TRANSPORT AND WORKS ACT 1992

TOWN AND COUNTRY PLANNING ACT 1990

PLANNING (LISTED BUILDINGS AND CONSERVATION AREAS) ACT 1990

PROPOSED LONDON UNDERGROUND (NORTHERN LINE EXTENSION) ORDER

TRANSPORT FOR LONDON'S REBUTTAL

OF

THE EVIDENCE OF

KENNINGTON GREEN SUPPORTERS GROUP (OBJ 158)

TOM BARTLETT (OBJ 128)

TRISTAN STANDISH AND DAVID HARKNESS (OBJ 40)

DECEMBER 2013

1. INTRODUCTION

1.1.1 This rebuttal has been prepared on behalf of Transport for London to address the evidence of Kennington Green Supporter's Group ("KGSG") (OBJ 158), Tom Bartlett (OBJ 128) and Tristan Standish and David Harkness (OBJ 40).

1.1.2 It is not intended that this rebuttal proof should address points that witnesses for TfL have previously covered in their evidence; however, cross-references to relevant paragraphs of those witnesses' proofs of evidence are made where appropriate.

1.1.3 It is intended that this rebuttal proof should be a composite response to those issues raised by Mr Bartlett (OBJ 128), Mr Harkness (OBJ 40) and the Kennington Green Supporters Group (OBJ 158) as set out above. In this respect, for cross-examination purposes the name of the TfL witness who is responsible for each aspect of this rebuttal proof is given at the beginning of each section below.

1.1.4 This rebuttal proof deals with the selection of the site at Kennington Green for the shaft. It addresses matters raised by the objectors in relation to this in a number of separate sections, for instance dealing with design and heritage matters, property impacts, transport, ground settlement, amenity and daylight impacts, noise and vibration, cost, consultation, and the impact on trees. For each of these sections, the points are organised into sub-themes with the objector's point summarised in plain font, with any quotations shown in italics. This is followed by TfL's response in bold font, preceded by the name of the witness making that part of the rebuttal. Within each sub-theme, there may be several points, each of which is dealt with separately in turn, and with the witness identified as described.

2. SELECTION OF THE SITE OF THE KENNINGTON GREEN SHAFT – OBJ 158 KGSG

2.1 Consideration of alternative sites for Kennington Green

2.1.1 Mr Bartlett (paragraph 7b) argues that TfL did not consider alternatives to locating the shaft on the distillery land at Kennington Green.

Expert witness: *Richard de Cani*

2.1.2 **Paragraphs 4.4.30 to 4.4.37 of my proof of evidence [TFL1/A] explain the process that was undertaken in selecting the Kennington Green shaft site. Paragraphs 12.35 to 12.40 of Jonathan Gammon's proof of evidence [TFL2/A] explain the process of considering early shaft location options from an engineering design perspective. Table 1 in section 4.4 of the review of shaft sites [NLE/C10] lists the alternative sites which were considered and the remainder of section 4 explains why those alternative sites were not selected.**

2.1.3 **Paragraphs 4.4.38 to 4.4.43 of my proof of evidence explains how 373 Kennington Road was reviewed in 2013 after feedback was received from members of KGSG. Paragraphs 12.46 to 12.48 of Jonathan Gammon's Proof of Evidence [TFL2/A] summarise the engineering issues that emerged from this review. The Report on Suitability of 373 Kennington Road [NLE/G6] explains, in section 5, that there are other greater environmental impacts that would occur as a result of using the site at 373 Kennington Road. That site is far less suitable than the proposed Kennington Green site.**

2.2 Selection of shaft location – engineering design benefits

2.2.1 Mr Bartlett (Appended report page 7, first item) argues that the further the ventilation shaft is from Kennington station, the greater the distance of new tunnel that is not protected. Locating the head house directly above the shaft reduces construction cost and construction time, makes emergency access quicker and makes maintenance and plant replacement activities easier (Appended report page 7, second item). He concludes that locating the shaft at the alternative site at 373 Kennington Road would be a preferable option and seeks to illustrate this in Figure 1 on page 4 of his report. He also argues that it could be possible to create emergency vehicle access to a head house in this location via either Milverton Street or Stannary Street.

Expert witness: *Jonathan Gammon*

2.2.2 **As stated in paragraph 5.2.3 of the Report on Suitability of 373 Kennington Road [NLE/G6], "The head house design would allow a slightly more efficient design solution overall, as Option B does not require a basement adit. However, a slight improvement in engineering design has to be balanced against the added complexity and impact of construction works at this site." Paragraph 5.2.4 of the report sets out the factors that make the construction at 373 Kennington Road more complex.**

2.2.3 **To avoid the need for an adit at the 373 Kennington Road site, the head house would be located at the furthest point from Milverton Street. Emergency and maintenance vehicle access would need to be taken from Milverton Street, as access northwards to Stannary Street is not physically possible. To provide emergency access would therefore require an internal vehicle route. The effect of this would mean that half of the total site area would be required for the head house and access requirements, approximately 800m^2 of a site 1,600m^2 in size. The area left for potential development would then be very constrained, comprising a number of smaller unconnected development sites.**

2.2.4 **Overall this would lead to an undesirable design solution for both the head house and any development opportunities on the remaining land.**

2.3 Safety issues relating to the Distillery operations

2.3.1 Mr Bartlett argues (Appended report, first item on page 8) that safety concerns relating to the proximity of the head house to the distillery have resulted in the NLE becoming more complex and costly.

Expert witness: *Richard de Cani*

2.3.2 **The history of the head house's location and design is provided in paragraph 4.4.32 to 4.4.37 of my proof of evidence [TFL1/A] and paragraphs 12.35 to 12.44, of Jonathan Gammon's proof of evidence [TFL2/A]. Both of these documents describe how the design has responded to the adjacent distillery and these design changes have not involved additional cost.**

2.3.3 **The precautions taken by TfL have been adopted to ensure that the shaft can be safely constructed and operated. Chivas Brothers Ltd and the Office of the Rail Regulator are satisfied with TfL's proposals.**

2.4 Amount, size, shape and practicality of the comparative worksites at Kennington Green and 373 Kennington Road

2.4.1 Mr Bartlett (Appended report, second item on page 8) comments on many advantages offered by the rectangular shape of the alternative site at 373 Kennington Road. The report quotes conclusions drawn by Halcrow about operating a gantry crane there, compared with a crawler crane at the Kennington Green site. It implies this site is more practical than the Kennington Green site. On page 9 of the report Mr Bartlett appends to his proof of evidence, the first item concludes "373 Kennington Road is therefore a better option in terms of the amount of land used by TfL".

Expert witness: *Richard de Cani*

2.4.2 **The shape of a construction worksite is one of many practical considerations for a construction worksite. Others include the size of the available land and ease of access for HGVs. When the two worksites are compared, the site at Kennington Green is preferred to the one at 373 Kennington Road for a number of reasons, including:**

i. **The Kennington Green construction worksite is 2,300 m^2, with the 373 site at approximately 1,600m^2. The Kennington Green site is 30% larger than the alternative worksite at the 373 site. This means that Kennington Green has more working space than 373 Kennington Road and is therefore less congested and provides greater opportunities to reduce noise effects. This is a key consideration when constructing any major infrastructure project.**

ii. **373 Kennington Road would require construction vehicles to reverse out of the site as a routine procedure. Reversing vehicles should be avoided wherever possible for the safety of the public and site personnel and the reversing risk can be mitigated in using Kennington Green, where routine reversing manoeuvres are avoided.**

2.4.3 **The 373 Kennington Road alternative site would lead to an increase in noise levels and ground movement. Because an acoustic shed would be required to reduce noise impacts it would not be possible to use a crawler crane at this site, therefore a gantry crane would be used.**

2.5 373 Kennington Road – site perimeter

2.5.1 Mr Bartlett includes photographs of the 373 Kennington Road site in the report appended to his proof of evidence (Figure 9 and 10 on page 20 and 21). He refers to these when commenting on the advantage offered by the existing

walls which run around the perimeter of the site, assuming these would provide noise mitigation for neighbouring residential properties.

Expert witness: *Jonathan Gammon*

2.5.2 **These photographs illustrate the nature of the 373 Kennington Road site. The existing brick wall that forms part of the existing building along Aulton Place would need to be demolished to make way for the construction of the foundation of the acoustic shed along Aulton Place.**

2.5.3 **Pedestrian access via Aulton Place would be restricted for approximately 6 weeks during the demolition of the wall.**

2.5.4 **Additionally, if Option A (see Figure 3 on page 12 of the Report on Suitability of 373 Kennington Road [NLE/G6]) were to be used the foundation of this existing brick wall on Aulton Place would be undermined by the construction of the underground basement connecting the vent stack and head house. It would also be necessary to demolish this wall if Aulton Place were to be widened as Mr Bartlett suggests in the first item on page 26 of his report.**

2.5.5 **Mr Bartlett's photograph also highlights the party walls that are also noted in paragraphs 3.2.3 and 3.2.4 of the Report on the Suitability of 373 Kennington Road [NLE/G6]. The Stannary Place building and Aircon House would become structurally unstable unless they were supported during the works. Paragraph 4.2.3 and 4.2.4 of the report explains the limitations this would create for construction work using this site. There is a realistic possibility that the occupiers of Aircon House (a residential property) would need to be temporarily re-housed during these works.**

2.5.6 **Construction work at the 373 site would be much closer to residential facades than at the Kennington Green site. Photograph 2 in Appendix B of the Report on Suitability of 373 Kennington Road shows the 1.5 metre gap between the boundary of the 373 site and the facade of the adjoining residential building – numbers 21 and 22 Aulton Place. If Option A were used, these properties would be only 4.1 metres from the excavation of the shaft's basement adit. The residential properties at the greatest distance from the 373 site are shown in Photograph 4 (corresponding with Figure 10 on page 21 of Mr Bartlett's report). These are numbers 14 to 20 Aulton Place at 7.2 metres and numbers 10 to 13 Aulton Place at 8.5 metres from the 373 site.**

2.5.7 **By contrast, the distance between the residential facades and the proposed Kennington Green site is much greater. The closest facade is 11 metres from the site boundary and the greatest distance is 14.6**

metres. These distances are used by Mr Bartlett in Figure 7 on page 16 of his report.

3. DESIGN AND HERITAGE IMPACT OF KENNINGTON GREEN HEAD HOUSE – OBJ 158 KGSG

3.1 Impact of selection of Kennington Green to residents, heritage assets and the built environment

3.1.1 Mr Bartlett (paragraph 7c) argues that TfL's proposals at Kennington Green involve unnecessary harm to residents, heritage assets and the built environment. In paragraph 7e of his proof of evidence, Mr Bartlett argues that TfL's proposed improvements to Kennington Green could be made without the NLE scheme.

3.1.2 He argues in bullet points 5 and 6 of page 3 of his appendix that 373 Kennington Road is a more appropriate site than the proposed Kennington Green site as Kennington Green "*is within the setting of a number of listed structures of high to very high significance and within a Conservation Area of very high significance. The industrial buildings at 373 Kennington Road are of low significance*". He notes the location of some listed buildings in Figures 18 and 19 on pages 48 and 49.

3.1.3 On page 27 of the report he provides his commentary on the design of the proposed head house at Kennington Green.

Expert witness: *Robin Buckle*

3.1.4 **Although the construction works for the head house would have impacts on the setting of the listed buildings which surround Kennington Green, these would be temporary in nature. Once completed, the proposed head house and the restored Green would provide an enhancement to the setting of the listed buildings as stated in paragraphs 6.3.15 – 6.3.26 and 6.3.45 – 6.3.71 of my proof of evidence [TFL8/A], and an enhancement to the character and appearance of the conservation area. These improvements would only happen with the NLE scheme.**

3.1.5 **The head house at Kennington Green has been designed in order to complement the character of the conservation area and the listed buildings which largely define the Green. The massing, proportions, materials and detailing of the head house respond to the context of the area, as set out in paragraphs 6.3.15 to 6.3.26 of my proof of evidence.**

3.1.6 **English Heritage has noted in their letter to the Secretary of State dated September 11, 2013 (refer to Appendix 5 of my proof of evidence [TFL8/B]) that they are "*satisfied with the design of the head houses at both Kennington Park and Kennington Green*". The London Borough of Lambeth has said in its Statement of Case [REP/15], dated August 2013**

paragraph 4.2.25, that the design of the head house at Kennington Green makes an: "*appropriate reference to this local historical context, it addresses and strongly defines the street corner and general building-line. Its height, materiality and general form conforms with that of the immediate locality*." Also, its general massing will provide both an improved sense of enclosure to the Green and better screening of the unsightly backs of the distillery buildings. Therefore the proposed head house is considered to make a positive contribution to the setting of Kennington Green and the Kennington Conservation Area and, in my opinion, will improve the character and appearance of the conservation area.

3.2 Height of the head house

3.2.1 Mr Bartlett notes in the first item on page 23 of his report his concern with the height of proposed head house and notes that it is "*roughly double the height*" and that it "*takes its form and massing from nearby houses, making it a tall and large building*".

3.2.2 Mr Bartlett also notes that "*The particular constraints of the Kennington Green site (heritage setting and proximity of distillery) have resulted in the controversial head house having to be much bigger than initially envisaged. Without these constraints, at 373 Kennington Road the head house can be only as large as technical needs require."*

Expert witness*: Robin Buckle*

3.2.3 **As noted in paragraphs 6.3.12 to 6.3.19 of NLE8/A and in section 4.4.24 to 4.4.27 of the DAS [NLE/A19/6], the height of the proposed head house varies between 8.4 metres and 9.6 for the two principal massing elements facing the Green and 11.1 metres at its highest point, which is an element set back from the Green facade. Therefore, and with the existing boundary wall standing at over 6 metres, the majority of the expressed height of the head house is lower than double the height of the existing wall, although the proposed structure would still provide a better enclosure to the Green and better screen the unsightly backs of the distillery. Mr Bartlett is correct in noting that the proportions of these elements, their materiality and detail are all influenced by the form and massing of the nearby houses. However, in their letter of 4th July 2013, English Heritage stated that the design *"...has produced a structure of similar height to the adjacent townhouses, maximising the screening, articulated with the recessed vertical panels and textured brickwork.."* which*"...does offer an appropriate solution*." (Appendix 5, TFL8/B)**

3.2.4 **In their letter of 11th July 2013 English Heritage advised that reducing the height of the head house structure would not "*achieve a satisfactory result or enhance the character or appearance of the conservation area*" (also in my Appendix 5). Until 2002, the site contained a c1960s bottling plant that was taller than the Georgian terraced housing facing onto the Green. The existing boundary wall stands at over 6 metres high while the proposed head house parapets range in height from 8.4 to 9.6 meters. The tallest element of the head house stands at 11.1 metres and is set back from the Green.**

3.3 Maturity of new trees

3.3.1 Mr Bartlett states on page 24 of his appendix that "*373 Kennington Road is obviously preferable in terms of the impact on trees. New trees on the Green would take decades to reach maturity.*"

Expert witness: *Robin Buckle*

3.3.2 **The landscape design at Kennington Green is a reserved matter and will be decided at a later date by the London Borough of Lambeth. The trees proposed in the landscape strategy, which would replace those removed for construction, would be semi-mature trees which I believe would have the advantage of providing an immediate visual impact with the opportunity to establish quickly.**

3.4 Trees

3.4.1 Mr Bartlett states on page 25 and again on page 47 of his appendix that several trees will be required to be removed including T8 and T5. Mr Bartlett also notes that "*Four mature trees on The Green will be lost, including the two best specimens (T1 and T2). It is doubtful whether T4, another mature tree will survive as the underground works are within its rootzone, see BS 5837:2012 Trees in relative relation to design, demolition and construction. All these trees help reduce pollution, their loss during the construction is significant. There are no trees on 373 K Road*."

Expert witness: *Robin Buckle*

3.4.2 **As noted in the Environmental Statement: Volume II Appendix J2: TfL Arboriculture Survey [NLE/A19/5], Kennington Green currently has eleven trees on site, eight of which would need to be removed for the NLE works. Of these eight trees proposed to be removed, four (Prunus) trees (T3, T6, T7 & T9) are categorised as U (trees unsuitable for**

retention), one (Fraxinus) (T5) is categorised as C (tree of low quality), one (Ailianthus)(T8) which is listed as a B tree (trees of moderate quality) and two (Platanus)(T1 & T2) trees, which are TfL trees, are categorised as A (tree of high quality). It is proposed to retain and protect three trees (Ailanthus [T4], Ginkgo [T10] and Platanus [T11]).

3.4.3 **All trees that are scheduled to be removed will be mitigated, as set out in the Planning Conditions, on a one-for-one basis, with semi-mature trees, to be agreed with the London Borough of Lambeth. TfL's intention is to restore the landscape to a higher standard than that which currently exists (see Figure 53 in the appendices of my proof of evidence [TFL8/B]). Therefore the loss of trees to the Green is temporary and will be appropriately mitigated in accordance with *BS:5837:2012 Trees in relation to Construction*.**

3.5 Impact on the Kennington Conservation Area

3.5.1 The first item on page 26 of the report appended to Mr Bartlett's proof of evidence argues that 373 Kennington Road is a much better option in terms of the effect on heritage properties and the Kennington Conservation Area. He suggests there would be fewer heritage properties affected, and no Grade II* properties. He views the current buildings on site at 373 Kennington Road as having no townscape value and the site is quite self-contained in any case. There is a more significant opportunity to redevelop and upgrade 373 Kennington Road in accordance with planning policy so that it makes a positive contribution to the area.

Expert witness: *Robin Buckle*

3.5.2 **The context of 373 Kennington Road is different from that of the Green, but it is not the case that it is of low heritage significance – 373 lies within the same conservation area and is surrounded on three sides by historic buildings including the important early Victorian Grade II listed former Lambeth Town Hall to its west; the characterful, largely Victorian residential street of Aulton Place to its north; the locally listed No.377 and the Grade II listed Lycee (former Victorian school) to the south.**

3.5.3 **The proposed site on Kennington Green was originally occupied by a pair of c1800 houses, long demolished, early in the 20th Century. TfL's proposal will result in a structure that echoes the scale, height and massing of the surviving Georgian houses on the Green and therefore repairs a fractured townscape that was damaged a century ago as the industrial works expanded up to the Green.**

3.6 Impact on noteworthy views

3.6.1 Mr Bartlett argues on page 28 of his appendix that the Kennington Conservation Area assessment records the view west from the Green as noteworthy. He also argues that the view is positive and that the addition of the head house will block this view.

Expert witness: *Robin Buckle*

3.6.2 **As noted in paragraph 6.3.56 of my proof of evidence [TFL8/A], the term noteworthy can indicate a positive or a negative characteristic – the summaries of this particular view gives no indication as to its merits or otherwise. The view of the back end of the distillery is an unattractive view at odds with the Georgian character of the listed buildings facing the Green and that of the Green itself, and the moderately taller head house represents a significant improvement on the existing as it would be a more effective screen from the Green. It will be closer in scale to the listed Georgian properties filling the current gap in the urban fabric on the west side of the Green, thus enhancing the character of this open space and the setting of the historic houses either side. The view from the Green along Montford Place to the striking Victorian gasometer to the west will be maintained, and much better framed by the new head house which will form a bookend with No.362.**

4. PROPERTY IMPACTS – OBJ 158 KGSG

4.1 Impact the use of the Tesco land

4.1.1 Mr Bartlett (paragraph 7d) argues that the Tesco land is a large site which has significant potential to contribute to the local area and Lambeth. He believes TfL's acquisition of the land has reduced and delayed this site's redevelopment potential. Using part of this site for the distillery represents a loss of land for commercial purposes.

4.1.2 On page 9 of the report Mr Bartlett appends to his proof of evidence, the first item concludes "*373 Kennington Road is therefore a better option in terms of the amount of land used by TfL*". The third item states "*TfL's use of the Tesco site not only reduces the amount of land that can be developed, but if they use it as a works yard it will frustrate the realisation of a development of the site for many more years*".

Expert witness: *Richard de Cani*

4.1.3 **The Tesco land is a Key Industrial Business Area (KIBA), as defined by the LB Lambeth proposals map. Core Strategy Policy S3 (Economic Development) [NLE/E19] states that the Council will Safeguard Key Industrial and Business Areas (KIBAs) for business, industrial, storage and waste management uses.**

4.1.4 **The proposed use of this land for the extension to the Chivas Distillery and proposed construction support site is fully consistent with the site's planning policy designation. The proposed development is in fact supported by the KIBA policy designations. It is not correct to say that the development would result in the loss of KIBA land at the Tesco site, as both the extension to an existing business and construction support site use are supported by Core Strategy Policy S3 which states that the Council will support local economic development by:**

> ***"(a) Safeguarding Key Industrial and Business Areas (KIBAs) for business, industrial, storage and waste management uses, including green industries, and other compatible commercial uses, excluding large scale retail" (LB Lambeth, Core Strategy, Policy S3, 2011)***

4.1.5 **The acceptability of construction storage uses on the Tesco land has also been confirmed by the existing use of the land for storage of construction and infrastructure equipment until July 2014, approved by planning permission 13/03037/FUL. In the determination of that permission, the principle of the land use was taken into account, with paragraph 5.6 of the officer's report (dated 25th September 2013) stating:**

"The proposed use of the site for the storage of construction and infrastructure equipment is considered to be the type of activity that would be commonly found in an industrial area. It is therefore considered to be an appropriate use within a KIBA. The proposed use is therefore in accordance with Policy S3 of the Core Strategy."

4.1.6 **The extension of the distillery comprises two components; firstly to relocate an ethanol storage tank and associated filling station of approximately 100m^2. Secondly, the proposals relate to improvements to the site, including a second access gate, circulation space and a new water tank and pumping station. These facilities are required in part to support the development of a visitor centre at the distillery site. Whilst 127 m^2 of the Distillery site is to be taken for the NLE's headhouse, overall the Chivas Distillery's site area increases by approximately 800m^2. This extension to Chivas is therefore fully consistent with LBL Core Strategy Policy S3.**

4.1.7 **Mr Bartlett also asserts that the temporary use of the Tesco land as a construction support site will frustrate the site's redevelopment. It is understood that the site's previous owner had begun looking at a residential / student led development on the site. It is understood that this is the scheme that Mr Bartlett refers to in his Appendix page 12, Figure 5. In the determination of the Chivas Brothers Ltd's extension, LB Lambeth took into account this emerging redevelopment proposal. Page 4 of Lambeth's Officers report for the planning permission for the Chivas Brothers Extension states:**

"The previous owner had just started to look at a residential redevelopment of the site. The site lies within a designated KIBA. KIBAs are Lambeth's locally Significant Industrial Sites and are explicitly safeguarded and promoted for employment uses. There are no alternative regeneration schemes currently being promoted for this site."

4.1.8 **This demonstrates that LB Lambeth does not consider the then emerging proposals could support planning permission being refused for an alternative scheme. Therefore, the proposed use of this land as a temporary construction support site cannot be considered to be frustrating any current development opportunities.**

4.1.9 **The temporary use of the land would in fact be supported by both local and national planning policy by bringing into use an underused area of brownfield land. Such an employment generating use is considered to be fully consistent with the Policy S3 and the objectives for KIBA locations.**

4.2 *Size of the Tesco site compared to the 373 Kennington Road site*

4.2.1 The second bullet on page 3 of the report Mr Bartlett appended to his proof of evidence says TfL purchased the Tesco site due to deficiencies in planning and design. The site (area c. 5,160 sq m) is many times larger than would be required for the construction of a ventilation shaft and head house. Mr Bartlett states that about one quarter of the land being transferred with no increase in floor space or employment at the site, results in the continuing frustration of a redevelopment of the site.

Expert witness: *Richard de Cani*

4.2.2 **Constructing a major infrastructure project in London presents a number of challenges and construction worksites are often constrained by site size and proximity to adjacent buildings. The Tesco land provides a useful opportunity to provide additional land for the NLE construction works. It is simply not correct to suggest that more land would not provide benefits for the construction process.**

4.2.3 **Once the NLE works have been completed, the land used for the construction support site will be restored to its current condition and made available for redevelopment.**

4.2.4 **Approximately 800m^2 of the Tesco land will be used to expand the distillery. The recent permission allows for the creation of a second access, onto Montford Place, more circulation space and a water tank and pumping station. These works will improve operations at the distillery. Whilst no additional jobs are provided, the expansion is fully consistent with LB Lambeth planning policy.**

4.3 *Potential redevelopment of the 373 Kennington Road site*

4.3.1 Mr Bartlett has included an initial sketch by Halcrow of potential site massing at the 373 Kennington Road, as Figure 4 on page 6 of the report appended to his proof of evidence.

Expert witness: *Richard de Cani*

4.3.2 **This sketch has been superseded by Figures 3 and 4 in the Report on the Suitability of 373 Kennington Road [NLE/G6], showing the options for locating a head house and ventilation stack at 373 Kennington Road and the amount of land remaining for redevelopment. This sketch is also unsupported by the usual feasibility analysis that would accompany a**

development proposal, for example, demonstrating that vehicular access for such an arrangement is viable.

4.3.3 **Locating the shaft at the 373 site would require the demolition of the existing commercial buildings, which would lead to the loss of existing employment floor space in a KIBA.**

4.3.4 **The 373 site is approximately 1,600 m2. The head house building, access and circulation space would occupy approximately 800 m^2. This would leave two unconnected areas of land, totalling approximately 800 m^2 for a KIBA compliant redevelopment. These sites would likely be very difficult to come forward in a manner that could be both economically viable and policy compliant. The employment benefits that they may provide would therefore be by no means certain**

4.3.5 **A shaft at the 373 site would reduce KIBA land by 800 m^2, compared to the 127 m2 of the distillery's site for the Kennington Green shaft site. The former option is considered to be a departure from Policy S3 and is a weighty consideration in terms of the acceptability of this alternative site.**

4.4 Impact of the shaft on development potential

4.4.1 On page 10 of the report, Mr Bartlett argues that the Tesco land has more development potential than the 373 Kennington Road site.

Expert witness: *Richard de Cani*

4.4.2 **Aside for the permitted expansion of the distillery using the Tesco land (see note TfL/47), neither site has an extant planning permission or firm proposal for the redevelopment of the site.**

4.4.3 **The Tesco land is currently in temporary use by Compass for storage of containers. It is available to accommodate the distillery's expansion and act as a support site for the construction of the NLE without the need to exercise compulsory purchase powers or demolish existing buildings.**

4.4.4 **Using the 373 Kennington Road site would require the demolition of existing commercial units and the relocation of the existing businesses. If pursued, it would be likely to require compulsory acquisition of the land and require demonstration that the Kennington Green site was not more advantageous. As I have stated, our analysis of the alternative sites has demonstrated that, taking into account all relevant considerations, the Kennington Green site is the most suitable site.**

4.5 Comparative impacts of a shaft at Kennington Green and the alternative 373 Kennington Road site on occupants

4.5.1 On page 13 of the report appended to Mr Bartlett's proof of evidence, he argues that relocating the occupants of 373 Kennington Road would be "*no more (or even less) than the disruption suffered by Beefeater due to their site reorganisation".*

Expert witness: *Richard Caten*

4.5.2 **Chivas Brothers Ltd (OBJ 81) has been engaged in consultation regarding the project by the original promoter and TfL since June 2010. An agreement that satisfies all of Chivas Brothers Ltd's concerns has been reached and on 26 November 2013 their objection was withdrawn along with their earlier evidence. The planning permission to extend the Chivas Distillery (approved by the London Borough of Lambeth on 20 September 2013 [TFL/47]) will in fact lead to an overall improvement to the operations of the distillery and help support a long term and valued local employer.**

4.5.3 **As Mr Bartlett has observed, using the site at 373 Kennington Road would involve the relocation of its occupants. In contrast, use of the site at Kennington Green allows the distillery to continue operating at its current premises during the construction and operation of the shaft.**

5. TRANSPORT IMPACTS – OBJ 158 KGSG

5.1 Traffic impact of the construction of the Kennington Green shaft

5.1.1 In the report appended to the evidence submitted by Mr Bartlett (first item, page 14) Mr Bartlett asserts, "*Reducing Kennington Road to a single lane northbound for over 3 years will cause a substantial cumulative amount of congestion and disruption to car drivers, bus users, cyclists, and motorcyclists. This would be avoided at 373 Kennington Road, very significantly reducing the impact of the construction works on traffic*."

Expert witness: *David Bowers*

5.1.2 **The effect of suspending 80m of bus lane and slightly reducing capacity on this section of road has been assessed and is detailed in paragraph 5.4.2 of my evidence [TFL7/A]. Further analysis is detailed in paragraph 5.6.3.**

5.1.3 **Overall, the effect that the removal of the bus lane will have on the road network is expected to be low and localised. The following sections of this rebuttal set out further, important, disadvantages that the 373 Site would present**.

5.2 Traffic impact of the alternative site at 373 Kennington Road

5.2.1 Mr Bartlett states in the second item on page 14 that "*The [NLE/G6] report confirms that the access point is sufficiently large to allow for construction vehicles including a low-loader to manoeuvre in and back out. Lorries can exit the site in either direction. The NLE/G6 report contends that a right turn into the site would not be allowed but fails to give a reason. 373 Kennington Road potentially eliminates needless lorry trips around the neighbourhood, which would be an inefficient, time-wasting and congestion-increasing arrangement".*

Expert witness: *David Bowers*

5.2.2 **Mr Bartlett is correct to state that the access point is large enough to enable construction vehicles to enter and exit the site but fails to recognise the additional space constraints of this site.**

5.2.3 **Firstly whilst vehicles could enter in a forward gear, the physical constraints of the site would result in construction vehicles having to reverse out of the site and onto the public highway. This manoeuvre would need to be overseen by a banksman.**

5.2.4 **This would be the only worksite where a reversing manoeuvre would be required and would have potential negative safety implications for pedestrians and cyclists near the site entrance. Such a reversing manoeuvre would not be normally permitted for a large vehicle such as a lorry. This is a significant disadvantage of the 373 site, particularly when taking into account the number of manoeuvres that would be required over the duration of the construction works.**

5.2.5 **In response to Mr Bartlett's claim that the 373 site would eliminate "*needless lorry trips around the neighbourhood*" it must be recognised that the number of construction vehicle trips will not change at this alternative site location and the overall volume of construction vehicles on the roads will remain the same. Construction vehicles are assumed to approach from areas to the south of Kennington (as shown in Figure 12 of TFL7/B) and they would be required to make a left turn into the site from the southbound carriageway of Kennington Road. This means that construction vehicles would be required to approach the 373 site via Kennington Park Road and then Kennington Lane to approach the site in a southbound direction on Kennington Road. This arrangement avoids the vehicle conflicts associated with a right turn movement into the 373 site from the northbound carriageway of Kennington Road and which crosses the southbound flow of traffic.**

5.2.6 **One of the construction traffic issues related to the 373 site is that the size constraints of the site mean that there is no on-site waiting area for more than one construction vehicles. This means that any construction vehicles which arrive when there is already a vehicle at the site would be forced to wait on one of the surrounding roads which would disrupt traffic flow and pose a safety issue to other road users.**

5.2.7 **This is in contrast to the Kennington Green worksite where there is the possibility for two or more construction vehicles to park at the worksite at any one time. This means that waiting construction vehicles will not pose a safety risk to other road users. This is shown by Figure 1 in Appendix A of this Rebuttal which shows two 10.2m large tipper lorries parked on site.**

5.3 Duration of pedestrian diversions and displaced car parking from Kennington Green site

5.3.1 In the third item on page 14, Mr Bartlett claims that *"373 Kennington Road avoids the significant long-term inconvenience, especially when the pedestrian diversions are taken into account, of losing all the car parking spaces around the Green for 3 years".*

Expert witness: *David Bowers*

5.3.2 **The expected pedestrian diversion is only expected to be in place for three months when the road will be closed as detailed in paragraph 6.12, Appendix C of TfL's Environmental Statement [NLE/A19/3]. Additional information on how the effects on pedestrian movements will be mitigated is provided in paragraph 5.10.3i of my evidence [TFL7/A].**

5.3.3 **As detailed in paragraph 5.7.5 and 5.7.6 of my evidence [TFL7/A] there is sufficient spare capacity on the surrounding roads to cope with the reduction in parking at Kennington Green with Montford Place showing significant amounts of spare capacity.**

5.4 Impact of pedestrian diversion from Kennington Green site

5.4.1 The fourth item on page 14, Mr Bartlett states that "*373 Kennington Road is much better in terms of pedestrian issues. During the head house construction phase (c.5months) the closure of access from Montford Place to the north side of Kennington Green will result in up to 1,100 pedestrians per day who use that route having to go on a 300m detour (TfL ES Vol.2b Appendix C 6.12)".* This response also refers to the calculation made by Mr Bartlett in Figure 10 in the report appended to his evidence (page 40).

Expert witness: *David Bowers*

5.4.2 **As mentioned in the response in paragraph 5.3.2 the pedestrian diversion is only expected to be in place for three months not the five months as Mr Bartlett claims.**

5.4.3 **Figure 10 of Mr Bartlett's evidence states that the 300m diversion would generate 500,000 'wasted minutes'. This conclusion is drawn from Mr Bartlett's misunderstanding of the data.**

5.4.4 **The calculation presented by Mr Bartlett is taken from the figure of 1,100 pedestrians who use Montford Place (see paragraph 6.12, Appendix C [NLE/A19/3]).**

5.4.5 **This value is based on the pedestrian surveys which were undertaken (see Figure 4.1 and paragraphs 4.4 to 4.8 of Appendix C [NLE/A19/3]).**

5.4.6 **Mr Bartlett's calculations have been assumed and are presented in Table 1 of Appendix 2 to this document.**

5.4.7 **In my view Mr Bartlett's calculations are inaccurate for two reasons:**

A. **Firstly they assume a walk time of 5 minutes for a 300m diversion. When a standard 80m/minute walk time is applied to the 300m diversion, this equates to a walk time of 3.75 minutes (rounded to 4 minutes). When this 4 minute walk time is then used, it produces figures much lower than those claimed by Mr Bartlett (see Table 2 in Appendix 2 of this document for more details).**

B. **Secondly Mr Bartlett assumes that the value of 1,100 pedestrians applies equally 7 days a week for 3 months. However, when the effects of the working week (i.e. five days a week, equating to 20 working days a month) is considered the estimates reduce significantly (See Table 2 in Appendix 2 for this).**

5.4.8 **This reduction equally applies when the weekend pedestrian numbers are considered (estimated to be half those during a normal weekday).**

5.4.9 **When weekday and weekend numbers are then summed together, this equates to 660 'wasted' days walking rather than the 1,000 that Mr Bartlett claims.**

5.4.10 **Overall, the pedestrian diversion does not incur the magnitude of wasted minutes that Mr Bartlett claims. The diversion is temporary in nature and an alternate route via Kennington Lane exists to the north, which does not require pedestrians to use the diversion route south via Montford Place.**

6. GROUND SETTLEMENT– OBJ 158 KGSG

6.1 Comparative risk of ground settlement due to works at alternative 373 Kennington Road site with Kennington Green

6.1.1 The report appended to Mr Bartlett's evidence, concludes on page 22 that: *"Given the scale of the NLE project, providing additional support (over and above that needed anyway due to the running tunnel and gallery tunnel), if necessary, for properties near 373 Kennington Road would not present TfL's engineers with any unusual difficulty."*

Expert witness: *Jonathan Gammon*

6.1.2 **As stated above at 2.4.2, the 373 Kennington Road alternative was discounted, primarily, due to adverse effects on the occupants and surrounding properties. It should be understood that the disadvantages include increased peak noise levels and a greater risk of ground movement. 373 Kennington Road was, however, also not preferred due to additional contributing factors including the need to support adjacent buildings.**

7. IMPACT OF KENNINGTON GREEN SHAFT ON AMENITY AND DAYLIGHT – OBJ 158 KGSG

7.1 Impact of the shaft on daylight and sunlight

7.1.1 Mr Bartlett argues on page 23, second item of his appendix, that the Kennington Green head house would reduce light to surrounding properties, particularly 356 and 362 Kennington Road. He asserts a head house at 373 Kennington Road would not have this effect.

Expert witness: *Richard de Cani*

7.1.2 **In order for surrounding properties to be able to be claim a right of light injury based on the site's existing situation (i.e. empty of buildings) as the baseline, these properties would have to have enjoyed continuous light in the current situation for at least 20 years. Until 2002 the proposed head house site contained a circa 4 storey building, a bottling plant. Therefore, the existing situation enjoyed by surrounding properties at Kennington Green has only been in place for approximately 12 years.**

7.1.3 **The situation at Kennington Green contrasts with that of 373 Kennington Road where the existing wall height is 5.8 metres. Paragraph 5.5.1 of the Report on the Suitability of 373 Kennington Road [NLE/G6] states, "*The close proximity of surrounding residential uses means that the construction of an acoustic shed would be required to mitigate noise effects. The acoustic shed would be required to mitigate noise effects. The acoustic shed would need to be approximately 12 m in height and would be located very close to adjacent properties."***

7.1.4 **As noted by Jonathan Gammon in paragraphs 2.5.6 of this Rebuttal, these properties are very close proximity to the 373 Kennington Road site. The facades are between 1.5 to 8.5 metres from the site, therefore the height of the acoustic shed would significantly reduce the penetration of daylight and sunlight to those residential properties at Aulton Place.**

7.1.5 **The extant planning permission 05/00321/FUL that Mr Bartlett refers to was followed by application 13/00579/FUL made by the current owners of 373 Kennington Road in February 2013. This application was refused by the London Borough of Lambeth as it no longer complied with planning policy.**

7.2 Visual impact of the Kennington Green construction site

7.2.1 Mr Bartlett notes on page 23, third item of his appendix that 373 Kennington Road is a better option in terms of amenity. Of particular concern to Mr. Bartlett is the loss of public amenity space as well as the visual impact that the construction will have on the environment.

Expert witness: *Robin Buckle*

7.2.2 **The loss of Kennington Green would be temporary and would be reinstated following construction with an improved open space, including the treatment of the surrounding roads and paving. During construction, the Green itself would be enclosed with hoardings. Section 3.3 of the Code of Construction Practice Part A [NLE/A19/9] contains requirements for the Contractor to ensure the appearance is acceptable and to ensure that the hoardings are well maintained. Paragraph 3.3.4 states, "*The construction sites at Kennington Park and Kennington Green are in Conservation Areas. The special qualities of these are fully recognised and proposals for hoardings will be developed with this in mind and in consultation with the local authorities and the local communities*."**

7.2.3 **Kennington Green has been described by the Kennington Conservation Area Statement (2012) [NLE/E25] in sections 2.38-2.40 as being: "*an important green open space which helps soften the appearance of the area, however it is very poorly landscaped*."**

7.2.4 **TfL are proposing to reinstate the Green with a design developed with local residents. The loss of the Green during construction will be mitigated with an improved setting once the NLE is operational.**

8. NOISE AND VIBRATION – OBJ 158 KGSG

8.1 Comparison of number of noise receptors for construction noise between alternative site at 373 Kennington Road and Kennington Green

8.1.1 In the report appended to Mr Bartlett's evidence (page 15) he calculates the number of noise receptors that would be affected by construction noise for the shaft site at Kennington Green and that for the site at 373 Kennington Road. He concludes that the number of receptors near 373 Kennington Road is less that those near Kennington Green.

Expert witness*: Rupert Thornely-Taylor*

8.1.2 **Mr Bartlett uses a different methodology to that employed in the Report on Suitability of 373 Kennington Road [NLE/G6] for counting potential receptors. Table 3 included in Appendix 3 of this document compares Mr Bartlett's calculation with an amended calculation that updates the number of residences per building, explaining the differences in results that Mr Bartlett arrives at.**

8.1.3 **The exercise undertaken by Mr Bartlett compares the number of potential receptors which have a direct line of sight to each respective construction site, regardless of distance. A more appropriate comparison would be to compare the number of receptors which, in the worst-case, could receive a significant effect due to construction noise. As Table 3 shows, there are a broadly similar number of receptors for both sites, with slightly less receptors at the Kennington Green site.**

8.1.4 **This exercise does not constitute a true assessment of construction noise impact. This is because it does not account for the potential level of noise these receptors would be exposed to, nor the potential duration of exposure. For these reasons the comparison of the number of potential receptors in isolation should not be used to select a preferred site.**

8.1.5 **Significant adverse effects of construction noise can be avoided at the Kennington Green site by using basic site management techniques, which is what the CoCP requires the NLE contractor to employ. It is highly unlikely that significant construction noise effects could be avoided at the 373 Kennington Road site, even with the use of specific mitigation in the form of an acoustic shed.**

8.2 Comparison of mitigation for construction noise posed for alternative site at 373 Kennington Road with Kennington Green

8.2.1 The report appended to Mr Bartlett's evidence also states (page 18) "*The site [373 Kennington Road] is currently surrounded on all sides by walls or buildings, which it may be possible to retain during the construction phase to provide shielding and which will help greatly in containing noise, disturbance and dirt.... The site specifics at 373 Kennington Road are preferable*." He concludes, "*even if the programme was lengthened to allow for the construction of the acoustic shed, overall the total disturbance experienced by nearby residents would be much less. The adverse effect on residents will therefore be more significant around the Green than at 373 Kennington Road."*

Expert witness: *Rupert Thornely Taylor*

8.2.2 **The wall adjacent to Aulton Place cannot be retained for the reasons Jonathan Gammon has set out in paragraphs 2.5.2 and 2.5.4 above.**

8.2.3 **Further to the appraisal in the ES, I have reviewed in more detail the potential impact of construction noise at Kennington Green. I have considered the implications of the adoption of best practicable means that could be applied to the management of noise from the construction site. This included the choice of quietest available plant, location of plant within the worksite, reduction in the amount of time each item of plant is operational during the working day and the use of a 2.4 m site hoarding to act as a noise barrier. The consideration of these measures is mandated by the Code of Construction Practice. This assessment was carried out against a construction noise threshold of 75 dB $L_{Aeq,10hr}$, which was the threshold identified in the ES as appropriate for the properties surrounding the Kennington Green worksite.**

8.2.4 **My appraisal results in a conclusion that with the use of the measures identified above, there are no phases of work which give rise to a significant construction noise effect at Kennington Green.**

8.2.5 **For the 373 Kennington Road site, the ambient noise levels at the closest receptors on Aulton Place are lower than around Kennington Green, leading to a construction noise threshold of 65 dB $L_{Aeq,10hr}$. It should also be noted that the Aulton Place receptors are closer to the worksite than those around Kennington Green, with the closest receptors approximately half the distance of those surrounding the Kennington Green site. As such, applying the same site management considerations is likely to result in a significant construction noise effect, with the threshold exceeded by at least 10dB. To avoid significant effects at the properties on Aulton Place, some form of site**

specific mitigation is required. This could take the form of an acoustic shed, which if designed and constructed correctly, could avoid significant effects during the majority of the construction phases on the 373 Kennington Road worksite. However, it should be noted that an acoustic shed is likely to require extensive construction works itself which would lead to significant noise effects of their own.

8.2.6 **Therefore, even with the provision of specific mitigation in the form of an acoustic shed, it is unlikely to be possible to avoid significant construction noise effects at receptors surrounding the 373 site, although the suggested mitigation will reduce the duration of these effects. The construction noise assessment carried out for the Kennington Green worksite shows that significant effects can be avoided for all receptors during all phases of work. The Kennington Green proposal is thus a better site in terms of minimising the peak environmental noise effects during the construction of the permanent shaft.**

8.3 Baseline noise survey points reported in the ES

8.3.1 On page 19 of the report appended to the evidence of Mr Bartlett he states, the baseline noise survey points are "*not representative of the nearest residential receptors and therefore this has arguably produced an incorrect measure of baseline noise level for the purposes of making comparisons in the noise reports. The measurements should have been taken at the residential properties most impacted by the proposed works*:

346 Kennington Road
366 Kennington Road
354 Kennington Road

8.3.2 *Alternatively it should have been taken at the residence furthest from the road, i.e. 354 Kennington Road, or at least at the same positions as the notional survey points used to make the predicted construction noise and vibration*."

Expert witness: *Rupert Thornely-Taylor*

8.3.3 **Baseline noise monitoring is often the first stage in an assessment of this kind and as such survey points are chosen before impacts and effects are calculated. This is especially true for construction noise where the impacts and effects are dependent upon the measured baseline noise level. As such, the choice of survey location is determined by the experience of the surveyor to choose a location which is considered to be representative of as many receptors as**

possible rather than selecting the worst or best case and making the measurement representative of only one receptor. The choice of survey locations at Kennington Green was carried out in such a manner. The locations chosen are considered to be representative of the ambient noise environment for the majority of properties surrounding Kennington Green. The use of three survey locations around Kennington Green, from which noise thresholds have been based, shows that a sufficiently detailed baseline noise survey has been carried out for a site of this size.

8.3.4 **350 Kennington Road is considered to be a representative likely worst case for receptors adjacent to the Kennington Green construction worksite. Other properties may experience slightly greater noise impacts, but this would not in any way change the findings of the ES. All properties at Kennington Green will benefit from the mitigation measures employed at the site which I have described in the above paragraphs 8.2.2 to 8.2.5.**

8.4 Distance of the nearest property to the head house louvres

8.4.1 Mr Bartlett states in the fourth paragraph on page 19 of his report, "*The ES vent shaft noise assessment also is incorrect, it states the shortest distance from shaft louvres to the nearest residential property is 25 metres. 362 Kennington road is 10.25 m from the head house site. Measuring at the roof level, the distance between louvres and 362 Kennington Road is 16 metres.*"

Expert witness: *Rupert Thornely-Taylor*

8.4.2 **The louvres for the ventilation shaft are located on the east façade of the head house and point towards Kennington Green. From this location, the louvres are equidistant from both 362 Kennington Road and 354 Kennington Road, which are both located approximately 20m on plan from the louvres. The distance of 10m is the plan distance between the two structures; however, the louvres for the ventilation shaft are not located on this closest part of the head house structure to 362 Kennington Road. Planning Direction Drawing Number 59 [NLE/A16/1] shows the location of the louvres in relation to the Ordnance Survey mapping of the Kennington Green area**.

8.5 Construction type of buildings around Kennington Green

8.5.1 Mr Bartlett includes an annotation to Figure 14 on page 44 of his report. He argues the buildings around Kennington Green have, due to their age and

listed status, single glazed windows and single skin brickwork. This type of construction is relatively poor in sound insulation terms. All of the above properties' principal front windows overlook the proposed worksite.

Expert witness*:* *Robin Buckle*

8.5.2 **If the threshold noise levels were predicted by the contractor to be exceeded, these properties would qualify for mitigation including secondary glazing, under the NLE Construction Noise and Vibration Mitigation Scheme [ES Appendix N2 in NLE/A19/5]. This would be subject to agreement with individual occupiers and the local planning authority.**

9. COST IMPACTS – OBJ 158 KGSG

9.1 Comparison of the cost of the Kennington Green shaft site and the alternative 373 Kennington Road site

9.1.1 On page 26 of the report appended to the evidence of Mr Bartlett, the conclusion drawn is that acquiring the “Tesco” land is 3.1 times the cost of acquiring the 373 Kennington Road site.

Expert witness: *Richard Caten*

9.1.2 **Costs were not a determinative factor in selecting sites for permanent shafts. The costs of both sites are likely to be broadly similar. However the Tesco land is larger and devoid of buildings so it provides for temporary worksite space and a better surplus land value recovery after the project is complete as it can be developed without constraint.**

9.1.3 **By comparison, the area of land at the 373 Kennington Road site that could be redeveloped is highly constrained by the presence of the NLE shaft, head house and access requirements. As Jonathan Gammon has calculated in paragraph 2.2.3 above in this Rebuttal, approximately 800 m^2 of the total site (1,600 m^2) would be available for redevelopment.**

10. CONSULTATION – OBJ 158 KGSG

10.1 Consultation on the design of the head house

10.1.1 Mr Bartlett states in paragraph 7a that the consultation for the design of the head house at Kennington Green was not sufficient:

> *"TfL's proofs of evidence claim that there was close and effective consultation with residents concerning the siting and design of the Kennington Green head house. This is incorrect. See KGSG Statement of Case paragraphs 5-21."*

10.1.2 Mr Bartlett reiterates this point in the first item on page 27 of his report appended to his proof of evidence.

Expert witness*: Robin Buckle*

10.1.3 **The design development of the head house and the reinstatement of the Green involved several rounds of public consultation which is described in paragraphs 4.4.13-4.4.16 of the Design and Access Statement [NLE/A19/6], is outlined in the Consultation Report [NLE/A7] and also noted in my Proof of Evidence in paragraph 6.3.14. The envelope of the head house was largely driven by technical requirements and TfL consulted on the design approach which is also determined by adhering to the Conservation Area principles. Therefore TfL consulted with both the London Borough of Lambeth and English Heritage on the design and, through that review process, made changes which are reflected in the final proposals, which both organisations have stated they are satisfied with. English Heritage have stated that the building responds appropriately to the character of the Conservation Area and through its proportionality and articulation and better screening of the unsightly backs of the distillery, provides enhancement to the character and appearance of the Conservation Area.**

10.1.4 **Paragraphs 4.7.1 to 4.7.13 of Richard de Cani's proof of evidence [TFL1/A] explains that wide ranging consultation with residents was conducted on the NLE scheme.**

10.2 Consultation on the alternative site at 373 Kennington Road

10.2.1 Mr Bartlett notes in paragraph 7f of his proof of evidence that comments were received by TfL from individuals and organisations who were opposed to the use of the alternative site at 373 Kennington Road. He observes, one response is from the owner, five are from individual residents, and one is from the Heart of Kennington Residents' Association. He states, "*All others are*

from persons out of the locality, concerned about the arts business, which would need to relocate during the works."

10.2.2 Mr Bartlett then goes on to state, "*In contrast, the petition in favour of using the site at 373 Kennington Road and against the Kennington Green site has been signed by 251 people, nearly all of them local to the area*."

Expert witness: *Richard de Cani*

10.2.3 **As I have explained in paragraph 11.1.29 Appendix 10 to my proof of evidence, the feedback received from consultation has helped to develop and shape the proposals for the NLE. However, consultation is not designed to be a referendum or a decision-making tool in its own right. Rather it is one of many tools used to inform decisions on large-scale infrastructure projects. Each consultation response received by TfL is equally considered on its own merits and TfL does not have a policy of favouring or discriminating against respondents according to a respondent's type or status, such as a resident or business owner.**

10.2.4 **Paragraph 4.9.3 of my proof of evidence explains that TfL has focussed on minimising the use of compulsory purchase to acquire land and property for the NLE. On 26 November 2013 TfL secured an agreement with Chivas Brothers Ltd resolving its concerns as regards locating the shaft site on the distillery land.**

11. ALTERNATIVE SITES FOR THE KENNINGTON GREEN SHAFT AND HEAD HOUSE – OBJ 40 DAVID HARKNESS

11.1 Consideration of alternative sites for Kennington Green

11.1.1 In the evidence given by Mr Harkness (second paragraph of page 1) the opinion is given that TfL did not consider alternatives to locating the shaft on the distillery land at Kennington Green. In the second paragraph of the first page of Mr Harkness' evidence, it is argued that, "*TfL have tried to defend their original proposals without stepping back and evaluating what really would be the best choice*".

11.1.2 Mr Harkness continues on page 3 paragraph 4, stating that Mr Buckle's evidence does not deal with the siting of the head house:

"In other words the correct question is not "will the headhouse damage the Green and its neighbourhood" but rather "would a headhouse in 373 be less damaging to the neighbourhood"? Mr Buckle does not answer that latter question (presumably because the answer is that in terms of design, putting the headhouse in 373 is actually a better outcome)."

Expert witness: *Richard de Cani*

11.1.3 **Paragraphs 4.4.30 to 4.4.37 of my proof of Evidence [TFL1/A] explain the process that was undertaken in selecting the Kennington Green shaft site. Paragraphs 12.35 to 12.40 of Jonathan Gammon's proof of evidence [TFL2/A] explain the process of considering early shaft location options from the perspective of engineering design. Table 1 in section 4.4 of the review of shaft sites [NLE/C10] lists the alternative sites which were considered and the rest of section 4 explains why the alternative sites were not selected. These alternative sites were considered on the basis of suitable land that was vacant and did not require removing either residents or businesses.**

11.1.4 **Paragraphs 4.4.38 to 4.4.43 of my proof of evidence explain how 373 Kennington Road was reviewed in 2013 after feedback was received from members of the Kennington Green Supporters Group. Paragraphs 12.46 to 12.48 of Jonathan Gammon's Proof of Evidence [TFL2/A] summarises the engineering issues that emerged from this review. The Report on Suitability of 373 Kennington Road [NLE/G6] explains in section 5 there are other greater environmental impacts that would occur as a result of using this site. This work demonstrated that as an alternative head house site 373 Kennington Road is not suitable.**

11.2 Consideration of alternative sites for Kennington Green

11.2.1 In the fourth bullet point on page 2 of Mr Harkness' proof of evidence he argues that locating the shaft at the 373 Kennington Road site would provide a clear engineering advantage that he believes been ignored by concluding that Kennington Green is the preferred site.

Expert witness: *Jonathan Gammon*

11.2.2 **In paragraphs 12.46 to 12.48 of my proof of evidence I have described all of the engineering elements that were taken into account when the alternative site at 373 Kennington Road was considered.**

11.2.3 **Paragraph 12.47 highlights three significant issues with the 373 Kennington Road site:**

- **i) the complexity of the construction methodology that must be used,**
- **ii) the need to demolish existing buildings and construct an acoustic shed which leads to an overall increase in construction cost, and**
- **iii) full ventilation functionality provided by having a head house above the shaft.**

11.2.4 **I conclude in paragraph 12.48 by stating, "Overall, from a purely engineering perspective, locating a shaft at 373 Kennington Road has no significant advantages over and above the proposed scheme."**

12. NOISE AND VIBRATION – OBJ 40 DAVID HARKNESS

12.1 Comparison of mitigation proposed for alternative site at 373 Kennington Road with Kennington Green

12.1.1 Mr Harkness (first bullet point, page 2) observes that the study into the alternative site at 373 Kennington Road requires an acoustic shed to mitigate construction noise, where a similar structure has not been proposed at the Kennington Green site.

Expert witness: *Rupert Thornely Taylor*

12.1.2 **Please refer to my response in paragraphs 8.2.2 to 8.2.6 above.**

12.2 Installation of secondary glazing on listed buildings

12.2.1 Mr Harkness (first dot point, page 2) believes it will be difficult or maybe impossible to install noise mitigation measures such as secondary glazing to the windows of houses near the Green due to their listed status.

Expert witness: *Robin Buckle*

12.2.2 **If the threshold noise levels were predicted by the contractor to be exceeded, these properties would qualify for mitigation including secondary glazing, under the NLE Construction Noise and Vibration Mitigation Scheme [ES Appendix N2 in NLE/A19/5]. This would be subject to agreement with individual occupiers and the local planning authority.**

12.3 Assessment of construction noise on residential properties at Kennington Green

12.3.1 Mr Harkness (first paragraph, page 4) cites the evidence given by Mr Thornely-Taylor in page 44 of the Appendices to the Proof of Evidence [TFL3/B]. Mr Harkness disputes the distance of his property to the worksite and proposed shaft.

Expert witness: *Rupert Thornely-Taylor*

12.3.2 **Mr Harkness is correct insofar as the figure of 100m in the Appendices to my evidence is incorrect. Scaling from planning direction drawing No 06 the distance from 352 Kennington Road to the shaft is 50m.**

12.3.3 **The Table 9.17 in the ES has misplaced labels in the first column, and the correct version of the table is Table 6 in Appendix E2 [NLE/A19/2].**

The text in Chapter 9 of the ES [NLE/A19/1] is however correct. In the ES the adjacent location of 350 Kennington Road has a predicted construction noise level of 79 dB L_{Aeq} and a predicted significant noise effect. The contractor will be required by the CoCP to mitigate construction noise using Best Practicable Means (BPM). I have explained above that with mitigation in place in accordance with BPM the likely impact will fall below the relevant noise threshold i.e. below 75dBL_{Aeq}. Nevertheless, if in the circumstance the noise insulation threshold is still forecast to be exceeded at the detailed design stage, this property will be eligible for noise insulation.

12.4 Mitigation of noise by trees at Kennington Green

12.4.1 Mr Harkness (third paragraph, page 4) believes the trees "*when in leaf provide a noticeable reductive effect on noise from Kennington Road, and their removal will have an effect on noise during and after construction*."

Expert witness: *Rupert Thornely-Taylor*

12.4.2 **The presence of leaves on trees has no effect on the transmission of traffic noise. Leaves have a slight scattering effect, and may affect local airflow in light winds which can modify the performance of noise barriers, but that is not relevant to the appraisal of impact at Kennington Road.**

13. GROUND SETTLEMENT – OBJ 40 DAVID HARKNESS

13.1 Comparative of ground settlement at alternative 373 Kennington Road site with Kennington Green

13.1.1 Mr Harkness (third dot point, page 2) is of the opinion that the buildings near Kennington Green are at a greater risk of damage from construction of the permanent shaft there, when compared to the buildings which would be near the alternative site at 373 Kennington Road.

Expert witness: *Jonathan Gammon*

13.1.2 **As stated above at 2.4.2, the 373 Kennington Road alternative was discounted, primarily, due to adverse effects on the occupants and surrounding properties. It should be understood that the disadvantages include increased peak noise levels and a greater risk of ground movement. 373 Kennington Road was, however, also not preferred due to additional contributing factors including the need to support the adjacent buildings.**

14. IMPACT ON TREES – OBJ 40 DAVID HARKNESS

14.1 Replacement of trees

14.1.1 Mr Harkness (first paragraph, page 5) is of the opinion that landscaping plans for the Green should "*take account of the need to replace any mature trees that are removed with similar mature trees after construction*". Mr Harkness observes TfL's proposal to replace mature trees with younger specimens.

Expert witness: *Robin Buckle*

14.1.2 **The landscape design at Kennington Green is a reserved matter and will be decided at a later date by the London Borough of Lambeth. The trees proposed in the landscape strategy, which would replace those removed for construction, would be semi-mature trees which I believe would have the advantage of providing an immediate visual impact with the opportunity to establish quickly.**

15. PROPERTY IMPACTS - OBJ 40 DAVID HARKNESS

15.1 Impact the use of the Tesco land

15.1.1 Mr Harkness (second bullet point, page 3) argues that if the head house is located on distillery land, part of the Tesco site will be used for the distillery which will prevent the Tesco site being developed for other purposes. He acknowledges that the 373 Kennington Road site currently has buildings on it, but argues that part of the Tesco site will be lost and that will have a greater effect long term on the available commercial space in the area.

15.1.2 Mr Harkness (first dot point, page 5) also disputes the description of the Tesco land as "brownfield", stating that "*it is currently used by Compass and is therefore a working business enterprise*".

Expert witness: *Richard de Cani*

15.1.3 **As I have noted in paragraphs 4.4.2 to 4.4.4 in this Rebuttal, aside for the permitted expansion of the distillery using the Tesco land (see note TFL/47), neither site has an extant planning permission or firm proposal for the redevelopment of the site.**

15.1.4 **The Tesco land is currently in temporary use by Compass for storage of containers. It is available to accommodate the distillery's expansion and act as a support site for the construction of the NLE without the need to exercise compulsory purchase powers or demolish existing buildings.**

15.1.5 **Using the 373 Kennington Road site would require the demolition of existing commercial units and the relocation of the existing businesses. If pursued, it would be likely to require compulsory acquisition of the land and require demonstration that the Kennington Green site was not more advantageous. As I have stated, our analysis of the alternative sites has demonstrated that, taking into account all relevant considerations, the Kennington Green site is the most suitable site.**

15.1.6 **In terms of the description of the site as 'brownfield' land, this is defined by the National Planning Policy Framework [NLE/E1] (paragraph 111) as land that has previously been developed and it is considered that the Tesco land clearly meets this definition.**

16. CONSULTATION – OBJ 40 DAVID HARKNESS

16.1 Consideration of responses from the public about alternative site at 373 Kennington Road

16.1.1 Mr Bartlett (paragraph 7f) observes that TfL received comments from some residents, occupants and other interested parties who were opposed to the proposed alternative shaft site at 373 Kennington Road. Mr Harkness (second dot point, paragraph b on page 5) believes there to be "*a difference in quality*" between these comments and those provided by the Kennington Green Supporters Group.

Expert witness: *Richard de Cani*

16.1.2 **As I have explained in paragraph 11.1.29 Appendix 10 to my proof of evidence, the feedback received from consultation has helped to develop and shape the proposals for the NLE, however consultation is not designed to be a referendum or a decision-making tool in its own right. Rather it is one of many tools used to inform decisions on large-scale infrastructure projects. Each consultation response received by TfL is equally considered on its own merits and TfL does not have a policy of favouring or discriminating against respondents according to a respondent's type or status, such as a resident or business owner.**

16.1.3 **Paragraph 4.9.3 of my proof of evidence explains that TfL has focussed on minimising the use of compulsory purchase to acquire land and property for the NLE. On 26 November 2013 TfL secured an agreement with Chivas Brothers Ltd as it concerns the shaft site on the distillery land.**

16.2 Consultation on the design of the head house

16.2.1 Mr Harkness states in the last paragraph of page 3 that there has been no "*material consultation with residents on this design*".

Expert witness: *Richard de Cani*

16.2.2 **Paragraphs 4.7.1 to 4.7.13 of Richard de Cani's proof of evidence [TFL1/A] explains that wide ranging consultation was conducted on the NLE scheme.**

16.2.3 **In paragraph 10.1.3 above of this Rebuttal, Robin Buckle explains the consultation that was conducted as part of the process of designing the head house. Changes were made to the design in response to consultation with the London Borough of Lambeth and English Heritage.**

16.2.4 **Mr Harkness' views on consultation conflict with those expressed by Mr Eric Guibert and Mr Robin Pembrooke (OBJ27) of Aircon House. They state in their objection letter dated 1 October 2013, "*We feel that we have been invited to many very well attended consultation events about the Northern Line. Quite the opposite of insufficient consultation, to many people it has felt like maybe too many meetings, but we recognise the need for TfL to run repeated events to ensure maximum awareness and consultation*."**

16.3 Views of English Heritage about 373 Kennington Road as a site

16.3.1 Mr Harkness states in the last bullet point on page 4 that there is no reference to consultation with English Heritage or the London Borough of Lambeth on the location of the head house.

Expert witness: *Robin Buckle*

16.3.2 **TfL conducted an alternative locations study, TfL's Review of Alternative Locations for the Kennington Green Permanent Intervention and Ventilation Shaft, 2013 [NLE/C10]. This report has been shared with both English Heritage and the London Borough of Lambeth. English Heritage writes in their letter dated 11th September 2013 that they are "*content with the assessments of the alternative locations in terms of the historic environment.*" English Heritage then goes on to state in that same letter that they "*can now express overall support for the proposed Northern Line Extension.*"**

17. CONCLUSION

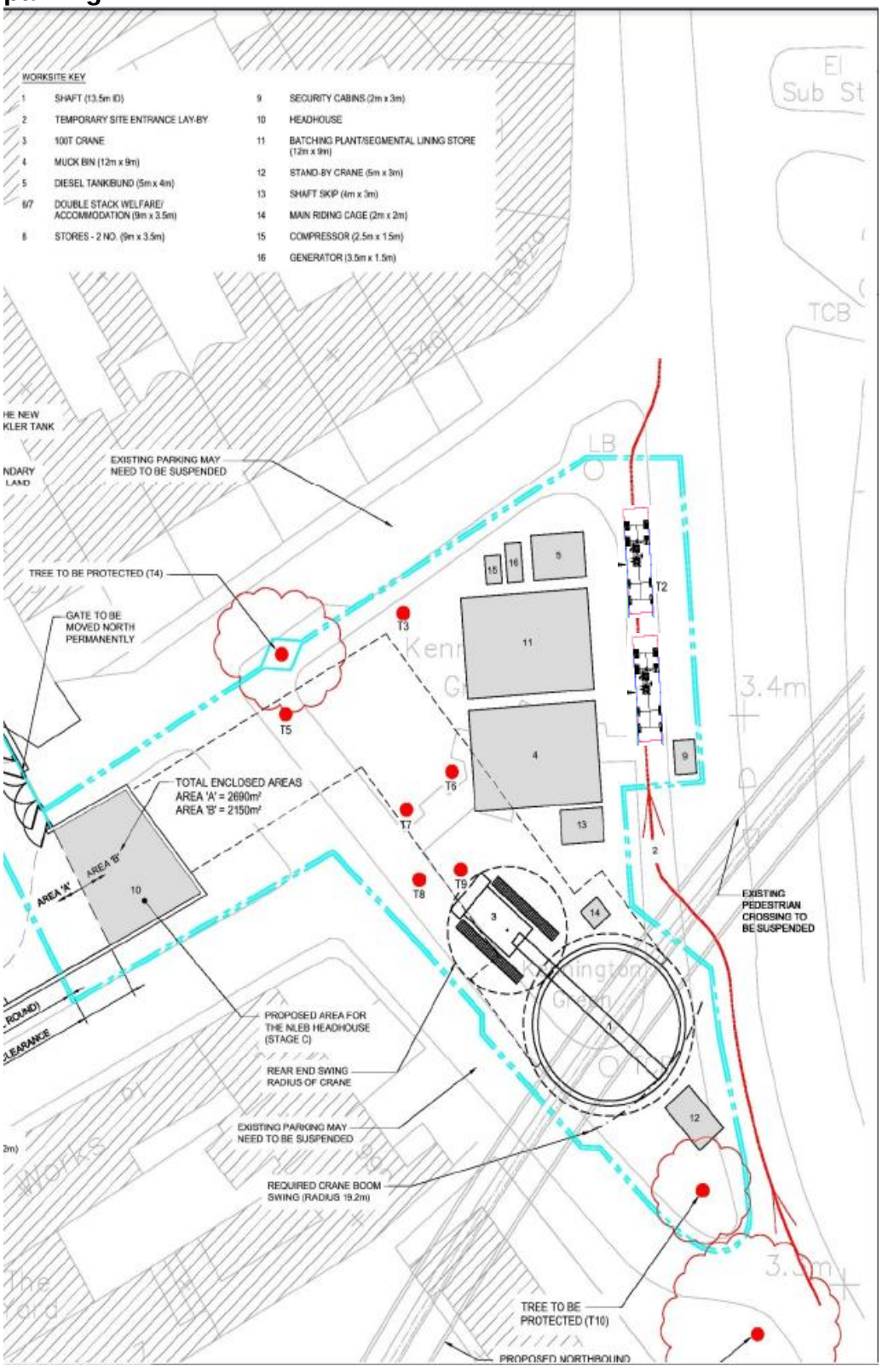
17.1.1 The objectors: Kennington Green Supporters Group (OBJ 158), Mr Bartlett (OBJ 128) and Mr Harkness (OBJ 40) have put forward in their evidence, statement of case and objection to the NLE scheme various arguments which can be summarised into two primary assertions.

17.1.2 Firstly, the objectors argue that the impact of the proposed shaft site at Kennington Green is too great. Various impacts, including that on the heritage of the Green, property, traffic, noise and vibration have been subject to environmental assessment which has been reported in the Environmental Statement **[NLE/A19/1]**. The conclusion of this assessment have also been summarised by the evidence provided by Messrs Buckle, Caten, Bowers and Thornely-Taylor. They conclude the impact of the shaft site at Kennington Green can be mitigated by using Best Practicable Means and the impacts of construction will be subject to the Code of Construction Practice.

17.1.3 Secondly, the objectors argue that an alternative site at 373 Kennington Road would be a better location for the permanent shaft than the one proposed at Kennington Green. A wide range of factors have been taken into account by TfL in comparing the two sites, which indicate that the use of 373 Kennington Road would not be advantageous and that the Kennington Green site is preferable. At the Kennington Green site, the distillery can continue to operate during the construction and operation of the shaft in contrast to 373 Kennington Road which would require removal of the business.

APPENDIX 1

Figure 1 – Kennington Green Worksite with on-site construction vehicle parking



APPENDIX 2

Table 1 – OBJ 158 calculation based on a walk time of 5 minutes for a 300m diversion

Time Period	No. of pedestrians	Walk time (mins)	3 month duration (days) *	Minutes incurred (rounded to nearest 100)	*/ 480 (8hours converted into minutes)*	No of days 'wasted' based on walking 8 hours per day (rounded to nearest 100)
7 days per week	1,100	5	90.91	500,000	/480	1,000

Note the exact figures used by objector 158 have tried to be replicated.

*The figure of 90.91 days for the 3 month period has been inferred from objector 158's calculations as being the total minutes incurred (500,000) divided by the walk time of the pedestrians (1,100*5 = 5,500). 500,000/5,500 = 90.91 days.

Table 2 – Calculation based on average walk speed of 80m/minute and considering workday and weekends

Time Period	No. of pedestrians	Walk time (mins)*	3 month duration (days)	Minutes incurred (rounded to nearest 100)	*/ 480 (8hours converted into minutes)*	No of days 'wasted' based on walking 8 hours per day (rounded to nearest 100)
7 days per week	1,100	4	90.91	400,000	/480	800
5 days per week (working week)	1,100	4	60	264,000	/480	550
2 days (weekend)	550**	4	24	52,800	/480	110
Weekday and weekend total						**660**

*Average walk time of 80m/minute for a 300m diversion equates to 3.75mins. This has been rounded to 4mins.
**550 is the assumed number of pedestrians using this route during the weekend.

APPENDIX 3

Table 3 – Calculation of the number of potential receptors to construction noise at the Kennington Green/ 373 Kennington Road shaft sites

	KGSG/ Mr Bartlett	URS/ TfL
Max distance of receptors	n/a	25 m
Basis of selection of properties	Direct line of sight	Whether the property has windows exposed to the site and is within the 25m at which a significant effect could occur
Number of flats per building	As per page 15 of Mr Bartlett's report	Updated from NLE/G6, consistent with Mr Barlett's report
Kennington Green site	25 residences	23 residences
373 Kennington Road	19 residences	25 residences
Noise Insulation Threshold Exceeded at Kennington Green	n/a	Yes according to ES [NLE/A19/1]. But detailed assessment shows it is possible not to exceed this threshold with on-site mitigation using Best Practicable Means.
Noise Insulation Threshold Exceeded at 373	n/a	Yes and unlikely to be avoided even with acoustic shed.