2	£12,100,000	£11,100,000	£10,600,000	£9,600,000	£8,600,000	£7,600,000	£6,600,000	£10,600,000
Value Area 3	£8,700,000	£7,700,000	£7,200,000	£6,200,000	£5,200,000	£4,200,000	£3,200,000	£8,000,000
Value Area 4	£-6,400,000	£-7,400,000	£-7,900,000	£-8,900,000	£-9,900,000	£-10,900,000	£-11,900,000	£3,200,000

Summary: residential development with no grant (Core Scenario)

We have assumed that the highest level of tariff that is viable (i.e. is coloured green) for both the medium and large schemes would be adopted. Table 1 and Table 2 above illustrate that the following levels of tariff would be viable for development:

- Value Area 1: £35,000 per unit
- Value Area 2: £15,000 per unit
- Value Area 3: £15,000 per unit
- Value Area 4: £0 per unit

Understanding residential development with grant (Core Scenario)

In the event that some NAHP grant is available, we have undertaken development appraisals to reflect a level of grant, as set out in Table 3 and Table 4. It should be noted that should grant be available, it is unlikely to be in the exact amounts we have assumed, but is unlikely to be as high as past grant regime trends might suggest.

Table 3 Scheme 1 Residual Land Values (Medium Residential) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£4,600,000	£4,500,000	£4,400,000	£4,100,000	£3,900,000	£3,700,000	£3,500,000	£3,300,000
Value Area 2	£3,600,000	£3,500,000	£3,400,000	£3,200,000	£2,900,000	£2,700,000	£2,500,000	£3,300,000
Value Area 3	£2,900,000	£2,800,000	£2,700,000	£2,400,000	£2,200,000	£2,000,000	£1,800,000	£2,500,000
Value Area 4	£300,000	£200,000	£100,000	£-100,000	£-400,000	£-600,000	£-800,000	£1,000,000

Table 4 Scheme 2 Residual Land Values (Large Residential) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£19,300,000	£18,300,000	£17,800,000	£16,800,000	£15,800,000	£14,800,000	£13,800,000	£10,600,000
Value Area 2	£13,700,000	£12,700,000	£12,200,000	£11,200,000	£10,200,000	£9,200,000	£8,200,000	£10,600,000
Value Area 3	£10,400,000	£9,400,000	£8,900,000	£7,900,000	£6,900,000	£5,900,000	£4,900,000	£8,000,000
Value Area 4	£-4,700,000	£-5,700,000	£-6,200,000	£-7,200,000	£-8,200,000	£-9,200,000	£-10,200,000	£3,200,000

Summary: residential development with grant (Core Scenario)

The inclusion of an element of NAHP grant to the development appraisals impacts on the level of tariff that can viably be afforded as follows:

Core: 40% Affordable Housing	Without Grant	With Grant
Value Area 1	£35,000 per unit	£40,000 per unit
Value Area 2	£15,000 per unit	£25,000 per unit
Value Area 3	£15,000 per unit	£20,000 per unit
Value Area 4	£0 per unit	£0

“Alternative” Scenario Appraisals over the current period (2010-2015)

As set out previously, in order to attempt to accurately reflect what an appropriate level of tariff might be, we have used the core scenario of 40% affordable housing with no grant to test key “what if” questions, as recommended by PINS, to assess an alternative scenario tariff.

One of the key elements of the ability of development to afford a level of tariff is the level of affordable housing required by the Local Planning Authority. In order to explore the availability of tariff contribution should there be a less stringent affordable housing requirement, we have run development appraisals assuming 15% affordable housing, both with and without the availability of NAHP grant.

These are set out in Table 5 to Table 8 below.

Table 5 Scheme 1 Residual Land Values (Medium Residential) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£7,600,000	£7,500,000	£7,400,000	£7,200,000	£7,000,000	£6,800,000	£6,500,000	£3,300,000
Value Area 2	£6,000,000	£5,900,000	£5,700,000	£5,500,000	£5,300,000	£5,100,000	£4,900,000	£3,300,000
Value Area 3	£5,000,000	£4,900,000	£4,800,000	£4,600,000	£4,400,000	£4,100,000	£3,900,000	£2,500,000
Value Area 4	£1,100,000	£900,000	£700,000	£600,000	£400,000	£200,000	£-100,000	£1,000,000

Table 6 Scheme 2 Residual Land Values (Large Residential) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£33,900,000	£32,900,000	£32,400,000	£31,400,000	£30,400,000	£29,400,000	£28,400,000	£10,600,000
Value Area 2	£25,400,000	£24,400,000	£23,900,000	£22,900,000	£21,900,000	£20,900,000	£19,900,000	£10,600,000
Value Area 3	£20,500,000	£19,500,000	£19,000,000	£18,000,000	£17,000,000	£16,000,000	£15,000,000	£8,000,000
Value Area 4	£1,500,000	£500,000	£0	£-1,000,000	£-2,000,000	£-3,000,000	£-4,000,000	£3,200,000

Table 7 Scheme 1 Residual Land Values (Medium Residential) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£8,000,000	£7,900,000	£7,800,000	£7,500,000	£7,300,000	£7,100,000	£6,900,000	£3,300,000
Value Area 2	£6,300,000	£6,200,000	£6,100,000	£5,900,000	£5,600,000	£5,400,000	£5,200,000	£3,300,000
Value Area 3	£5,400,000	£5,300,000	£5,200,000	£4,900,000	£4,700,000	£4,500,000	£4,300,000	£2,500,000
Value Area 4	£1,400,000	£1,300,000	£1,200,000	£1,000,000	£700,000	£500,000	£300,000	£1,000,000

Table 8 Scheme 2 Residual Land Values (Large Residential) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£34,300,000	£33,300,000	£32,800,000	£31,700,000	£30,700,000	£29,700,000	£29,000,000	£10,600,000
Value Area 2	£26,000,000	£25,000,000	£24,500,000	£23,500,000	£22,500,000	£21,500,000	£20,500,000	£10,600,000
Value Area 3	£21,100,000	£20,100,000	£19,600,000	£18,600,000	£17,600,000	£16,600,000	£15,600,000	£8,000,000
Value Area 4	£2,100,000	£1,100,000	£600,000	£-400,000	£-1,400,000	£-2,400,000	£-3,400,000	£3,200,000

Summary

Again, we have assumed that, the highest level of tariff that is viable for both the medium and large schemes would be adopted. The tables above show that should the level of affordable housing required from a residential development fall from 40% to 15%, the following tariff levels would, in theory, become viable.

Table 9 Tariff with and without affordable housing grant

Alternative: 15% Affordable Housing	Without Grant	With Grant
Value Area 1	£40,000 per unit	£40,000 per unit
Value Area 2	£40,000 per unit	£40,000 per unit
Value Area 3	£40,000 per unit	£40,000 per unit
Value Area 4	£15,000 per unit	£20,000 per unit

Residential viability analysis: "Core" appraisals projected -contributions per unit (2016-2031)

As discussed previously we have undertaken development appraisals to reflect the anticipated different circumstances of the OA from 2016 to 2031 due to a number of factors such as the likelihood that development circumstances will change in the future due to the current supposed low position in a market cycle and the likelihood that policy stances may change moving forward, as well as the impact that 'place making' may have on the OA.

Table 10 and Table 11 set out the core scenario (40% affordable housing, without NAHP grant),

Table 10 Scheme 1 Projected Residual Land Values (Medium Residential) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£7,600,000	£7,500,000	£7,400,000	£7,200,000	£7,000,000	£6,800,000	£6,500,000	£3,300,000
Value Area 2	£5,500,000	£5,400,000	£5,200,000	£5,000,000	£4,800,000	£4,600,000	£4,400,000	£3,300,000
Value Area 3	£4,800,000	£4,700,000	£4,600,000	£4,400,000	£4,200,000	£3,900,000	£3,700,000	£2,500,000
Value Area 4	£600,000	£400,000	£200,000	£100,000	£-100,000	£-300,000	£-600,000	£1,000,000

Table 11 Scheme 2 Projected Residual Land Values (Large Residential) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£28,100,000	£27,100,000	£26,600,000	£25,600,000	£24,600,000	£23,600,000	£22,600,000	£10,600,000
Value Area 2	£19,800,000	£18,800,000	£18,300,000	£17,300,000	£16,300,000	£15,300,000	£14,300,000	£10,600,000
Value Area 3	£14,700,000	£13,700,000	£13,200,000	£12,200,000	£11,200,000	£10,200,000	£9,200,000	£8,000,000
Value Area 4	£-1,400,000	£-2,400,000	£-2,900,000	£-3,900,000	£-4,900,000	£-5,900,000	£-6,900,000	£3,200,000

Table 12 and Table 13 below set out the core projected scenario as above, but making an allowance for some provision of NAHP grant.

Table 12 Scheme 1 Projected Residual Land Values (Medium Residential) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£8,000,000	£7,900,000	£7,800,000	£7,500,000	£7,300,000	£7,100,000	£6,900,000	£3,300,000

Value Area 2	£5,800,000	£5,700,000	£5,600,000	£5,400,000	£5,100,000	£4,900,000	£4,700,000	£3,300,000
Value Area 3	£5,200,000	£5,100,000	£5,000,000	£4,700,000	£4,500,000	£4,300,000	£4,100,000	£2,500,000
Value Area 4	£900,000	£800,000	£700,000	£500,000	£200,000	£0	£-200,000	£1,000,000

Table 13 Scheme 2 Projected Residual Land Values (Large Residential) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£29,800,000	£28,800,000	£28,300,000	£27,300,000	£26,300,000	£25,300,000	£24,400,000	£10,600,000
Value Area 2	£21,500,000	£20,500,000	£20,000,000	£19,000,000	£18,000,000	£17,000,000	£22,100,000	£10,600,000
Value Area 3	£16,400,000	£15,400,000	£14,900,000	£13,900,000	£12,900,000	£11,900,000	£11,000,000	£8,000,000
Value Area 4	£300,000	£-700,000	£-1,200,000	£-2,200,000	£-3,200,000	£-4,200,000	£-5,100,000	£3,200,000

Assuming that the highest level of tariff that is affordable for both the medium and large schemes would be adopted, and that the core scenario appraisals are projected to 2016-2031, the following tariff levels would, in theory, become viable.

Projected Core Appraisals:

40% Affordable Housing	Without Grant	With Grant
Value Area 1	£40,000 per unit	£40,000 per unit
Value Area 2	£40,000 per unit	£40,000 per unit
Value Area 3	£40,000 per unit	£40,000 per unit
Value Area 4	£0 per unit	£0 per unit

Residential viability analysis: "Alternative" scenario appraisals projected (2016-2031)

As part of scenario testing at a future date we have therefore undertaken projection appraisals on the basis of 15% affordable housing with and without grant.

These are set out in Table 14 to Table 15 below:

Table 14 Scheme 1 Projected Residual Land Values (Medium Residential) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£12,400,000	£12,300,000	£12,200,000	£12,000,000	£11,800,000	£11,600,000	£11,400,000	£3,300,000
Value Area 2	£9,800,000	£9,700,000	£9,600,000	£9,400,000	£9,200,000	£9,000,000	£8,800,000	£3,300,000
Value Area 3	£8,400,000	£8,300,000	£8,200,000	£8,000,000	£7,800,000	£7,600,000	£7,300,000	£2,500,000
Value Area 4	£2,400,000	£2,300,000	£2,200,000	£2,000,000	£1,800,000	£1,600,000	£1,400,000	£1,000,000

Table 15 Scheme 2 Projected Residual Land Values (Large Residential) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£57,700,000	£56,700,000	£56,200,000	£55,200,000	£54,200,000	£53,200,000	£52,200,000	£10,600,000
Value Area 2	£41,000,000	£40,000,000	£39,500,000	£38,500,000	£37,500,000	£36,500,000	£35,500,000	£10,600,000
Value Area 3	£34,000,000	£33,000,000	£32,500,000	£31,500,000	£30,500,000	£29,500,000	£28,500,000	£8,000,000
Value Area 4	£8,800,000	£7,800,000	£7,300,000	£6,300,000	£5,300,000	£4,300,000	£3,300,000	£3,200,000

Table 16 Scheme 1 Projected Residual Land Values (Medium Residential) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£12,800,000	£12,700,000	£12,400,000	£12,200,000	£12,000,000	£11,800,000	£11,600,000	£3,300,000
Value Area 2	£10,100,000	£10,000,000	£9,800,000	£9,600,000	£9,400,000	£9,200,000	£8,800,000	£3,300,000
Value Area 3	£8,800,000	£8,700,000	£8,400,000	£8,200,000	£8,000,000	£7,800,000	£7,500,000	£2,500,000
Value Area 4	£2,700,000	£2,700,000	£2,400,000	£2,200,000	£2,000,000	£1,800,000	£1,500,000	£1,000,000

Table 17 Scheme 2 Projected Residual Land Values (Large Residential) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£58,100,000	£57,100,000	£56,600,000	£55,500,000	£54,500,000	£53,500,000	£52,800,000	£10,600,000
Value Area 2	£41,600,000	£40,600,000	£40,100,000	£39,100,000	£38,100,000	£37,100,000	£36,100,000	£10,600,000
Value Area 3	£34,600,000	£33,600,000	£33,100,000	£32,100,000	£31,100,000	£30,100,000	£29,100,000	£8,000,000
Value Area 4	£9,400,000	£8,400,000	£7,900,000	£6,900,000	£5,900,000	£4,900,000	£3,900,000	£3,200,000

Table 16 and Table 17 above show that, assuming values and costs as at 2016 are reflective of our projection assumptions, regardless of location in the OA, all residential development can afford at least £40,000 per unit, assuming a 15% affordable housing requirement.

Mixed use

Mixed use: "Core" appraisals (2010-2015)

Table 18 and Table 19 below set out the indicative residual land values for the Mixed Use typologies, Scheme 3 and Scheme 4, at 40% affordable housing and with no NAHP grant, the 'core scenario'. These residual land values have been compared to a benchmark land cost which reflects those of pure residential development - £24.7million per Ha (£10million per acre), £18.5million per Ha (£7.5million per acre) and £7.4million per Ha (£3million per acre) as set out in Table 6.2.

Table 18 Scheme 3 Mixed Use Land Values (Medium) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£3,800,000	£3,700,000	£3,700,000	£3,500,000	£3,300,000	£3,100,000	£2,900,000	£3,300,000
Value Area 2	£3,000,000	£2,900,000	£2,900,000	£2,700,000	£2,500,000	£2,300,000	£2,100,000	£3,300,000
Value Area 3	£2,500,000	£2,400,000	£2,400,000	£2,200,000	£2,000,000	£1,800,000	£1,600,000	£2,500,000
Value Area 4	£400,000	£300,000	£200,000	£0	£-200,000	£-400,000	£-500,000	£1,000,000

Table 19 Scheme 4 Mixed Use Land Values (Large) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£15,600,000	£15,200,000	£14,700,000	£13,700,000	£12,800,000	£12,500,000	£11,600,000	£10,600,000
Value Area 2	£10,800,000	£10,400,000	£9,900,000	£8,900,000	£8,000,000	£7,000,000	£6,100,000	£10,600,000
Value Area 3	£7,500,000	£7,000,000	£6,600,000	£5,600,000	£4,600,000	£3,700,000	£2,700,000	£8,000,000
Value Area 4	£-6,900,000	£-7,400,000	£-7,900,000	£-8,900,000	£-9,900,000	£-10,900,000	£-11,900,000	£3,200,000

We have assumed that the highest level of tariff that is viable (i.e. is coloured green) for both the medium and large schemes would be adopted. Table 17 and Table 18 above illustrate that the following levels of tariff would be viable for development:

Value Area 1: £30,000 per unit

Value Area 2: £15,000 per unit

Value Area 3: £15,000 per unit

Value Area 4: £0 per unit

In the event that some NAHP grant is available, we have undertaken development appraisals to reflect a level of grant, as set out in Table 19 and Table 20. Again, it should be noted that should grant be available, it is unlikely to be in the exact amounts we have assumed, but is unlikely to be as high as past grant regime trends might suggest.

Table 20 Scheme 3 Mixed Use Residual Land Values (Medium) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£3,900,000	£3,800,000	£4,000,000	£3,800,000	£3,600,000	£3,400,000	£3,300,000	£3,300,000
Value Area 2	£3,400,000	£3,300,000	£3,200,000	£3,000,000	£2,800,000	£2,600,000	£2,400,000	£3,300,000
Value Area 3	£3,000,000	£2,900,000	£2,800,000	£2,600,000	£2,400,000	£2,200,000	£2,000,000	£2,500,000
Value Area 4	£900,000	£800,000	£700,000	£500,000	£300,000	£100,000	£-100,000	£1,000,000

Table 21 Scheme 4 Mixed Use Residual Land Values (Large) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£18,100,000	£17,600,000	£17,200,000	£16,200,000	£15,200,000	£14,300,000	£13,300,000	£10,600,000
Value Area 2	£12,500,000	£12,000,000	£11,300,000	£10,600,000	£9,600,000	£8,700,000	£7,700,000	£10,600,000
Value Area 3	£9,200,000	£8,700,000	£8,200,000	£7,300,000	£6,300,000	£5,400,000	£4,400,000	£8,000,000
Value Area 4	£-5,200,000	£-5,700,000	£-6,200,000	£-7,200,000	£-8,200,000	£-9,200,000	£-10,200,000	£3,200,000

The inclusion of an element of NAHP grant to the development appraisals impacts on the level of tariff that can viably be afforded as follows:

Core: 40% Affordable Housing	Without Grant	With Grant
Value Area 1	£30,000 per unit	£40,000 per unit
Value Area 2	£15,000 per unit	£25,000 per unit
Value Area 3	£15,000 per unit	£25,000 per unit
Value Area 4	£0 per unit	£0 per unit

Mixed use: "Alternative" Scenario Appraisals

As set out previously, in order to attempt to accurately reflect what an appropriate level of tariff might be, we have used the core scenario of 40% affordable housing with no grant to test key alternative scenario viable tariff levels. We have therefore reflected the pure residential typologies and run development appraisals assuming 15% affordable housing, both with and without the availability of NAHP grant.

These are set out in Tables 22 to Table 25 below:

Table 22 Scheme 3 Residual Land Values (Medium Residential) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£7,500,000	£7,400,000	£7,300,000	£7,100,000	£6,900,000	£6,700,000	£6,500,000	£3,300,000
Value Area 2	£6,100,000	£6,000,000	£5,900,000	£5,700,000	£5,500,000	£5,300,000	£5,100,000	£3,300,000
Value Area 3	£5,200,000	£5,100,000	£5,000,000	£4,800,000	£4,600,000	£4,400,000	£4,200,000	£2,500,000

Value Area 4	£1,200,000	£1,100,000	£1,000,000	£800,000	£600,000	£400,000	£200,000	£1,000,000
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Table 23 Scheme 4 Residual Land Values (Large Residential) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£32,200,000	£31,800,000	£31,300,000	£30,300,000	£29,400,000	£28,400,000	£27,500,000	£10,600,000
Value Area 2	£23,300,000	£23,300,000	£22,800,000	£21,900,000	£20,900,000	£20,000,000	£19,000,000	£10,600,000
Value Area 3	£18,900,000	£18,400,000	£17,900,000	£16,900,000	£16,000,000	£15,000,000	£14,100,000	£8,000,000
Value Area 4	£-600,000	£-1,000,000	£-1,500,000	£-2,400,000	£-3,300,000	£-4,300,000	£-4,500,000	£3,200,000

Table 24 Scheme 3 Residual Land Values (Medium Residential) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£7,700,000	£7,600,000	£7,500,000	£7,300,000	£7,100,000	£6,900,000	£6,700,000	£3,300,000
Value Area 2	£6,300,000	£6,200,000	£6,100,000	£5,900,000	£5,700,000	£5,500,000	£5,300,000	£3,300,000
Value Area 3	£5,400,000	£5,300,000	£5,200,000	£5,000,000	£4,800,000	£4,600,000	£4,400,000	£2,500,000
Value Area 4	£1,400,000	£1,300,000	£1,200,000	£1,000,000	£800,000	£600,000	£400,000	£1,000,000

Table 25 Scheme 4 Mixed Use Residual Land Values (Large) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£32,900,000	£32,400,000	£31,900,000	£30,900,000	£30,000,000	£29,000,000	£28,100,000	£10,600,000
Value Area 2	£24,400,000	£23,900,000	£23,400,000	£22,500,000	£21,500,000	£20,600,000	£19,600,000	£10,600,000
Value Area 3	£20,200,000	£19,200,000	£18,700,000	£17,700,000	£16,700,000	£15,700,000	£14,700,000	£8,000,000
Value Area 4	£1,600,000	£600,000	£100,000	£-900,000	£-1,900,000	£-2,900,000	£-3,900,000	£3,200,000

Assuming that, the highest level of tariff that is viable for both the medium and large schemes would be adopted. The tables above show that should the level of affordable housing required from a residential development fall from 40% to 15%, the following tariff levels would, in theory, become viable.

Alternative Mixed Use:

15% Affordable Housing	Without Grant	With Grant
Value Area 1	£40,000 per unit	£40,000 per unit
Value Area 2	£40,000 per unit	£40,000 per unit
Value Area 3	£40,000 per unit	£40,000 per unit
Value Area 4	£20,000 per unit	£25,000 per unit

Mixed use: "Core" Appraisals projected (2016-2031)

Table 26 and Table 27 set out the core scenario (40% affordable housing, without NAHP grant), projected to 2016.

Table 26 Scheme 3 Mixed Use Projected Residual Land Values (Medium) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£6,700,000	£6,600,000	£6,500,000	£6,300,000	£6,100,000	£5,900,000	£5,600,000	£3,300,000
Value Area 2	£4,900,000	£4,800,000	£4,600,000	£4,400,000	£4,200,000	£4,000,000	£3,800,000	£3,300,000
Value Area 3	£4,600,000	£4,500,000	£4,400,000	£4,200,000	£4,000,000	£3,700,000	£3,500,000	£2,500,000
Value Area 4	£200,000	£0	£-200,000	£-300,000	£-400,000	£-600,000	£-700,000	£1,000,000

Table 27 Scheme 4 Mixed Use Projected Residual Land Values (Large) 40% Affordable Housing, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£25,600,000	£25,100,000	£24,600,000	£23,600,000	£22,600,000	£21,600,000	£20,600,000	£10,600,000
Value Area 2	£17,800,000	£16,800,000	£16,300,000	£15,300,000	£14,300,000	£13,300,000	£12,300,000	£10,600,000
Value Area 3	£13,200,000	£12,200,000	£11,700,000	£10,700,000	£9,700,000	£8,700,000	£7,700,000	£8,000,000
Value Area 4	-£1,400,000	-£2,400,000	-£2,900,000	-£3,900,000	-£4,900,000	-£5,900,000	-£6,900,000	£3,200,000

Table 28 and Table 29 below set out the core projected scenario as above, but making an allowance for some provision of NAHP grant.

Table 28 Scheme 3 Mixed Use Projected Residual Land Values (Medium) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£6,900,000	£6,800,000	£6,700,000	£6,600,000	£6,400,000	£6,200,000	£6,000,000	£3,300,000
Value Area 2	£5,100,000	£5,000,000	£4,900,000	£4,800,000	£4,600,000	£4,400,000	£4,200,000	£3,300,000
Value Area 3	£4,900,000	£4,800,000	£4,700,000	£4,500,000	£4,300,000	£4,100,000	£3,900,000	£2,500,000
Value Area 4	£700,000	£600,000	£500,000	£300,000	£100,000	-£100,000	-£300,000	£1,000,000

Table 29 Scheme 4 Mixed Use Projected Residual Land Values (Large) 40% Affordable Housing, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£27,100,000	£26,100,000	£25,600,000	£24,600,000	£23,600,000	£22,600,000	£22,100,000	£10,600,000
Value Area 2	£19,500,000	£18,500,000	£18,000,000	£17,000,000	£16,000,000	£15,000,000	£13,800,000	£10,600,000
Value Area 3	£14,900,000	£13,900,000	£13,400,000	£12,400,000	£11,400,000	£10,400,000	£9,200,000	£8,000,000
Value Area 4	£300,000	-£700,000	-£1,200,000	-£2,200,000	-£3,200,000	-£4,200,000	-£5,400,000	£3,200,000

The tables above show that should the core scenario appraisals be projected to 2016, the following tariff levels would, in theory, become viable.

Projected Core Appraisals:

40% Affordable Housing

	Without Grant	With Grant
Value Area 1	£40,000 per unit	£40,000 per unit
Value Area 2	£40,000 per unit	£40,000 per unit
Value Area 3	£40,000 per unit	£40,000 per unit
Value Area 4	£0 per unit	£0 per unit

Mixed use: Alternative Scenario Appraisals Projected (2016-2031)

Projection appraisals assuming 15% affordable housing, with and without NAHP grant are set out in Table 30 to Table 34 below:

Table 30 Scheme 3 Mixed Use Projected Residual Land Values (Medium) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£11,800,000	£11,700,000	£11,600,000	£11,400,000	£11,200,000	£11,000,000	£10,800,000	£3,300,000
Value Area 2	£9,600,000	£9,500,000	£9,400,000	£9,200,000	£9,000,000	£8,800,000	£8,600,000	£3,300,000
Value Area 3	£8,200,000	£8,100,000	£8,000,000	£7,800,000	£7,600,000	£7,400,000	£7,200,000	£2,500,000
Value Area 4	£2,400,000	£2,300,000	£2,200,000	£2,000,000	£1,800,000	£1,600,000	£1,400,000	£1,000,000

Table 31 Scheme 4 Mixed Use Projected Residual Land Values (Large) 15% Affordable, No Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£54,700,000	£53,700,000	£53,200,000	£52,200,000	£51,200,000	£50,200,000	£49,200,000	£10,600,000
Value Area 2	£39,000,000	£38,000,000	£37,500,000	£36,500,000	£35,500,000	£34,500,000	£33,500,000	£10,600,000
Value Area 3	£32,000,000	£31,000,000	£30,500,000	£29,500,000	£28,500,000	£27,500,000	£26,500,000	£8,000,000
Value Area 4	£8,300,000	£7,300,000	£6,800,000	£5,800,000	£4,800,000	£3,800,000	£2,800,000	£3,200,000

Table 32 Scheme 3 Projected Mixed Use Residual Land Values (Medium) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£12,200,000	£12,100,000	£11,800,000	£11,600,000	£11,400,000	£11,200,000	£11,000,000	£3,300,000
Value Area 2	£9,900,000	£9,800,000	£9,600,000	£9,400,000	£9,200,000	£9,000,000	£9,600,000	£3,300,000
Value Area 3	£8,600,000	£8,500,000	£8,200,000	£8,000,000	£7,800,000	£7,600,000	£7,300,000	£2,500,000
Value Area 4	£2,700,000	£2,700,000	£2,400,000	£2,200,000	£2,000,000	£1,800,000	£1,600,000	£1,000,000

Table 34 Scheme 4 Mixed Use Projected Residual Land Values (Large) 15% Affordable, with Grant

Contribution Per Unit	£15,000	£17,500	£20,000	£25,000	£30,000	£35,000	£40,000	Benchmark Land Value
Value Area 1	£55,100,000	£54,100,000	£53,600,000	£52,500,000	£51,500,000	£50,500,000	£49,700,000	£10,600,000
Value Area 2	£39,600,000	£38,600,000	£38,100,000	£37,100,000	£36,100,000	£35,100,000	£34,100,000	£10,600,000
Value Area 3	£32,600,000	£31,600,000	£31,100,000	£30,100,000	£29,100,000	£28,100,000	£27,100,000	£8,000,000
Value Area 4	£8,900,000	£7,900,000	£7,400,000	£6,400,000	£5,400,000	£4,400,000	£3,400,000	£3,200,000

The tables above show that, assuming values and costs as at 2016 are reflective of our projection assumptions, regardless of location in the OA, all residential development can afford at least £40,000 per unit, assuming a 15% affordable housing requirement.

Commercial

Commercial: "Core" appraisals (2016 - 2031)

Our discussions with office agents have made clear the fact that, currently, no office development would come forward in the OA due to its poor transport links and lack of gravitas as an office location. We understand, however, that the opening of the US Embassy and the construction of a northern line extension, alongside the volume of office space proposed at Battersea Power Station, is likely to make office development viable at some point in the future.

We have therefore made the assumption that no commercial space will be built, and thus no tariff or planning contribution will be made available for office until 2016. As such our 'Core Appraisal' has been run using development assumptions tailored to 2016 - 2031.

Table 35 below sets out tariff viability for the two office schemes. It indicates that an appropriate and viable tariff (taking into account likely developable office building sizes) is £150 per sq m.

Table 35 Schemes 5 & 6 Commercial (Office) Projected Residual Land Values

Tariff Per Sq M	Scheme 5	Scheme 6
£50	£34,300,000	£9,500,000
£100	£32,600,000	£9,000,000

£125	£31,800,000	£8,800,000
£150	£30,900,000	£8,500,000
£200	£29,300,000	£8,100,000
£250	£27,600,000	£7,600,000
£300	£25,900,000	£7,200,000
£350	£24,300,000	£6,700,000

Retail

Retail: "Core" appraisal

We have undertaken two stand alone retail appraisals, assuming costs and values for both 2010 - 2015 and 2016 - 2031 in line with our current day and projection assumptions.

Table 36 and Table 37 below set out the residual land values of the retail appraisals and the viability of a tested level of tariff when benchmarked against the EUV/AUV.

Table 36 Scheme 7 Retail Residual Land Values

Tariff Per Sq M	Scheme 7
£50	£16,600,000
£100	£16,100,000
£125	£15,800,000
£150	£15,600,000
£200	£15,000,000
£250	£14,500,000
£300	£14,000,000
£350	£13,500,000

Retail: "Alternative" appraisal

Table 37 Scheme 7 (Projected) Retail Residual Land Values

Tariff Per Sq M	Scheme 7
£50	£17,600,000
£100	£17,000,000
£125	£16,800,000
£150	£16,500,000
£200	£16,000,000
£250	£15,500,000
£300	£15,000,000
£350	£14,500,000

Table 36 and Table 37 above illustrate that the following levels of tariff contribution are viable:

Commercial Appraisals Scheme 7	Core Appraisal 2010 - 2015	Alternative Scenario Appraisal 2016 - 2031
Viable Tariff (Per Sq M)	£150	£250

Hotel

Hotel: "Core" appraisal

We have appraised a hotel typology (scheme 8) to determine the level of tariff contribution that could viably be afforded by a typical hotel development coming forward in the OA. From our discussions with hotel agents we understand that there could be demand for a c.100 bed hotel in the OA in the 2010-2015 timeframe. They considered, however, that the proposed 300 bed hotel at Battersea Power Station would subsume all demand from 2016-2031, most likely making all other hotel development in the OA commercially unviable. This was believed to be the case despite the opening of the US Embassy in 2016, the impact of which, in terms of demand for hotel rooms, hotel agents consider to be de minimis.

Table 38 Scheme 8 Hotel Residual Land Values

Tariff Per Sq M	Scheme 8
£0	£450,000
£10	£409,000
£20	£368,000
£30	£327,000
£40	£286,000
£50	£245,000
£60	£204,000
£70	£163,000
£80	£122,000
£90	£81,000

Table 38 illustrates that the level of tariff that a hotel built in the OA could currently afford is £40 per sq m.

In the main body of the text we have summarised the levels of tariff which could viably be afforded by different densities of residential development, taking into account the core scenario assumptions and alternative scenario assumptions, both for 2010-2015 and projected to 2016 - 2031.

APPENDIX 3

Typology assumptions

Typology assumptions

Residential

We have tested residential development against a “core” scenario, based on policy compliant and likely assumptions (40% affordable with and without NAHP grant), and alternative scenarios which encompass a lower level of affordable housing (15%) with and without grant,

These tariffs in the final report will be based over two broad time periods. This is in order to allow, as much as is possible, for projected residential sale value growth and build costs changes moving forwards, as well as to allow for foreseeable policy changes which could impact on development costs / revenue.

We have therefore undertaken the following analysis:

- 2010-2015 - broadly based on current day values at CSH 4
- 2016+ - a future scenario based on potential future values and CSH 6

A summary of all the residential typology assumptions are set out in Table 1 below:

Table 1 Residential (Schemes 1 & 2) Typology Assumptions

RESIDENTIAL	Scheme 1	Scheme 2
No. of Dwellings	51	233
Site Coverage	0.134 hectares	0.430 hectares
Private Dwellings	60% / 85%	60% / 85%
Affordable Dwellings	40% / 15%	40% / 15%
Unit Type Mix	1 bed x 10 2 bed x 19 3 bed x 17 4 bed x 5	Studio x 9 1 bed x 37 2 bed x 84 3 bed x 70 4 bed x 26 5 bed x 7
Unit Sizes (GIA Sq M)	1 bed - 50 2 bed - 71 3 bed - 86 4 bed - 104	Studio - 38 1 bed - 50 2 bed - 70 3 bed - 88 4 bed - 107 5 bed - 134
Net Density (Dwellings per Ha)	380	540

We have assumed that within affordable housing the balance between social rent and intermediate housing will reflect the 70:30 split in the Adopted London Plan (consolidated with alterations since 2004) and both Lambeth and Wandsworth’s housing policies.

We have tested tariff for purely residential schemes at £15,000, £17,500, £20,000, £25,000, £30,000, £35,000 and £40,000 per unit.

We have made further development appraisal assumptions, which are set out in the table below:

Table 2 Residential (Schemes 1 & 2) Development Appraisal Assumptions

RESIDENTIAL	2010 - 2015	2016 - 2031
Code for Sustainable Homes	Level 4 (private & affordable)	Level 6 (private & affordable)
Affordable Housing Split	40% & 15%	40% & 15%
Tenure Split	70:30 (Soc.rent:Intermediate)	70:30 (Soc.rent:Intermediate)
Grant Assumption	No Grant With Grant	No Grant With Grant
Ground Rents	£250 per annum (6.5% yield)	£250 per annum (6.5% yield)
Base Build Costs - Private	£1,600 - 2,400 per sq m	£2,400 - 3,600 per sq m
Base Build Costs - Affordable	£1,500 - 1,650 per sq m	£2,250 - 2,475 per sq m
Enabling Costs	£25-50 per sq m (£2.32-4.64 per sq ft)	£25-50 per sq m (£2.32-4.64 per sq ft)
Contingency	5%	5%
Prelims	5%	5%
Professional Fees	10%	10%
Finance Rate	6.75%	7.5%
Profit	20% on GDV	17.5% on GDV
Value Areas (See Value Map) £ per Sq M	Value Area 1: £8,880 (£825 per sq ft)	Value Area 1: £13,423 (£1,245 per sq ft)
	Value Area 2: £7,247 (£670 per sq ft)	Value Area 2: £11,227 (£1,040 per sq ft)
	Value Area 3: £6,781 (£630 per sq ft)	Value Area 3: £10,247 (£950 per sq ft)
	Value Area 4: £4,844 (£450 per sq ft)	Value Area 4: £7,320 (£680 per sq ft)

We have appraised the typologies assuming no NAHP grant and with NAHP grant, per unit, as set out in Table 3 below. Because of the uncertainty surrounding both the current and future grant regimes, we have used the below assumptions for both the 2010-2015 and the 2016-2031 appraisals.

Table 3 Residential (Schemes 1 & 2) NAHP Grant Assumptions

UNIT TYPE	Social Rent Grant per unit	Intermediate Grant per unit
Studio	£12,500	£6,000
1 bedroom	£12,500	£6,000
2 bedroom	£25,000	£12,000
3 bedroom	£50,000	£25,000

4 bedroom	£62,500	£31,000
5 bedroom	£75,000	£37,000

Mixed Use

Much of what is coming forward in the Opportunity Area is mixed use, with some element of ground floor retail. We therefore included two typical residential led mixed-use typologies within our appraisals:

Table 4 Mixed Use (Schemes 3 & 4) Typology and Development Appraisal Assumptions

RESIDENTIAL MIXED USE with RETAIL Ground Floor Use	Scheme 3	Scheme 4
No of Dwellings	40	216
Site Coverage	0.134	0.430
No of Private	60%/85%	60%/85%
No of Affordable	40%/15%	40%/15%
Unit Type Mix	1 bed x 2 2 bed x 5 3 bed x 24 4 bed x 9	Studio x 8 1 bed x 35 2 bed x 80 3 bed x 62 4 bed x 25 5 bed x 6
Unit Sizes GIA sq m	1 bed - 50 2 bed - 71 3 bed - 86 4 bed - 104	Studio - 38 1 bed - 50 2 bed - 70 3 bed - 88 4 bed - 107 5 bed - 134
Site Coverage	0.134 hectares	0.430 hectares
Retail Use Floor Area (GIA / sq m)	370 sq m	1,020 sq m
Rental Value	£215 per sq m	£235 per sq m
Yield	8%	7%

We have assumed that the residential values for the mixed use typologies reflect residential values used for the purely residential typologies. This is also true of the development appraisal assumptions.

We have tested the same levels of tariff contribution for the mixed use appraisals as were tested in the purely residential appraisals. We have assumed that the retail element of any mixed use scheme will pay a tariff in line with the proposed stand alone retail tariff.

Commercial (Office)

In addition to residential/mixed-use schemes, we also looked at commercial typologies. Because of the industrial nature of much of the OA, there was no obvious office typology to use as an example of what would come forward in the area. GVA therefore consulted with local commercial agents and our in house office agency department to determine what type of office building a developer would build, looking at the market generally and the type of occupiers that might be attracted to the area.

Because of the poor environmental quality of Vauxhall / Nine Elms office rents are currently c. £270 per sq m (£25 sq ft) for second hand stock. In order to build and develop an office building at a profit, we anticipate that no one would build until at least after the US Embassy has opened, and possibly when the NLE is in place. This is because we believe that developers would need to attract a rent of c.£430 per sq m (£40 per sq ft) to make developing worth their while, and these rents would only be achievable once the US Embassy is in place - providing some critical office mass to the area as well as industry sub-shoots, or the NLE is open - allowing for improved transport links. We have therefore assumed that no office development will come forward until 2016.

We have tested tariff at levels of £50, £100, £125, £150, £200, £250, £300 and £350 per sq m.

Table 5 Commercial (Schemes 5 & 6) Typology and Development Appraisal Assumptions

OFFICE (2016-2031 only)	Scheme 5	Scheme 6
Type of Development	Medium Office Scheme	Large Office Scheme Potential to split building into multiple occupations
Site Coverage	0.42 hectares	1 hectare
GIA (Sq M)	10,200	37,160
NIA (Sq M)	9,180	33,444
Rental value	£40 per sq m	£40 per sq m
Yield	7%	7%
Profit	17.5%	17.5%

Retail

We have included retail use as part of the residential mixed-use typology in line with the OAPF/GLA view that c.27,000 sq m of retail will come forward in the area backed by the Lambeth UDP policy for retail frontage. We consider, however, that a larger retail development may come forwards and have, further to discussing a retailer's requirements, formulated a retail typology as set out below:

Table.6 Retail (Scheme 7) Typology and Development Appraisal Assumptions

RETAIL Scheme 7	2010 - 2015	2016 - 2031
GIA (Sq M)	12,295	12,295
NIA (Sq M)	11,680	11,680

Rental Value	£269 per sq m	£294 per sq m
Yield	5.5%	5.5%
Profit	20% on GDV	20% on GDV

For the retail typology we have tested tariff at levels of £50, £100, £125, £150, £200, £250, £300 and £350 per sq m.

Hotel

A number of proposals across the OA include a hotel use, and we have therefore included a hotel typology in our CIL viability work.

Having spoken to hotel agents, it is clear that the OA is not currently a desirable hotel location. Historically, hotel chains are drawn to established areas north of the river, for example in W1 and W2, and in and around the Bayswater area. There is therefore limited hotel activity south of the river, mainly focused around the Waterloo roundabout, with its proximity to good transport links and cultural attractions such as the London Eye and the South Bank, and further along the South Bank in the developments that surround City Hall and Tower Bridge where there is a Hilton Hotel.

There is one hotel, a Comfort Inn, which trades well on South Lambeth Road, however agents are of the opinion that this 94 bed budget to mid-range option effectively accommodates all of the demand in the area.

We have therefore had regard to the above and our conversations with agents. We have tested CIL levels at £10, £20, £30, £40, £50, £60, £70, £80 and £90 per sq m.

Table.7 Hotel (Scheme 8) Typology and Development Appraisal Assumptions

HOTEL Scheme 8	2010 - 2015
GIA (Sq M)	4,300
NIA (Sq M)	2,580
Rental Value (per room)	£5,500
Yield	5.75%
Profit on Sale	17.5%

For 2010 - 2015, we have assumed that a budget / mid-range operator such as a Travelodge or Holiday Inn would be most likely to come forward for a site in the OA, with a requirement for c.100 rooms. We note that the Battersea Power Station planning application includes a 300 room, 4* hotel. We have assumed that this will be developed post 2016, and that this will satisfy all hotel demand in the OA, particularly that arising from the opening of the US Embassy (which agents do not consider to be particularly significant). We have therefore not forecasted a hotel typology to 2016.

We would note that, because of the particular business models used by the hotel industry, viability is based more fundamentally on cashflow rather than on residual land value. It is therefore difficult to determine viability pertaining to an EUV. We have, however, adopted an EUV of 800,000 per acre, based on advice from agents (although many confessed that on occasion the residual land

values produced may be negative, but that an operator would be more interested in, say, a 5 year cashflow).

APPENDIX 4

Tax Increment Financing and Private Finance Initiative

In this appendix, we will examine the concepts of Tax Increment Financing (TIF) and Private Finance Initiative (PFI).

Tax Increment Financing

The Tax Increment Financing (TIF) Model is a method of financing whereby future increases in tax yield generated by some upfront investment are ring fenced to pay for that investment, rather than being collected and distributed nationally by central government. TIF has been suggested as a mechanism for funding the extension of the Northern Line. Currently TIF has not been used anywhere in the UK though it has been applied elsewhere, particularly in the United States.

As there is no UK model for TIF it is difficult to consider whether it would be applicable for providing VNEB infrastructure. All that can be done is to make a number of assumptions about how a TIF might work. In a theoretical TIF model the additional tax revenue that is raised as a result of the development is used to pay for the necessary infrastructure, without which the development would not otherwise occur. The future income stream is “securitized” (ie, converted to a capital lump sum) and the repayments are made from the additional ‘incremental’ taxes generated in the area such as business rates and stamp duty.

A review of the feasibility of using TIF for the Northern Line Extension was carried out by PriceWaterhouseCoopers (PWC) and Colliers CRE in April 2010.¹ It should be noted that the costs of the Northern Line Extension have now changed slightly since this report was written but the conclusions remain the same. The costs used in this appendix are those provided by Parsons Brinckerhoff as used in the draft PriceWaterhouseCoopers report.

The structure of a Tax Increment Financing model for the Northern Line Extension

PWC and Colliers were tasked with explaining how to structure a TIF delivery model for NLE that would have no impact on the public sector both in terms of funding and financing capacity (balance sheet impact). The proposed structure to achieve this is that a private sector company will be set up, called say NLE Co, to design, build, finance and maintain the NLE extension. The report states that

- The capital sum for the project would be raised by the NLE Co from a mixture of senior debt, subordinated debt and equity from NLE Co shareholders.
- The NLE Co would receive some of the S106 developer contributions, the business rates from commercial development in the area and stamp duty land tax from sales and lettings in the area.
- Transport for London would retain the ticket sales revenue and would bear the operating costs of the service.

¹ Colliers CRE April 2010 *Innovation in Infrastructure Finance: Northern Line Extension, Project Revenues - DRAFT*

- The NLE Co would be responsible for financing the costs of construction of the NLE. At the end of the concession period the NLE Co would hand back responsibility of the extension to TfL (unless a further arrangement is made).

The importance of proving additionality

A key issue is the amount of development that is *genuinely additional* resulting from the provision of NLE infrastructure. Genuinely additional means that amount of development which would not otherwise occur and which is not just the transfer of jobs or housing to the VNEB area from another area.

This is particularly important because the finance to be used for the repayments comes from the additional revenue to the exchequer as a result of the development. This is not the additional income from the local development area but the additional income to the exchequer regardless of boundaries - i.e. the net gain to UK PLC.

As PwC state, 'to satisfy public expenditure investment criteria the business rates generated within the OA, by the developments resulting from the NLE, are required to be 'additional' to likely business rate levels without the NLE. Similarly, such developments should not (to any significant degree) 'displace' other rateable activities elsewhere in London.'

Timescales

The timescales used in the PwC financial modelling work are shown in table 13.1 below. These assumptions were required to create the model and do not represent a view from TfL as to when the NLE would be built.

Table 1 Timescales

Milestone	Date
Revenue stream starts	1 April 2013
NLE Construction starts	1 April 2016
NLE Operations start	1 April 2019
End of concession	31 March 2046

Revenue stream assumptions

The size and timing of the expected revenue stream is provided by Colliers. The revenue streams are:

- S106 developer contributions, which would otherwise be spent on other forms of infrastructure (assuming such infrastructure could be reasonably negotiated, and shown to be necessary).
- Business rates, which would otherwise go to the national exchequer.
- Stamp duty land tax, which would otherwise go to the national exchequer.

Revenue timing and additionality

Revenue timings are as follows.

- Upfront revenues are those received before operations start on 1 April 2019.
- Ongoing revenues are those received from 1 April 2019 until 31 March 2046.

Colliers have excluded developments that they have been told by the land owners would occur in the area even if the Northern Line extension is not built. They have then allowed for 10% of the NLE dependent development to be displaced from elsewhere in London ie 90% is additional.

Colliers have worked with two scenarios. The base is Scenario 1 and assumes that 50% of the Battersea Power Station Section 106 contributions are allocated to the NLE. The second, Scenario 2 assumes a shorter build out period for the power station site, a higher rateable value at Battersea Power Station and an increase to 90% of Section 106 from BPS site allocated to the NLE.

Upfront revenue

The amount of upfront revenue is important as it is received as the project is under construction and so reduces the amount the NLE Co needs to borrow to finance the construction costs.

The source of the upfront revenue is shown in the table below.

Table 2 Upfront revenues

Up front revenue streams	Scenario 1	Scenario 2
Incremental Business Rates	£23m	£55m
Section 106 Developer Contributions	£60m	£123m
Incremental Stamp Duty	£25m	£33m
Total	£108m	£211m

Observations: the assumptions used on up front revenue streams are optimistic

The PWC/Colliers model is based on incremental revenue streams starting in 2013. This would require that all the necessary powers and agreements are in place before then

We would suggest that these up-front revenue streams are somewhat optimistic. This is for two reasons.

- TIF will need primary legislation to be passed. This makes it challenging to then complete all the necessary contracts and other arrangements necessary to permit a 2013 start.
- The rapid build-out scenario, which exceeds rates envisaged in OAPF, is not considered realistic.

Ongoing revenues

The nominal ongoing revenues generated by the model are shown in the table below. There is much less difference between the two scenarios as far as ongoing project revenues are concerned.

Table 3 Nominal ongoing revenues

Ongoing revenue streams	Scenario 1	Scenario 2
Incremental Business Rates	£2,432m	£2,502m
Section 106 Developer Contributions	£35m	£30m
Incremental Stamp Duty	£82m	£73m
Total	£2,549m	£2,605m

The table below shows the total size of the nominal revenue streams. The amount of developer contribution is assumed to be £95m in the base case and £153 million in Scenario 2. The value of the incremental business rates is £2,455m in the base case and £2,557 in Scenario 2. The incremental stamp duty land tax yields a far smaller sum, at £107m in the base and £106m in Scenario 2.

Table 4 Nominal revenue streams

Revenue streams	Scenario 1	Scenario 2
Incremental Business Rates	£2,455m	£2,557m
Section 106 Developer Contributions	£95m	£153m
Incremental Stamp Duty	£107m	£106m
Total	£2,657m	£2,816m

Costs: “permissible” costs given the income stream generated by the NLE

The approach to costs adopted in the study is to model what amount of construction costs could be supported by the projected revenue stream. This means that the cost figure is an output from the financial modelling exercise - the financial model works out how expensive the transport scheme *could possibly* be in order to pay for itself, given the revenue stream. It is not a “builder’s quote” from an engineering firm charged with costing the project. (Parson Brinckerhoff have provided these cost estimates; we return to them below).

The following table of costs is based on a construction cost figure of £462m with the revenue streams associated with Scenario 1 and a construction cost figure of £575m with the revenue streams associated with Scenario 2.

Table 5 shows the breakdown of the costs that could be covered from the anticipated revenue streams.

Table 5 Permissible total project costs (permissible costs given anticipated revenues)

Cost Category	Scenario 1 £ m	Scenario 2 £ m
Construction costs	462	575
Operating costs	0	0
Insurance	45	45
maintenance	198	198
Development	18	23
Running costs	131	135
Tax	172	177
Senior debt	601	623
Subordinate debt	176	182
Equity	441	456
Total costs	2244	2414

The financial model suggests that if all its assumptions are met, then a construction cost in the range of £462m (Scenario 1) to £575m (Scenario 2) could be covered.

Forecast construction costs

The above “permissible” cost numbers would then need to be juxtaposed with a forecast of the construction costs. Parson Brinckerhoff, in their feasibility report published in December 2008, provide their assessment of the forecast construction costs. Their forecast costs are considerably higher than the “permissible” costs arrived at through calculating what revenue might support. The Parson Brinckerhoff infrastructure costs alone are £460m in 2008 prices. This excludes any risk or contingency. The rolling stock and stabling are costed at a further £46m.

The £460m cost excludes the costs incurred by LUL, Councils and other Authorities including design and project management duties; the cost of preparing, promoting and supporting any Transport and Works Act; the cost of the clients team developing the project design and during the construction phase; the purchase and disposal of land and property licences and associated costs; fluctuations i.e. inflation; main contractor’s design costs and commissioning costs. These would need to be included. Inclusion would be

likely to raise the cost of the scheme above that which can be covered by the projected revenue stream.

Cashflow issues

Gap finance will be needed

The annual repayments on the finance required to construct and maintain the NLE are, in the early years of the project, higher than the ongoing revenue stream. This means that further monies would need to be borrowed until such time as the income from the business rates, stamp duty tax and further S106 contributions are sufficient to meet the annual finance payments.

This means that an additional source of finance will be needed in the early years, known as gap finance. PwC estimate that the amount of Gap Finance required is around £220m in each scenario, plus fees and interest. In Scenario 1 they estimate the fees and interest to be around £74m for Scenario 1 and £62m Scenario 2.

Gap finance providers are not identified

PwC note that 'the Gap Facility is not a form of finance that would typically be provided by the private sector and therefore, given the innovative nature of the potential structure, further work will be required to identify who will provide this facility or whether the project can be structured to remove the requirement for such a facility'. It is our opinion that the market is unlikely to provide this gap facility at an affordable price for this project as so much of the revenue stream is dependent upon a single development.

Any build delays would inflate finance costs

This cashflow issue is accentuated by the fact that any delay in the build profile and hence the receipt of incremental revenue will lead to an increase in the amount of gap finance required.

Other observations and Issues from the PWC/Colliers model

The work carried out so far on TIF is at an early stage, given that the concept itself is new to the UK. Other assumptions used in this work would need to be re-examined if TIF were to be taken forward. These are as follows.

- PwC note that 'no legal advice has been taken upon the deliverability of the structure and no market testing has yet been undertaken in order to test the commercial deliverability of the proposals'. A full legal review would need to be undertaken.
- PwC assume that gap facility finance as well as project finance can be raised in the market.
- PwC assume that gap facility finance as well as project finance will be available at conventional interest rates
- PwC assume that for a cost of around £130m somebody will guarantee the future revenue stream up to 2046. PwC comment on this assumption 'Are there any private sector entities that will have an interest in providing the revenue guarantee or will this

need to be supported or covered by the public sector?’ ie is the private sector prepared to cover this risk or will the public sector effectively have to underwrite the revenue stream. In reality, it is our view that no one will provide this revenue guarantee and certainly not at the low price assumed in the financial model,

- No sensitivity testing is reported on key variables, such as a delay in the buildout and letting of the commercial development.
- The model assumes monies are received from incremental stamp duty as well as business rates.
- The model assumes that the mechanism to allocate the incremental revenue to the project is in place by 1 April 2013
- Colliers are concerned about the reliance of the revenue stream on the Battersea Power Station. The total revenue is estimated at £2,657m of which over 94% (£2,508m) comes from the power station site. As Colliers state ‘For the avoidance of doubt, in the event that the office elements of the pipeline cannot be delivered as anticipated, then the resulting income could be significantly less than forecast’. The financial modelling work shows that if this schedule is not met the need for gap financing will increase. The Colliers report is based on the total amount of development in revised scenario 5. The table below shows the assumed phasing of the Battersea Power Station site but no details are provided as to the amount of development assumed at each stage.

Table 6 Battersea Power Station Scheme Phasing

Phase	Start	Completion	Full Occupation
Phase 1	01-Oct-11	15-Sep-14	04-Sep-16
Phase 2	08-Mar-16	26-Feb-18	16-Feb-20
Phase 3	20-Aug-19	09-Aug-21	30-Jul-23
Phase 4	04-Aug-22	26-Jan-24	15-Jan-26
Phase 5	20-Jan-25	14-Jul-26	03-Jul-28

More work is necessary to identify a role for TIF in the delivery of the NLE

Our work has suggested that more work is necessary to identify a role for TIF in the delivery of the NLE. This is for the following reasons:

- There is no legal framework for TIF in the UK at the moment although the Coalition Government has announced that it is to consider drafting the necessary rules and introducing primary legislation to allow TIF arrangements.
- The amount of revenue (and the risk around achieving this) that could be raised through a TIF does not seem to sufficient to cover the full outturn costs of construction and the necessary interest payments, so it appears that any TIF scheme would have to accompany other funding.
- There is a large cashflow issue associated with using TIF for the NLE as the costs of construction are incurred before most of the TIF revenue is received. To overcome this problem the revenue streams would have to be securitised (ie, turned into a lump

sum). There are questions to resolve around whether the market would have appetite for this risk at a reasonable price.

- A TIF scheme is likely to have to prove that the development that arises as a result of the infrastructure is additional to that which would come forward in London otherwise. This could prove a hard condition to satisfy.

However, TIF could provide a feasible way of funding smaller elements of the infrastructure requirement for the area. In several years time, the legislation to enable TIF could be in place. By then, there may be greater certainty over the timing and scale of delivery of the development in the OA. This would mean that markets may be more willing to lend to against future TIF revenue. The gap between the time when the upfront money is needed and when the repayments can begin in earnest will be shorter, thus reducing the interest burden of the arrangement.

We believe that it would be beneficial to undertake further investigation into the feasibility of using TIF for the Northern Line Extension, and other infrastructure.

Private Finance Initiative

The private finance initiative (PFI) has been successfully used for infrastructure

The private finance initiative has been successfully used by the public sector on projects in both transport and other sectors since it was introduced into the UK in 1992. This mechanism allows the public sector to pay for infrastructure with a periodic payment to cover construction, and often maintenance and/or operation as well, rather than using a large initial upfront payment. For transport schemes, the Department of Transport provides funding in the form of PFI Credits which supports the payment of the unitary charge.

Under the private finance initiative the public sector decides what services it thinks are needed but uses the private sector to determine the most economical and efficient way of delivering these services. The private sector designs, builds, finances and sometimes operates the infrastructure. The emphasis is not on the provision of the infrastructure itself but on the provision of the stream of services based on its use. The anticipation is that the private sector will be better able to manage costs and by providing a combined package can produce better value over the life time of the project. PFI can be a cost-effective way of providing asset-based services. It is often used to provide buildings such as schools and hospitals where there is a requirement to build and maintain the buildings and often to provide auxiliary services. This form of funding may be appropriate for some of the infrastructure requirements of the VNEB, but it is not suitable for them all.

Key characteristics of PFI projects

The key characteristics of a suitable project for PFI are:

- The public sector is able to state its requirements as a set of outputs rather than defining inputs. The public sector determines “what” needs to be delivered and the private sector works out ‘how’ this is best achieved.

- The contract can be easily defined as two main components, the construction of a physical asset and the long term delivery of services using this asset. For example the construction of a underground line (an asset) and the running of train services on it thereafter (a service).
- The requirements of the contract can be defined for a long term; typically 25-30 years. This is needed to encourage solutions that minimise the 'whole life' cost of the project and allow sufficient time for investors to recoup their money and make a reasonable profit.
- Risks can be allocated between the public and private sector to the side best able to manage them. The intention is that this minimises overall cost.

Are VNEB infrastructure projects suitable for PFI? Is the public sector willing to make the commitment to PFI payments?

There are several key factors when assessing the suitability of each of the infrastructure requirements of the VNEB for PFI. These are as follows.

The prior "public sector willingness" test

PFI is not "free money". Therefore the first consideration is whether the public sector is willing or able to make the long term commitment to the regular PFI payments for the duration of the project.

The SDG Business Case shows that the NLE revenue will not cover the NLE operating costs alone. This means that the NLE will not generate the necessary income to cover the PFI payments - and the PFI payments must cover operating costs plus capital costs and interest costs.

Our discussions have indicated that there is no ability for TfL to fund a PFI component for transport infrastructure at this time, or for the medium term.

The PFI concept therefore fails on this test at the current time.

After this prior test, there are a series of other tests, which may become more relevant in the medium term.

1. Is the project value high enough to mean that potential savings from PFI financing outweigh costs?

First is the question of whether the value of the project is sufficiently high that the potential savings from using PFI can cover the additional costs of using PFI such as the legal and financial advice required in setting up a PFI project. HM Treasury recommends a minimum project value of £20m is needed to recoup these costs and suggests that smaller projects should be bundled together to achieve this. The performance of the private sector will also need monitoring throughout the contract to ensure that the service provided meets contractual requirements and to determine any reductions in payments as a result of poor performance. For small projects these ongoing management costs can become relatively high, which again points towards only using PFI for high value projects.

A VNEB transport package could be of sufficient size to pass this test.

2. Can a clear service contract be written?

Second is the question of whether there is sufficient clarity over the services that are needed, over the whole life time of the contract such that a clear contract can be written. With PFI, the public sector imposes a retention on its periodic payments if performance standards have not been met. The intention of this penalty is to incentivise the private sector to meet the specified output standards. However this requires that contracts have been well written so that the penalties can be enforced and that they are sufficiently severe to motivate the required behaviour in the public sector partner. They also need to be monitored and enforced by the private sector. The cost of monitoring the performance of the private sector party should not be underestimated.

A VNEB transport package could pass this test.

3. Can risks be appropriately transferred to the private sector?

Third, is the nature of the project such that it is possible to achieve an appropriate transfer of risk to the private sector? The Treasury (2004) state that 'the appropriate sharing of risks is key to ensuring that the value for money benefits in PFI projects are realised'. There are many different risks in the lifetime of a project and the theory is that the total cost of a project will be minimised if risks are carried by the party best able to manage them.

A VNEB transport package would potentially fail this test. This is because the private sector is not well placed to carry patronage risk. The public sector consequently has to charge a very high premium to insure itself against this risk. With the Docklands Light Railway PFI the periodic payments by the public sector are based on the availability of the service and this would be the likely arrangement if PFI were used for public transport in the VNEB. This arrangement, though, would mean that if TfL receives the fares revenue, it is effectively taking the patronage risk. This is not something that TfL appears willing to do.

4. Can the PFI contract build in sufficient flexibility to cope with uncertainty at VNEB?

Fourth, PFI contracts tend to be inflexible and are more suited to stable conditions when the requirements can be clearly specified for many years into the future. This makes them less suitable for use in areas of rapid development especially when the scale and delivery date of the new developments, and hence the source of demand for the services, is uncertain.

A PFI contract for VNEB could pass this test, but would have to be very carefully constructed.

There may be some PFI opportunities but only for big non-transport infrastructure packages (for example, for health and education)

PFI may be suitable for some of the infrastructure required for the VNEB, such as the new schools, and large packages of health investment. The precise opportunities change from time to time depending on national policy priorities.

Even these large packages may have to be part of the wider provision of schools in the area as individually many of the items of infrastructure required are too low in value to make them viable as stand-alone PFI projects. Local Authority clients will be aware what their own plans are in relation to these types of scheme and our expectation would be that they could only be readily utilised to support the costs incurred in delivering the VNEB schemes in the context of wider municipal service delivery plans.

We conclude that PFI has no role in funding the transport infrastructure at the VNEB

Our analysis shows that there is no role for PFI in the foreseeable short and medium term. This is the case for the construction of the Northern Line Extension and a major re-build of Vauxhall underground station.

- At the current time, the use of PFI for transport projects is not seen as a realistic option, as the relevant public sector bodies e.g. Transport for London (TfL) and the Department of Transport are unlikely to be prepared to make the necessary long term commitment to periodic payments that would be required.
- Even if the public sector had a theoretical willingness to fund PFI schemes, the NLE project would be in difficulties. The SDG Business Case shows that the NLE revenue will not cover the NLE operating costs alone. This means that the NLE will not generate the necessary income to cover the PFI payments - and the PFI payments must cover operating costs plus capital costs and interest costs.
- Even if the project did generate an income stream that would fund the PFI schemes, the public sector would also have to absorb a significant degree of patronage risk. This is common to all transport projects, which are particularly prey to patronage risk. The public sector is not willing to absorb this risk.

APPENDIX 5

Transport Section References

References for transport section

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APPENDIX 6

Local Property Market Report

LOCAL PROPERTY MARKET REPORT

1. Residential

Proposals for the Opportunity Area provide the possibility to develop a substantial new residential district in south west London. It is currently envisaged it will provide approximately 1.2 million sq m (13.1million sq ft) of residential floorspace, a total of 16,000 new homes.

In coming to a view on the residential values across the area, we have reviewed both historic and current data, conducting desk top research and speaking to local agents. We have taken account of residential values in prime locations such as Chelsea (immediately to the north of the river) to illustrate the relative discount applied opposite, south of the river, and to understand the potential to increase values in the area, in order to inform our understanding of the ceiling to any uplift in values brought about by any 'place making'.

2. Summary of Adopted values

We have used the following residential values for the different value zones within the Opportunity Area as set out in Figure 6.2:

Assumed Current Sales Values for different Value Zones				
Value Zones	1	2	3	4
Description	River Front	North Opportunity Area (Albert Embankment)	South of Nine Elms Lane / North of Railway Line	South of Railway Line
Residential Values Used £ per sq m (£ per sq ft)	£9,170 (£825)	£7,247 (£670)	£6,780 (£630)	£4,840 (£450)
Uplift for 2016	15%	15%	15%	15%

3. Opportunity Area Residential Market

There is considerable demand for properties in new schemes along the river, such as St George Wharf, largely due to the scheme's close proximity to central London. However, with the exception of high specification riverside residential schemes, within the OA and where industrial property and low value residential accommodation predominates, demand is lower. Agents do, however, agree that there is high demand for residential accommodation to the west of the OA in the Battersea Park area and also around Queenstown Road, the environment and desirability of which has improved significantly in recent years. Agents anticipate that the impetus towards comprehensive regeneration, with the 'major opportunity area' allocation, plus the proposed new home for the US Embassy and the redevelopment of the New Covent Garden Market, will mean that demand will strengthen in the coming years.

As noted, river front properties are already in demand and therefore achieve higher sales values than those properties that are not located on the riverfront. The strong demand is evidenced by the uptake levels at St. George Wharf as well as other new developments such as Chelsea

Bridge Wharf, hence the riverfront locations set out in value zones 1 and 2 are the two highest residential value areas. Value Zone 1 has higher values than Value Zone 2 based on discussions with local agents, and because it already has established new developments. Value Zone 4, furthest from the river and with the poorest access to the tube network, is the lowest Value Zone. Agents note that this is largely because of its industrial nature and existing low value residential accommodation.

Across the OA agents comment that sales prices achieved are close to asking prices (within 2 - 5%), but with more properties now coming to the market it is anticipated that asking prices will become more negotiable, and the difference will be nearer to 5%.

In terms of parking, agents comment that flat purchasers would expect to pay c. £10 - £20,000 per space.

Agents consider that, as a consequence of place making through development and infrastructure improvements in the OA over time, it would be reasonable to assume an average uplift in values of 15% across the OA.

Comparable New Build Residential Development

We set out below examples of comparable new build developments

Chelsea Bridge Wharf, Queens Town Road, Battersea SW8

This development by Berkeley Homes is located directly to the west of Battersea Power Station on the river (Value Zone 1).

It comprises six buildings with over 650 units, a 202 room hotel, 8,360 sq m (90,000 sq.ft) of office space (now to be converted to residential use), a 3,250 sq m (35,000 sq.ft) health club, 2,790 sq m (30,000 sq.ft) of restaurants and 790 sq m (8,500 sq.ft) of retail. The development is set around a central garden area with riverfront access. Some of the apartments have views over Battersea Park and the river.

There are a number of properties from this development on the market, including the following:

Unit Type	Size (sq m)	Quoting price	£ Per Sq M (per sq ft)
1 bed flat	30	£365,000	£12,170 (£1,112)
1 bed flat	30	£360,000	£12,000 (£1,097)
2 bed flat	60	£635,000	£10,400 (£966)
2 bed flat	60	£630,000	£10,330 (£958)
2 bed flat	65	£645,000	£10,010 (£953)
4 bed flat	140	£1,995,000	£14,250 (£1,306)
		AVERAGE:	£11,530 (£1,065)

The scheme's prime riverside location and proximity to transport links has ensured high demand, with asking prices at an average of just over £11,500 per sq m (£1,000 per sq. ft). Car parking spaces are available to purchase at £42,000. It is also possible to rent spaces.

St George Wharf, Vauxhall, SW8

St George Wharf is a mixed use, riverside development by Vauxhall Bridge. The seven acre site now contains over 900 residential apartments, offices, restaurants, retail and leisure facilities. The development benefits from excellent transport links at Vauxhall Cross and its proximity to central London. The final stage of the development, approved by the Secretary of State in 2005, will be a 50 storey residential tower at the western end of the development providing 386 flats, of which 40% will be affordable.

There are a number of re-sale units at St George Wharf currently on the market:

Unit Type	Size sq m	Quoting price	Per Sq M (per sq ft)
1 bedroom / 1 bathroom flat	28	£399,950	£14,280 (£1,331)
1 bedroom / 1 bathroom flat	28	£409,950	£14,640 (£1,365)
2 bedroom / 2 bathroom flat	56	£499,950	£8,930 (£836)
3 bedroom / 3 bathroom flat	122	£1,150,000	£9,430 (£875)
3 bedroom / 3 bathroom flat	115	£1,200,000	£10,430 (£963)
		AVERAGE:	£11,540 (£1,102)

St George Wharf sits within Value Zone 1, at the opposite end of the Zone to the Chelsea Bridge Wharf scheme to the west. Like Chelsea Bridge Wharf, the prime riverside location and the proximity to transport links ensure that average asking prices are high, at just over £11,500 per sq metre (£1,000 per sq ft).

Viridian, Battersea Park Road, Battersea

This Barratt Homes development lies immediately to the south of the riverfront area, in Value Zone 3, and therefore does not benefit from river views. As this is the first recent development in the immediate area, there are limited amenities and the surrounding properties are either commercial or low value or local authority housing.

There are a number of re-sale properties currently on the market:

Unit Type	Size sq m	Quoting price	Per Sq M (per sq ft)
1 bedroom flat	44	£325,000	£7,400 (£687)
2 bedroom flat	53	£399,950	£7,600 (£707)
2 bedroom flat	100	£540,000	£5,390 (£500)
2 bedroom flat	88	£649,950	£7,410 (£689)
2 bedroom flat	88	£649,950	£7,410 (£689)
		AVERAGE:	£7,040 (£697)

The values of the riverside properties are significantly higher, reflecting the benefit of the riverside frontage and the significant improvement to the overall character of the area, brought about by the existing developments. At present, there are limited amenities in the local area of Value Zone 3, and it lacks the premium asset of river frontage.

Grosvenor Waterside, Chelsea, SW1

This c. 6 hectare (14.8 acre) site is located across the Thames to the east of Chelsea Bridge, and borders the northern bank of the river. The scheme is to comprise six residential blocks of which to date Phase 1 has been completed and sold, with Phase 2 recently completed and containing c.355 apartments. This phase of the development has been purchased by the Joint Venture Company formed by the Candy brothers CPC Group and Qatari Real Estate Investment Company.

Unit Type	Size sq m	Quoting price	Per Sq M (per sq ft)
1 bedroom flat	62	£595,000	£9,600 (£892)
3 bedroom / 2 bathroom flat	85	£925,000	£10,850 (£1,008)
2 bedroom flat	82	£1,105,000	£13,530 (£1,257)
3 bedroom / 3 bathroom flat	108	£2,600,000	£24,100 (£2,239)
2 bedroom flat	72	£1,100,000	£15,220 (£1,414)
3 bedroom / 3 bathroom flat	112	£1,500,000	£13,410 (£1,246)
		AVERAGE:	£14,450 (£1,343)

The average prices for this riverside development are noticeably higher than those for riverside apartments on the southern bank of the Thames, demonstrating the higher values achieved in 'up-market' locations such as Chelsea and Pimlico. The prices are approximately 20% higher than those at Chelsea Bridge Wharf and St George Wharf.

Imperial Wharf, Townmead Road, Fulham

This major development on the north side of the river, west of OA, covers 13 hectares (32 acres). The scheme masterplan comprises 1,875 residential units, 15,565 sq m (167,530 sq.ft) of B1 floorspace, 6,500 sq m (70,000 sq.ft) of retail, financial and professional services and food and drink floorspace, 2,230 sq m (24,000 sq.ft) of space for community use, a 175 bedroom hotel, 3,160 sq m (34,000 sq.ft) for health and fitness and 4 hectares (10 acres) of open space. A station providing rail access to the site has also been constructed.

Unit Type	Size sq m	Quoting price	Per Sq M (per sq ft)
Studio flat	19	£182,700	£9,410 (£874)
2 bedroom / 1 bathroom flat	59	£499,950	£8,480 (£787)
2 bedroom / 1 bathroom flat	58	£525,000	£9,030 (£839)

Unit Type	Size sq m	Quoting price	Per Sq M (per sq ft)
2 bedroom / 2 bathroom flat	73	£795,000	£10,960 (£1,018)
3 bedroom / 2 bathroom flat	85	£995,000	£11,755 (£1,092)
		Average	£9,925 (£922)

Car parking spaces are available at £15,000 per space (plus service charge), or £45,000 for an allocated, secure space £45,000.

4. Offices

Proposals for the Opportunity Area provide the possibility to develop approximately 100,000 sq m (1.07 million sq.ft) of offices, as well as 27,000 sq m (290,000 sq ft) of retail, 65,000 sq m (700,000 sq ft) of hotel use and 27,500 sq m (295,000 sq ft) of other uses.

In assessing appropriate commercial values (rents and yields) for our development viability work, we sought to review both historic data and values recently achieved in the immediate area. In addition to conducting desk top research, we have also spoken to local agents.

It is apparent from our research and conversations with agents that this is not an established office location. Whilst there is some demand for smaller units, there is very limited stock of good quality office space, and there are consequently few transactions of note in the area. Agents comment that the rents, averaging at approximately £215 per sq m (£20 per sq. ft), have always lagged behind rents in central London due to limited demand in the area.

The only significant office development that has taken place in the area in recent years is at Chelsea Bridge Wharf, where Berkeley Homes developed 6,040 sq m (65,000 sq. ft.) of speculative office space as part of its mixed use scheme. We understand from the former agents that the offices are no longer being marketed, and instead the accommodation, which was completed in 2009, will be converted to residential accommodation. The agents were originally quoting £350 per sq. m (£32.50 per sq.ft) for the offices, but we understand that there was no significant interest.

Elsewhere in the OA there is more dated office accommodation, particularly along Nine Elms Lane. Of significance is Market Towers, which is a landmark building constructed in the 1970s. The accommodation is arranged over 21 floors and includes air conditioning, raised floors, lifts and car parking. In August 2008, 860 sq m (9,277 sq. ft) of third floor accommodation was let to the Royal Society of Health on a short term lease at a rent which equates to £215 (£20 per sq.ft.) This building is close to the Vauxhall Interchange and associated transport links.

The current low level of office rents and the lack of development is a reflection of the general character of the area and the current, poor transport links. Furthermore the currently low level of rents makes most new office development currently unviable. However some agents commented that already they believe Vauxhall to be underrated as a location, and with the comprehensive regeneration of the area, including the infrastructure improvements, plus the proposed new home for the US Embassy, the character of the area and the transport links will be transformed such that it should become an attractive destination for occupiers seeking high quality accommodation within close proximity of the West End, but not requiring a prime location.

With such improvements yet to happen, and with office development currently unviable, we have not included an office element in our appraisals for 2010. We have, however, assumed that offices will be developed in 2016, and we have accordingly established appropriate values for this future time period.

In our appraisal for 2016, we have adopted an office rent of £430 per sq m (£40 per sq. ft.) and yield of 7%.

We have allowed a 12 month rent free period on all of the office space.

In assessing an appropriate level of rent we have had regard to rental levels achieved in other new developments in historically fringe locations, and made adjustments to reflect the projected time period, plus the quality of the location, transport links and proximity to central London. This helps us to understand the values achievable in the area, subject to future 'place making' through development and infrastructure improvements, and to understand the ceiling to any uplift in values brought about by such 'place making'.

An office development of the scale proposed in the OAPF, providing high quality space, would represent a major new office centre in London, which would attract large corporate occupiers who need to be near central London, but want to avoid higher value core West End and City locations. It is also attractive in that it is near to prestigious areas such as Chelsea, just north of the River Thames. It might therefore compete with areas such as Paddington, King's Cross, and Southbank More London, as well as further fringe locations such as Hammersmith, Chiswick and Stratford.

Discussions with local agents, our own in-house office agency team and desk top research indicates that headline, prime rents achieved in such locations are as follows:

Prime Rents - Offices	
Area	Headline Rent Per Sq M (per sq ft.)
Paddington	£485 (£45)
Victoria	£590 (£55)
Kings Cross	£375 (£35)
Waterloo / Bankside	£430 (£40)
London Bridge / More London	£430 (£40)
Chiswick Park	£365 (£34)
Hammersmith	£375 (£35)

King's Cross has traditionally been regarded as a secondary office location, however it benefits from large areas of developable land and good transport links as a result of the existing mainline and underground stations. In recent years this has resulted in substantial development proposals being brought forward. In particular, Argent's King's Cross Central scheme is a 750,000 sq m (8 million sq. ft) mixed use development which was granted consent in December 2006. The permission includes up to 25 large new office buildings totalling approximately 455,000 sq m (4.9

million sq. ft). Work on the scheme has commenced and it is expected to bring about extensive regeneration of the area.

Whilst King's Cross benefits from better transport links than the Opportunity Area (even with the proposed Northern Line extension), the overall quality of the environment is perhaps poorer than that which can be created in the OA, particularly near the river.

Paddington has seen significant development in recent years and is, as a result, more established than King's Cross as a fringe West End office location. We believe Paddington provides a good illustration of the level of rents that could be achieved for high quality offices in a fringe, but now established area. In terms of transport links it would be regarded as superior due to the proximity of the whole of the area to Paddington mainline and underground stations, with the benefit of the Heathrow Express. The proximity to the A4 also provides good road communications links to the west of London and Central, West and South West England.

The Southbank area of central London, stretching from Waterloo in the west to Tower Bridge in the east, has seen significant regeneration, including office development, in recent years, and has been successful in attracting major occupiers away from core West End and City locations. The first major development in the area was London Bridge City, now known as More London, which is immediately to the east of London Bridge. The scheme provides in excess of 93,000 sq m (1,000,000 sq. ft), and has attracted occupiers such as PricewaterhouseCoopers and the Greater London Authority. The area as a whole benefits from its proximity to the West End and the City, in addition to excellent transport links.

The nearest existing established market to the OA is at Victoria. Victoria Station is only c. 1 mile to the north of the OA, and it is likely that potential office occupiers for the OA would also consider Victoria, and would have regard to the difference in rental values between the two. Victoria also benefits from being a major central London transport hub on the fringe of the West End.

Locations further from central London include Hammersmith and Chiswick Park. Chiswick Park is a 13 hectare (33 acre) site on the border of west London suburbs Chiswick and Acton, on the site of a derelict London Transport bus depot. Despite its distance from central London and a transport hub, the quality of the development has ensured that it has attracted good tenants.

Considering yields, there has of course been a serious deterioration in global economic conditions since the summer of 2007, and whilst a more gradual slowdown in the economy and economic growth had been widely anticipated, the speed and severity of the downturn was far worse than expected. A key factor behind the current economic problems has been the "credit crisis" which has severely affected the banking sector. Not surprisingly this, and the turmoil in the financial markets, has had a significant detrimental impact on the property investment market.

The investment market has since, however, begun to recover (at least for prime stock). On the back of strong demand and a shortage of good quality stock, prime City and West End yields have moved to c. 5.5% and c. 4.5% respectively, with yields in lesser areas such as the City fringes and Victoria at c. 6.5% and 5.5% respectively. Paddington is closer to 6%. This yield compression is predominantly driven by private money rather than debt, which remains constrained.

For our 2016 appraisals, we have had to take a relatively long term view on the investment market. In our appraisal we have adopted a yield of 7% on the office income and, whilst this does reflect the current general downturn in the investment market, it does assume that a level of

liquidity will have returned to the market such that it is trading at more normal levels than at present.

The yield applied effectively represents a blended yield, as yields for individual elements in the scheme will vary over time depending on lease term, covenant strength, lot size etc. However, we feel that 7% represents an appropriate level of discount to the yields that may be anticipated for similar quality offices in a more established location, albeit the differential may reduce as the development progresses and Battersea itself becomes more established as an office location.