Amendments to dwellings and landscape

Minor Material Amendment

Amendments to dwellings and landscape

Minor Material Amendment

February 2016

Indigo Planning



Indigo Planning Limited 87 Chancery Lane London WC2A 1ET

Tel: 020 7269 6300 Fax: 020 7269 6301

info@indigoplanning.com indigoplanning.com

Amendments to dwellings and landscape Minor Material Amendment

Contents	Page
1. The Latchmere Development	1
2. Key characteristics of the development	2
3. So what is changing?	3
4. Amended Applications	4
6. Planning Considerations Principle of use Site layout and public realm Height, scale and massing Amenity Density Housing Transport Residential amenity and housing standards Ecology Trees Sustainability Noise Heritage & Archaeology Flooding and Drainage Land Contamination	66 66 67 77 77 88 88 99 99 10
7. S106 Heads of Terms and Community infrastructure Levy (CIL) Affordable Housing and other contributions	12 12
8. Conclusions	13

Amendments to dwellings and landscape

Minor Material Amendment

Appendices

Appendix A

Schedule of submitted plans

Appendix B

Consultation Boards

Appendix C

RSK Ecology Addendum

Appendix D

Arboricultural Report Addendum

Appendix E

Drainage Assessment and FRA Addendum

1. The Latchmere Development

- 1.1. The demolition of the former remand centre at Latchmere House and the redevelopment of the site as a residential housing scheme were approved in 2015 by both the London Borough of Richmond (LBR) and the Royal Borough of Kingston-upon-Thames (RBK).
- 1.2. The scheme includes the retention of the locally significant building Latchmere House, converting this into apartments within landscaped gardens. Around the focal point of Latchmere House, a residential development totalling seventy-three houses was approved. These homes range from two-bedroom to five bedroom homes, with a variety of styles all reflecting their location as part of the setting of Latchmere House and their place within the wider context of Ham.
- 1.3. Berkeley Homes (West London) is moving in forward into the delivery phase of the project with some of the site preparation works. As part of Berkeley Homes' commitment to ensuring their developments are of the highest quality, the designs are periodically reviewed to see if there is any opportunity to improve upon them. As with all major development schemes, design development is an ongoing process with suggested improvements to the individual design detail of each new home coming during and after the planning approval process. Some design development is specific to the individual house (for instance, moving a parking space to give a better and more pleasant garden) whereas others might involve changes to the hard and soft landscape proposals.
- 1.4. With the London Borough of Richmond, it is proposed to improve the appearance and internal layout of a number of dwellings to give more usable internal layouts and a better quality of external detailing. Additionally, the landscape setting around Latchmere House is to be improved with increased planting at the entrance of the site.
- 1.5. These relatively minor amendments do not alter the overall scheme which remains a development of houses based around a tree lined avenue form with the improved setting of Latchmere House being at the centrepiece of the development. These principles remain the same with development maintaining the sweeping crescents of housed facing Latchmere House with more traditionally designed homes beyond, blending in with the existing properties around the edge of the Latchmere site. The homes will retain their spacious gardens, ample parking spaces and well planted trees, with an overall increase in planting as part of the improvements to the look and feel of the street.



2. Key characteristics of the development

- Gatehouse dwellings marking the entrance to the site.
- Sweeping curved terraces facing Latchmere House with a broad avenue leading from the front of Latchmere House, westwards into the development.
- Traditionally styled homes lining this boulevard opening onto a tradition cul-de-sac arrangement.
- · Generous tree planting along the boulevard.
- Access points into the development to encourage walking, cycling and integration with existing homes.
- Spacious development with large planted gardens for every new home.
- · Ample parking provision for each new home.
- · Formal landscaping increased around Latchmere House.
- 2.1. All of these elements are to be retained as approved.



3. So what is changing?

- 3.1. All of the key features of the development noted above are to be retained.
- 3.2. Berkeley (West London) Ltd. is committed to a high quality of design and seeks to ensure that the Latchmere development has a strong sense of place and distinctiveness creating a high quality environment. Berkeley's design team have been working hard on the detail to identify changes and interventions that will enhance how the new Latchmere site is perceived from the moment a person enters the site, whilst maintaining all the previous key design principles and basic form of the development This is both a desire for the highest quality placemaking and urban design and because places that feel good are attractive to house buyers and help Berkeley pass on their new homes to prospective buyers.
- 3.3. Berkeley's designers have identified that without changing the key characteristics of the site, a number of small amendments to the scheme can be made which improve the feel of the scheme. These include;
 - Improvements to the setting of Latchmere House as seen from the entrance to the site.
 - Formally landscaped gardens around Latchmere House and individually designed homes that respond to these landscaped gardens in terms of position and appearance.
 - · Omission of render from most of the homes and the use of high quality brick throughout.
 - Inclusion of traditional roof pitches and design detailing such as bay window features and storm porches.
 - Individual detailing (such as octagonal bays) to homes at prominent corner locations within the site.
 - · Increased tree planting along the boulevard
 - A shared space environment, prioritising people within the development and reducing the visual dominance of cars and the roadway.
- 3.4. Additionally, within the neighbouring borough of Kingston, realigning the layout with a decrease in the number of larger house sizes has resulted in the overall number of homes altering very minimally, with four additional homes overall. A separate amendment has been submitted to Kingston to deal with this element and Richmond is a statutory consultee to that application.



4. Amended Applications

- 4.1. The planning process allows for amendments to schemes as part of the natural evolution of design proposals and Berkeley (West London) is submitting these changes for consideration and approval.
- 4.2. As the site spans across the borough boundary between LBR and RBK, there are parallel consents that need to be submitted to achieve overall consents.
- 4.3. In addition to this amendment application for small scale amendments to dwelling detail and landscape improvements parallel consents have been submitted to RBK regarding the changes within that borough. That application is not further detailed here but is referenced for the sake of completeness for interested third parties.
- 4.4. For the individual design changes to each dwelling, the submitted Design and Access Statement and Landscape Plans can offer more detail. The following section presents key planning considerations with respect to the proposed changes, outlining why these relatively minor changes have minimal impact on the ecology and historical significance of the site and similarly no impact in terms of traffic, noise or visual impact to the existing properties around the Latchmere site.
- 4.5. A schedule of the amended plans is provided at **Appendix A.**



5. Consultation

- 5.1. Berkeley has met with local residents and described these amendments at two separate public consultation session in the autumn of 2015. This results in a better development and a more welcoming sense of place and the Latchmere development is no different.
- 5.2. Berkeley has held three separate consultation events on 31 October, 21 November and 28 November 2015. The first event, in October, sought to keep residents updated of the construction programme. The second and third presented the proposed amendments, (Consultation Boards included as **Appendix B**). These boards proposed the submitted amendments as well as the addition of four new dwellings, not forming part of this submission. Comments from local residents were positive with regard to the design changes and, having reviewed the positive local feedback, Berkeley has gone on to contact both Richmond and Kingston regarding the desire to improve and amend the scheme.



6. Planning Considerations

Principle of use

6.1. There are no proposed changes to the approved use of the site as a residential development.

Site layout and public realm

- 6.2. Minor road layout changes are proposed across the site on both the Kingston and Richmond sides of the boundary. The purpose of the alterations is to holistically improve the quality and feel of the development increasing the village feel and sense of place. The landscape changes and placement of dwellings has been subtly amended to improve the setting of Latchmere House when entering the development from Latchmere Close.
- 6.3. The number of trees within the development is to be increased with approved planting supported by additional trees to form a boulevard of planting along the main east-west road proposed. This is hoped to improve the well planted, village feel of the development and support the low traffic-speed aims of the shared space environment.
- 6.4. The shared space environment is a relatively minor change but on which will improve pedestrian safety and increase a positive, pedestrian focused environment. Trees are proposed to be repositioned closer to the road surface to improve the character and appearance across the scheme and to reduce traffic speeds within the development. Feature trees in focal points and will be formalised through the submission of the landscaping conditions.
- 6.5. There are minor alterations to the layout positions of the approved residential houses reflecting the elevation changes.
- 6.6. Cumulatively the minor revisions constitute visual enhancements which are intended to improve the appearance and feel of the development, the setting and relationship with Latchmere House and connectivity with the wider Ham Conservation Area.

Height, scale and massing

6.7. The proposed external alterations result in minor increases in ridge height resulting from the improvements to the elevations. The visual improvements include fully pitched roofs rather than the approved flat roofed elements and better relate to the vernacular style of the surrounding area and increases views into the site and through the site from the surrounding area. This will also ensure that all habitable rooms meet the current London Plan minimum height standard, an improvement relative to the approved scheme. The alterations also



ensure that the proposed homes reflect the DCLG's published guidance on housing standards 'Technical Housing Standards 2015'.

Amenity

6.8. All gardens will continue to meet or exceed the minimum requirements of the London Plan (FALP 2015).

Density

6.9. The number of units remains unchanged relative to the approved scheme.

Housing

- 6.10. The revised scheme proposes changes to the appearance of the houses on plots 14 and 55 which have been redesigned to better reflect their context, specifically, to better relate visually to Latchmere House and add interest to the newly created street.
- 6.11. Additional detailing has been included to the elevations of other approved houses to improve their overall appearance and ensure continuity of design across the wider Latchmere development (reflecting similar design detailing within RBK). This includes Victorian Revival features (such as brick detailing, bay windows and pitched roofs) with the terraces improved through the removal of render and similar brick detailing.

Transport

Highways impact

6.12. The submitted MMA does not increase in the number of dwellings proposed nor is the number of bedrooms to be increased. As such, the impact on the highways network can be considered to be identical to the approved scheme and no additional highways impact will arise as a result of the changes.

Site access

6.13. There are no changes proposed to the vehicular access to the site which will be via Latchmere Close off of Church Road and LB Richmond. The changes to the landscaping scheme around the setting of Latchmere House are intended to improve the perception of the development on entering the site. These changes represent minor alterations to the approved landscaping scheme to better reveal the setting of Latchmere House.

Car parking

6.14. Each property will retain at least two off-street car parking spaces, as previously approved.

These parking spaces will be provided as hard standing to the front of the houses, mindful of the design guidelines set out within Richmond's 'Front gardens and other off street parking



- standards' and 'Design Quality' SPDs. The development is identical in this regard to the approved scheme which was found acceptable in the light of these approved SPDs.
- 6.15. The removal of integral garages will allow the internal spaces of each dwelling to be used more efficiently and improve the quality of the living environment for occupiers, again ensuring that improved Housing Standards are comfortably met. As the approved integral garages were never included in the Council's consideration of proposed parking spaces, the omission of the integral garages has no impact to the consideration of the appropriate levels of parking within the development, which remains comparable to the approved scheme and fully compliant with Richmond's adopted parking standards.
- 6.16. As noted, the minor changes propose an identical number of bedrooms relative to the approved scheme with an overall increase in floor area across the red line of the application site of just 8.4 square metres; a negligible increase. As such, there would be no increase in traffic relative to the approved scheme.

Cycle Parking

6.17. Adequate private space for cycle parking and cycle access routes connecting through the development are unaffected by any of the amendments to the elevations of the buildings or the minor layout changes of the estate road.

Residential amenity and housing standards

- 6.18. The minor alterations to the layout of the properties retain generous distances between the facing windows of habitable rooms of both existing and proposed properties. Internally, space standards comply with the minimum space standards set out within Section 4.2 of Richmond's Residential Development Standards SPD as per the approved permission and furthermore, with the national space standards set out within the DCLG's Technical Housing Standards 2015 and those within the London Plan (FALP 2015), both published subsequently to the original permission. It is Berkeley's intention to provide a high quality environment for all of the homes within the development and the alterations are aimed at improving internal layouts to reflect identified design improvements.
- 6.19. The minor increase of the height of the rooflines will not impact any neighbouring property given the distances between the approved dwellings and surrounding development. The realignment of roofs is intended to increase views into and through the Latchmere site with glimpses of the trees in between, again to emphasise a high quality, well-integrated and open feel for the scheme.

Ecology

6.20. Whilst the changes are minor, Berkeley is mindful of the need to ensure that all developments give due regard to their potential impacts on local biodiversity and that



appropriate mitigation is in place where required. RSK Environment Ltd has been given access to the full set of approved plans and their amended counterparts. Having considered these holistically (across Kingston and Richmond), RSK came to the view that there would be no greater impacts to the scheme than already approved and proposed no additional mitigation (See RSK letter dated 14 January at **Appendix C**).

Trees

6.21. Similarly, independent arboriculturalists tree:fabrik have been tasked with reviewing the tree protection measures and the arboricultural implications of the amendments to ensure that there is no additional mitigation necessary and to ensure that approved (and currently proposed) tree protection measures are adequate. Their statement (attached as Appendix D of this document) concludes the following;

'Based on the above assessment, documents supplied and recommendations outlined above, trees indicated for retention can be safely integrated within the proposed residential development'.

Sustainability

- 6.22. At the time of the approval of 14/0451/FUL, the Code for Sustainable Homes was the accepted sustainable standard. Whilst this has subsequently been abolished the development will be completed in accordance with the Hoare Lea Sustainability and Energy Assessment approved as part of the application 14/0451/FUL and any subsequently approved conditions.
- 6.23. All of the dwellings proposed will be built to a Lifetime Homes standard and would be adaptable to wheelchair housing standards.

Noise

6.24. The development will be completed in accordance with the Mayer Brown Noise Impact Assessment approved as part of the application 14/0451/FUL and any subsequently approved conditions.

Heritage & Archaeology

- 6.25. The improvements to the external façade of the dwellings and the other changes proposed by the submitted MMA have been carefully considered to better reveal the significance of the setting of Latchmere House and better relate the development to this landmark quality building.
- 6.26. The original application approved the principle of the original terraced properties in this location with relatively minor differences in their external appearance. The external alterations combine the improvements to the external façade of the MMA with the necessary



- openings and subdivisions previously consented. As such, the current proposal is considered to have been approved in principle with the minor alterations to the façade of the building having minimal impact to the heritage significance of Latchmere House.
- 6.27. Similarly, the original application submitted an archaeological evaluation by Archaeology South East which concluded the following;

No evidence of Mesolithic, Neolithic or Bronze Age remains was encountered on site and it is likely that and remains of these dates that had been present were removed during the evident previous truncation.

6.28. It is not considered that the archaeological situation will have altered subsequent to the approval of the original application in July 2015 and therefore, an updated archaeological report is not considered necessary to submit for this smaller application.

Flooding and Drainage

- 6.29. The application is to be built to a high standard of sustainable water management and drainage design. The approved application was accompanied by a Flood Risk Assessment and Drainage Assessment by RLT (ref. 132034 R1(3) dated December 2013). Berkeley (West London) Ltd has recommissioned RLT to assess the amended designs. This most particularly addresses the cumulative impacts of the very minor amendments in Richmond with the overall layout changes proposed within Kingston and the cumulative impacts of the MMA and the increase in homes proposed by the full planning application.
- 6.30. RLT's letter detailing that there would be no negative or detrimental differences in Flood Risk and Drainage is appended as **Appendix E** to this report. They instead note that relative to the approved scheme, an improvement in natural drainage capacity of the site is proposed due to a reduction in solid ground coverage and an increased amount of permeable paving relative to the original scheme.

Land Contamination

6.31. The development will be completed in accordance with the Listers Geotechnical Land Contamination and Ground Investigation Report approved as part of the application 14/0451/FUL. It is not considered that the ground contamination conditions will have altered subsequent to the approval of the original application in July 2015 and therefore, an updated ground contamination report is not considered necessary to submit for this smaller application.





7. S106 Heads of Terms and Community infrastructure Levy (CIL)

Affordable Housing and other contributions

Affordable Housing

7.1. The minor amendments have no impact on the approved Affordable Housing contributions which continues to be offered as set out in the Section 106 Agreement approved at appeal in July 2015.

CIL

7.2. The floor area of residential floorspace within the red line of the application site is 4337.8sqm representing an uplift above the originally approved scheme of 8.4sqm. This uplift is too insignificant to trigger additional CIL payment in line with the CIL Regulations 2010 (as amended) and CIL contributions remain as originally approved.



8. Conclusions

- 8.1. In conclusion, the minor amendments proposed are small in scale and make no significant changes to the original permission. The amendments do not go to the heart of the approved scheme but rather seek to make reasonable adjustments to improve the development and assist with the prompt sale of the resulting homes.
- 8.2. The scheme is being brought forward in this way, following discussions with officers at London Borough of Richmond. Berkeley are committed to ensuring that the development is as desirable as possible in terms of visual appearance and feel and in terms of the size of properties following the recent rise in stamp duty liability on home buyers.
- 8.3. The proposal accommodates and contributes to Richmond's housing growth and secures a mix of households without compromising the quality of life of existing residents or the character of this part of the borough.
- 8.4. Overall, the changes are beneficial and do not alter the substance of the approved development, nor do they create any substantive issues or cause materially different environmental effects than originally assessed and appraised. The grant of an amended planning permission via minor material amendment is therefore appropriate, subject to the conditions and obligations propose by the Local Authority.



Schedule of revised drawings

The proposed amendments to the drawing numbers as a result of this application are shown below;

Drawing Title	Proposed Drawings
Richmond Location Plan	No change
Proposed Site Plan	BKH04_P_101 01 Rev 3
Proposed Site Sections 01	BKH04 P 102 00 02
Proposed Site Sections 02	BKH04 P 103 00 02
Proposed Street Scene	BKH04 P 104 00 02
Elevations	
Proposed Block Ground Floor	BKH04_P_111 00 01
Plan Sheet 01	
Proposed Block First Floor Plan	BKH04_P_113 00 01
Sheet 01	
Proposed Block Second Floor	BKH04_P_115 00 01
Plan Sheet 01	DKU04 D 447 00 04
Proposed Block Roof Plan Sheet 01	BKH04_P_117 00 01
House Type B3 - Plans Sections	PKH04 P 202 00 01
and Elevations	BKH04_P_202 00 01
House Type B4 - Plans Sections	BKH04_P_203 00 01
and Elevations	BR(104_1 _200 00 01
House Type D1 - Plans Sections	BKH04_P_205 00 02
and Elevations	
House Type E1 - Plans Sections	BKH04_P_206 00 02
and Elevations	
House Type E2 – Plans and	BKH04_P_207 00 02
Sections	
House Type F1 – Plans and	BKH04_P_208 00 01
Sections	DI(104 D 00= 00 04
Bin Store	BKH04_P_237 00 01
Refuse Strategy Plan	BKH04_P_301 00 02
Lighting Strategy Plan	BKH04_P_302 01 03

PROPOSED MINOR DESIGN IMPROVEMENTS

PLANNING APPROVAL

- In July 2015 Berkeley Homes obtained planning permission for:
- The provision of 73 homes, including 13 affordable. These will comprise of 66 new homes and the conversion and ground floor extension of Latchmere House to provide 7 apartments.
- Associated highway works, landscaping, tree works and car parking.
- Demolition of existing buildings, excluding Latchmere House.

PROPOSED MINOR DESIGN IMPROVEMENTS

- Inclusion of a formal entrance square and tree lined boulevard.
- A fully shared surface to allow for pedestrian dominance over vehicles.
- Elevations enhancements to create a more saleable and traditional product type.
- The substitution of 10 large five bed houses with 14 smaller four bed homes to improve saleability following recent changes in Stamp Duty on larger homes.
- Realignment of cul-de-sac away from Garth Road.
- Reorientation of rooflines to improve street scene and increase view corridors from neighbouring streets such as Latchmere Close and Garth Close.

CONSENTED LANDSCAPE MASTERPLAN



PROPSED LANDSCAPE MASTERPLAN













ENHANCED ELEVATIONS



Proposed Elevations

ENHANCED ELEVATIONS

- Elevations improvements to create a more saleable and traditional product type.
- Reorientation of rooflines to improve street scene.



Consented Elevations











IMPROVED STREET SCENE













IMPROVED STREET SCENE















Alistair Brummell,
Berkeley Homes (West London) Limited,
380 Queenstown Road,
London,
SW8 4PE

18 Frogmore Road Hemel Hempstead Hertfordshire HP3 9RT UK

Telephone: +44 (0)1442 437500 Fax: +44 (0)1442 437552 www.rsk.co.uk

Our ref - 854891 - Latchmere House

14 January 2016

Dear Alistair.

Covering letter for revised scheme at Latchmere House

We have reviewed the revised housing scheme for Latchmere House enclosed in your email dated 16 November 2015. After consulting with the consented plans (drawing no's: Latchmere P-BKH01_B_101_01 and BKH04_P_101_Rev02) we are happy that the revised scheme will not require any additional land take, tree or vegetation removal. We can therefore confirm that the revised scheme will not impact upon ecology of the site; and no further surveys or mitigation are required. This revised scheme remains in line with RSK's issued ecology report from February 2014 (which includes details on the habitats on site and details of protected species namely bats, Badger and Stag Beetle). This previously issued ecology report has been approved by Kingston-upon-Thames Borough Council and Richmond Council.

In addition the majority of ecology planning conditions from both councils have now been undertaken and discharged.

RSK will be working with Berkeley to ensure any further changes to the scheme remain in line with the report and will be on hand should any ecological issues arise.

If you have any questions please do not hesitate to contact me on 07713 214586 or email rbenbow@rsk.co.uk

Yours faithfully,

Rosy Benbow Ecological Consultant

Lory Barbon

Reviewed by

Louise Denning Principal Consultant

ouseDerning











ARBORICULTURAL STATEMENT

LATCHMERE HOUSE

Produced for: Berkeley (West London) Ltd

January 2016

tree: fabrik

Ref: TF/DR/913s1 MMA addendum Prepared by: Alan Richardson

19/01/16

tree:fabrik
Lenten House
16 Lenton Street
Alton
Hampshire
GU34 1HG

T: 01420 593260 F: 01420 544243

1.0 Introduction

- 1.1 This statement considers the arboricultural implications of the amended planning submission as outlined by the accompanying statement by Indigo Planning and forms an addendum to the Arboricultural Development Report [tf/DR/931revB] dated February 2014 in respect of planning permission 14/12144/FUL (Royal Borough of Kingston) and planning permission 14/0451/FUL (London Borough of Richmond Upon Thames).
- 1.2 This enables a review by the Council in context of other material considerations submitted in support of the planning submission and a basis for issuing planning permission and the imposition of conditions.

2.0 General

- 2.1 The potential tree loss and arboricultural implications previously assessed within the Arboricultural Development Report [tf/DR/913revB] by *tree*:fabrik remains relevant to the revised submission.
- 2.2 The following documents are considered within this addendum.
 - Site Plan BKH04_P_101 Rev 02 dated Nov 2015
 - Consultation Masterplan by Murdock Wickham 1353/010

3.0 Development description

3.1 The proposals seek to amend the layout of thirty-one dwellings relative to the consented scheme.

4.0 Arboricultural Impact Assessment

- 4.1 The proposed amendment does not result in additional tree removal above that previously approved.
- 4.2 Whilst minor re-alignment of the internal road and configuration of plots are proposed these amendments occur within the site and are beyond the zone of influence of retained trees. The proposed amendment therefore places no additional pressure on

© tree:fabrik 3

- retained trees and their juxtaposition does not impact on the amenities of future occupiers or pruning above that previously considered.
- 4.3 Similarly, to the south east of the site, the proposed footpaths which link to Latchmere Lane remain as previously identified within the approved plan and therefore their impact remains neutral.
- 4.4 Four garden sheds are proposed within the RPA of Maple (T96) and Cedar (T99) assessed as 'C' and 'B' categories respectively. Of these structures, three are located to the north of the trees and therefore within an area previously beyond the perimeter wall and security fence of the former prison. Root activity is likely to be influenced by these previous structures and therefore limited. Whilst the remaining shed is located to the east of the Cedar (T99), they are relatively light structures and therefore, subject to the foundations being 'at or above' ground level, they would not have an adverse impact on the trees health or amenity. The total area of the three sheds within Cedar (T99) equates to 4% of the existing soft ground. The single shed located within the RPA of Maple (T96) equates to below 6%. The potential areas therefore accord with the guidance and recommendations contained within BS5837 (2012).
- 4.5 With regards to services and utilities, it is not anticipated that these would impact on retained trees above that previously considered within the consented scheme.

5.0 Conclusion

- 5.1 The proposed amendment does not result in additional tree removal above that previously approved.
- 5.2 Whilst adequate tree protection and precautionary measures will be required to limit potential root disturbance as previously highlighted within the original arboricultural development report, it is considered that this can be achieved in accordance with BS 5837 (2012) and current good arboricultural practice.
- 5.3 Provision for tree protection is addressed through the imposition of Condition 7 attached to the existing planning permission. This Condition requires that no development, including any works of demolition, shall take place until a detailed Arboricultural Method Statement, including a Tree Protection Plan, has been submitted to and approved in writing by the local planning authority.

© tree:fabrik 4

LATCHMERE HOUSE, RICHMOND ARBORICULTURAL STATEMENT

5.4 Based on the above assessment, documents supplied and recommendations outlined above, trees indicated for retention can be safely integrated within the proposed residential development.

© tree:fabrik 5



tree: fabrik Lenten House 16 Lenten Street Alton, Hampshire GU34 1HG

T: 01420 593250 F: 01420 544243

E: office@treefabrik.com



For The Attention of Alistair Brummell

Berkeley Homes (West London) Limited, Chelsea Bridge Wharf, 380 Queenstown Road, London. SW8 4PF

19 January 2016

<u>Latchmere House – Drainage Implications of Revised Site Layout – MMA Application</u>

Alistair

We have reviewed the Landscape Master Plan drawing 1353/010, which shows the new site layout.

The revision to the layout introduces a marginal increase in impermeable area to the development which affects the surface water design and a 6% increase in the potential peak waste water outflow.

The surface water drainage design is a combination of permeable paving and flood retention basins with cellular storage beneath. These allow retention within them whilst also discharging into the permeable stratum beneath.

This small increase in impermeable roof area can be offset by several means as follows:

- Increase in voided sub base thickness beneath the permeable paving.
- Increase in cellular storage beneath the retention basins.
- · Increase in area of permeable paving

We also note that the area of block paving (which can all be permeable if necessary) is significantly larger than the areas shown in the indicative SUDS Layout (Scheme 1) of the Flood Risk Assessment (attached). This alone will more than compensate for the marginal increase in impermeable roof areas.



