PLANNING APPLICATIONS COMMITTEE 7 NOVEMBER 2013

Item No: 10

<u>UPRN</u> <u>APPLICATION NO.</u> <u>DATE VALID</u>

13/P2659 21/08/2013

Address/Site Pelham Primary School, Southey Road, Wimbledon, SW19 1NU

(Ward) Abbey

Proposal: Proposed partial demolition of some single storey elements of

existing building, construction of three storey extension on the east of the site adjacent to Southey Road and erection of single storey pitched roof extension to existing school hall, and various

soft landscaping works to the existing playground.

Drawing No's 999-1100, 999-1101 B, 999-1102 A, 999-1103 A, 999-1104 A,

999-1110 C, 999-1111 B, 999-1112 B, 999-1113 B, 999-1114 A, 999-2100 B, 999-2101 B, 999-2102 C, 999-2103 B, 999-2110 C, 999-2111 C, 999-2112 B, 999-2113 C, 999-2500 B, 999-2501 C, 999-2502 C, 999-2503 C, 999-2504 B, SJA TPP 12135-02, SJA TPP 12135-03 A, 1254/LP/301 C, 1254/LL/106

G, 3692/1, Design and Access Statement, Transport

Assessment, BREEAM report, Ecological Survey, Tree Survey

Schedule, and Site Waste Management Plan.

Contact Officer: Sabah Halli (8545 3297)

RECOMMENDATION

Permission be GRANTED subject to conditions.

CHECKLIST INFORMATION

Is a screening opinion required: No

Is an Environmental Statement required: No

Has an Environmental Statement been submitted: No

Press notice: No

Site notice: Yes

Design Review Panel consulted: NoNumber of neighbours consulted: 85

External consultations: Yes

Controlled Parking Zone: Yes (4F)

1. **INTRODUCTION**

1.1 This application is being brought to the Planning Applications Committee for determination because it is the Council's own development.

2. **SITE AND SURROUNDINGS**

- 2.1 The site comprises a primary school and its curtilage, including playground, soft play areas and parking. The school buildings are single and two storey in height and are situated on the northern half of the site, with the southern half generally open. The site is bounded by Southey Road to the east with residential properties opposite, a fire station to the south (which fronts Kingston Road) and the Salvation Army barracks to the south-west. The main school access for pupils and staff is on this side. On the western boundary there is a secondary access and the site is bounded by the side gardens of the end of terrace properties in Palmerston Grove. Palmerston Grove terminates with the gated access into the school. Flats served off both Cross Road and Southey Road sit to the north
- 2.2 There are a number of trees within the curtilage, including some important mature trees on the Southey Road frontage and a mature willow in the centre of the site.
- 2.3 Pedestrian access to the site is via two separate gates off Southey Road and vehicular access to the site is via a gated driveway leading from Southey Road into the car park in the north-east corner. This car park is used by teachers and visitors. An additional access point, is present midway along the western part of the site from Palmerston Grove which provides occasional access to refuse truck and other service vehicles.
- 2.4 The site is not located within a Conservation Area.

3. **CURRENT PROPOSAL**

- 3.1 The works proposed are to enable expansion from a one-form entry primary school to a two-form entry school. The school currently has 266 pupils, including nursery (26 pupils) and one 'bulge' class (30 pupils, and which has been accommodated in a temporary classroom block). There are currently 42 staff (11 full time and 31 part time).
- 3.2 The total number of full-time pupils would increase to 466 and it is proposed to increase staff numbers to 24 full-time and 31 part-time, over a period of 7 years until the school reaches full capacity.
- 3.3 The proposed works comprise:
 - Demolition of a class-space, toilet block, and the kitchen adjacent to the main hall.

- Construction of a three storey, flat roofed, extension on the east side of the site adjacent to Southey Road and which would be attached to the existing main building
- New front canopy to provide cover for visitors using the front intercom
- Construction of a front, single storey, pitched roof extension to the existing main hall to house the new kitchen and hall storage space
- Minor refurbishment of some parts of the existing building, including extension of existing canopy facing playground area
- Extensive re-configuration and upgrading of the playground facilities and soft landscaping, including the installation of a hard court area and nature/wildlife area
- Provision of 18 additional cycle parking spaces
- Installation of 1.5m and 1.8m railings to parts of front boundary and section of 1.5m railing to rear boundary
- 3.4 The proposed three storey building would be slightly set back from the front building line of the existing school building and would be 14.55mm in width, 43.12m in depth, and 12.32m in height.
- 3.5 The proposed single storey front extension to the existing building would be 5.30m in width, 13.45m in depth, 3.92m to eaves height, and 8.26mm to ridge height (same as existing building) and would be attached the new extension.
- 3.6 The main extension is proposed to be of a sandy, light coloured brickwork to tie with the buildings surrounding the site that are formed from London stock in addition to specific sections of the external walls being formed from a blend of lighter and darker sandy coloured brickwork. The applicant advises that there will also be recessed section by approx 100mmm to assist in providing articulation and general visual interest to the external elevations.
- 3.7 The small area of wall that would wrap around the single storey, flat-roofed joining element between the 3 storey block and the main hall extension on the east elevation is proposed to be formed from vertical timber cladding.
- 3.8 The windows and doors are proposed to be formed from coated aluminium frames with double glazed units apart from doors to the plant room on the west elevation which will have louvered infill panels.
- 3.9 The roof material to the 3 storey block will be liquid asphalt and will not be visible from street level. The pitched roof finish over the front extension to the main hall is proposed to be formed of tiles to match the existing.
- 3.10 The new canopy to be created over the new main entrance on the front elevation will be of metal and the extended section of the existing playground

- canopy will be formed out of polycarbonate and timber to match the existing canopy materials.
- 3.11 The existing 12 car parking spaces will remain and parking is not proposed to be increased due to the site's good PTAL rating (4) and its location within a CPZ. It is proposed to provide an additional 18 cycle parking spaces creating a total of 48 spaces.
- 3.12 Vehicular access for goods vehicles will be via the vehicular access/staff car park located to the north of the proposed building, as per the current arrangement. Access to bin stores will be from an existing vehicular access off Palmerston Grove. There are no turning facilities for refuse vehicles however and so they would be required to wait on the adjacent carriageway as per the existing situation.

4. **PLANNING HISTORY**

13/P1042 - INSTALLATION OF 2 NO TEMPORARY CLASS-ROOMS. A TEMPORARY WC BLOCK AND VARIOUS SOFT AND HARD LANDSCAPING WORKS TO EXISTING PLAYGROUND – Approved

10/P1440 - ERECTION OF A NEW TWO BAY MODULAR TEMPORARY CLASSROOM - Approved

06/P1375 - ERECTION OF NEW 1.8M HIGH FENCING AND GATES TO CAR PARK AREA. - Approved

03/P1829 - REPLACEMENT OF EXISTING CHAIN LINK FENCE WITH 3 METRE HIGH METAL RAILINGS AND GATES TO THE REAR ENTRANCE AREA FRONTING PALMERSTON GROVE – Approved

03/P0879 - ERECTION OF AN EXTERNAL STORAGE BUILDING (AT THE SIDE OF 6 PALMERSTON GROVE) - Approved

03/P0776 - RETENTION OF EXISTING TIMBER PERGOLA IN CHILDRENS PLAYGROUND – Approved

99/P0540 - ALTERATIONS TO EXISTING BUILDING AND ERECTION OF A SINGLE-STOREY EXTENSION TO PROVIDE ADDITIONAL CLASSROOM, STAFF ROOM AND LIBRARY ACCOMMODATION WITH ALTERATIONS TO CAR PARKING ARRANGEMENTS – Approved

Other various applications from the 1950's to 1990s for extensions/alterations to the site.

5. **CONSULTATION**

The application was advertised by site notice, and individual letters to occupiers of 85 properties adjoining the site and in neighbouring roads. 1

objection has been received in relation to the proposed works and on the following grounds:

- The large Willow tree which sits in the school yard and is the school's emblem will be killed and removed. The Council is urged to find a way to carry out the redevelopment without having to remove the tree.
- The tree is part of the school and many of the children are upset at its removal. The tree is magnificent and embedded in the within the school community and to remove it would be setting a bad example to younger generations i.e. that development must happen at any cost.

Transport Planning Officer

It should be noted that Pelham Primary school are up to date with their school travel plan for 2013. This should enable the school to comply with the STP condition.

The existing 12 car parking spaces will remain and parking is not proposed to be increased due to the site's good PTAL rating (4) and its location within a CPZ. It is proposed to provide an additional 18 cycle parking spaces creating a total of 48 spaces.

There are no transport objections to this application as sufficient evidence has been provided to demonstrate no significant impact on road safety and the public highway.

The only concern is that the safety of the school staff and pupils is considered adequately during the construction period. To ensure this a condition will be applied.

The conditions in respect of cycle parking details to be submitted for approval, delivery and servicing plan to be submitted for approval, construction Logistics plan to be submitted for approval, and implementation of an up to date Travel Plan should be added to any approval in addition to 'Informative 12'.

Tree Officer

The application requires the removal of 8 existing trees, including 4 'B' category trees: a Weeping Willow tree, Paper-bark Birch, Himalayan Birch, and a Horse Chestnut tree and 4 other existing trees have been approved for removal under planning ref: 13/P1042.

The applicant proposes to plant 15 new trees that will include the replacement of trees approved for removal under planning ref: 13/P1042 and the new trees include several native species which will enhance the wildlife value of the site;

Special provision should be made for those new trees to be planted within the proposed grilles in the tarmac and synthetic grass areas. This should include methods to prevent future disturbance of the tarmac by root growth by using

soil cell modules, or similar. Special provision should be made to protect the soil within the grilles from erosion and compaction. Details of this should be made subject to a planning condition.

It is recommend that planning conditions in respect of a the submitted tree survey, tree protection, site supervision (trees), that the soft landscaping shown on the approved planting plan drawing ref: '1254/LP/301 Rev.C' shall be planted in accordance with the approved details, and that no development shall commence until details of the proposed design, materials and method of construction of the tree pits located in the tarmac and synthetic grass areas shall be submitted to and approved in writing by the Local Planning Authority (LPA).

Climate Change Officer

After a detailed meeting with the architects, we are happy to accept the development achieving a 'Good' level on the basis that:

The architects have put forward a valid viability argument that no more funds are available to direct towards this development

We are satisfied that the design approach they have taken is compliant with Core Strategy Policy CS15 (parts a-d)

The design stage assessments demonstrates that the design is capable of achieving 'Very Good' (however there is only a slim margin for error between Levels 'Good' and 'Very Good' in the case of this development).

Environmental Health Officer

It is recommended that conditions in respect of soundproofing of plant and machinery, kitchen ventilation/extraction systems, external lighting, and contaminated land, and an informative in respect of kitchen ventilation/extraction system noise levels be added to any approval.

6. **POLICY CONTEXT**

The relevant policies contained within the Adopted Merton Unitary Development Plan (October 2003) are:

L.11 (The Protection of Existing Facilities and Land)

C.14 (Non Council Schools/Other Educational Facilities)

BE.15 (New Buildings and Extensions; Daylight, Sunlight, Privacy, Visual Intrusion and Noise)

BE.16 (Urban Design),

BE.22 (Design of New Development),

BE.15 (New Buildings and Extensions; Daylight, Sunlight, Privacy, Visual Intrusion and Noise),

BE.22 (Design of New Developments)

E.2 (Access for disabled people)

PE.2 (Pollution and Amenity)

PE.3 (Light Pollution)

The relevant policies contained within the Adopted Merton Core Strategy (July 2011) are:

CS 11 (Infrastructure)

CS 13 (Open Space, Nature Conservation, Leisure and Culture)

CS 14 (Design)

CS 15 (Climate Change)

CS 18 (Active Transport)

CS 19 (Public Transport)

CS 20 (Parking, Servicing and Delivery)

London Plan 2011:

- 3.18 (Education Facilities)
- 5.2 (Minimising Carbon Dioxide Emissions)
- 5.3 (Sustainable Design and Construction)
- 5.7 (Renewable Energy)
- 7.2 (An Inclusive Environment)
- 7.4 (Local Character)
- 7.15 (Reducing Noise and Enhancing Landscapes)

National Planning Policy Framework (2012)

Para. 72 states that the Government attaches great importance to ensuring that there is a sufficient choice of school places available. Local planning authorities are advised to give great weight to the need to create, expand, or alter schools.

7. PLANNING CONSIDERATIONS

- 7.1 Core Strategy policy CS 11 aims to support education services in the expansion and provision of schools to meet the anticipated increased number of children in Merton, including to enable primary school children to be educated within walking distance of their homes. This policy also supports the multi-use of social, education, cultural and recreational facilities.
- 7.2 UDP policy C.14 advises that applications for other new educational facilities or extensions/improvements to existing ones will be considered favourably subject to other plan policies, the proposal meeting an identified need, the proposal meetings the Council's car parking standards and not having an adverse impact on road safety or traffic flows, and the proposal not result in adverse impact on residential amenities or the surrounding area.
- 7.3 Under Section 14 of the Education Act 1996 Local Authorities have a statutory duty to ensure that there are sufficient school places available within their area, and within a reasonable travelling distance. If a child is required to travel more than 2 miles from their home to their school, the Local Authority

- has a duty to ensure travel arrangements are made/compensate the parent/s/guardian/s of the child/children for this additional travel. It is national Government policy that popular and successful schools be expanded.
- 7.4 There has been a significant increase in demand for school places across the whole Borough, created by a 39% rise in the number of live births per annum between 2002 and 2010 (2,535 to 3,523), with additional demand from changing migration patterns. Over the last five years, 21 reception forms have been added through a substantial primary school expansion programme but there are barely any spare places. The need to provide for the additional places and the strategy for this has been considered by the Council's cabinet in a series of reports over the past few years. Pelham Primary School has been identified as one of a number of schools with the capacity to be extended to meet the need for additional primary school places.

7.5 **Design**

- 7.6 Policies BE.16 and BE.22 of the UDP and policy CS 14 of the Core Strategy seek to ensure that new developments are of high quality design which relate to their surroundings.
- 7.7 The form of the proposed development has come about following preapplication discussions with Officers and local public consultations on the 29th November 2012 and 13th June 2013. The culmination of this is the proposed erection of a three storey, flat roofed, block which would be sited along the front of the site but be attached to the existing main school building. This would allow the creation of the required additional floor space but also enable to reconfiguration and improvement/modernisation of the existing side/rear play area. It is also proposed to install a small front extension to the existing main building.
- 7.8 It is considered that the proposed three storey building would not be excessive in footprint or height and would sit well in relation to the scale and height of the existing school building. It would only be 2.25 3.75m taller than the adjoining school building and would be set slightly further back than the existing front building line. The extension would also be set 27m from the side boundary, which retain a sufficient amount of spacing and allows views into the new landscaped areas of the site.
- 7.9 The predominant facing material would be yellow sandy coloured brick akin to London stock brick to match other buildings along the road and irregular recessed bays would create an interesting horizontal and vertical rhythm to the building and contrary to that of the existing school building. This modern simple approach is considered to be an acceptable response relating well to the existing building in scale. Samples of materials will be required by condition to be approved by the Local Planning Authority prior to development commencing.

- 7.10 The proposed single storey front extension is considered acceptable in design terms and would be of the same overall design as the existing building it would be extending.
- 7.11 The proposed extension of the existing playground facing canopy is considered acceptable in terms of its scale and siting and would be of the same design and materials as existing.
- 7.12 The proposed soft landscaping and re-surfacing of the existing hard-standing area would improve the appearance of the site. Although some trees would be lost, none of these would category 'A' trees and replacement planting is proposed. The new play area would include a hard games court, new play area with climbing frames, and new nature area. The additional planting would also serve to soften the appearance of the new extension within the site.

7.13 **Neighbour Amenity Issues**

- 7.14 Policy BE.15 of the UDP and policy CS 14 of the Core Strategy require that developments be designed to minimise any negative impacts on the amenities of occupiers of adjoining properties.
- 7. There are residential properties on adjoining the side boundary at Cross Road, the rear boundary at Palmerston Grove and opposite the site at Southey Road. The other side boundary adjoins Wimbledon Fire Station and the rear of the Salvation Army barracks.
- 7.15 It is not considered that there would be any detrimental impact on the amenities of the occupiers of the adjoining and surrounding properties as a result of the proposed works. The use of the site would intensify and with a resultant increase in noise at certain hours of the day (morning and afternoon drop-off times in particular) and during play times, however these periods would be of relatively short duration. These increases in noise would also only occur during school hours and not at all at weekends, and it is not proposed to re-site the existing play areas, only to enhance and modernise the existing space, which itself mostly is located centrally within the site and adjoining the boundary shared with the Fire Station.
- 7.16 The boundary treatments would remain as existing aside from the installation of 1.8m and 1.5m high railing to parts of the front boundary, and 1.5m high railings and gate near the Palmerston Grove service entrance. These new railings are not considered to result in a detrimental impact on the outlook of the occupiers of the surrounding properties because they are not excessively high and are sited sufficiently far enough away from the nearest properties.
- 7.17 Any plant and machinery to be used within the proposed building and single storey front extension to the existing school building would be sound-proofed by condition and are considered would not generate any more noise than the use of the existing school buildings.

- 7.18 It is not considered that there would be a loss of outlook to the occupiers of the adjoining and surrounding properties as result of the proposed external alterations. The proposed extensions and alterations are not excessive in scale and relate to both the existing and retained buildings and the site surrounding in terms of scale and massing. The school has been extended in a piecemeal fashion over the years, and the proposed extensions and alterations would rationalise the site and greatly improve its appearance. This is particularly so through the removal of the existing temporary accommodation, whose use evolved as reaction to the need to provide additional accommodation relatively quickly as opposed to the being result of a more long-term plan for the entire site.
- 7.19 It is not considered that there would result any loss of privacy as a result of the proposed works, with satisfactory window to window separating distances. Both adjoining the site to one side and across from the site are 2-3 storey plus high residential blocks of flats.

7.20 Parking and Highway Implications

- 7.21 The site has a PTAL rating of 4 (good) and is located within a CPZ. The existing staff car park will be retained with 12 spaces. There will also be increased cycle parking provision on site and servicing and delivery arrangements are not expected to change.
- 7.22 The applicants advise that there is a current Travel Plan in place however since this relates to the current one form entry and will be updated for the two form entry proposal.
- 7.23 A transport assessment has been carried out by the applicant's consultants and the Council's Transport Officer has assessed the proposals and concluded that whilst there would be an increase in numbers of children being driven to and from the school, this will be off-set by the continued implementation of the school Travel Plan. These measures are likely to off-set any proportional increases in vehicle movements to the site, associated with the potential impact on the existing catchment area as a result of the increase in the number of pupils.
- 7.24 Sufficient car parking is available for use by parents and staff and therefore no additional car parking is recommended. A condition requiring additional Cycle parking is recommended be added to any approval to encourage sustainable forms of transport.
- 7.25 In light of the above, it is not considered that the proposed development would result in an undue burden on local parking or highways movements.

7.26 Trees and Landscaping

- 7.27 With the exception of a relatively small grassed area to the front of the site and the various existing trees, the site is predominantly hard landscaped. A tree survey has been undertaken and which notes that there are 28 trees and one hedgerow in total (of which 3 trees (no's T24 26) and one group of trees (G3) are located just outside the site) which could/will be affected by the proposed development. Four of the trees counted in the survey (T12 14 and T20) have already been removed as part of the enabling works for the extension, which leaves 21 trees to be considered.
- 7.28 There are 5 category 'A' trees (2 on site and 3 off site) and all are located along the Southey Road frontage. These trees are all identified as being of high quality and landscape value with long term potential. Trees T1(Common Lime) and T27 (Common Lime) are shown for retention. There are 7 category 'B' trees and the majority are identified as having moderate quality and landscape value and medium term potential. T2 (Weeping Willow), T7 (Paper Bark Birch), T9 (Horse Chestnut), and T10 (Himalayan Birch) are shown for removal.
- 7.29 There are 10 trees, 2 groups, and 1 hedgerow defined as category 'C' with moderate to low quality and landscape value and short term potential. Three of the trees and part of one hedgerow are shown for removal (T3 (Sumach), T8 (Paper Bark Birch), T28 (), and H1 (Leyland Cypress)). There are 2 category 'U' trees and a single group, all shown for removal.
- 7.30 Drawing SJA TPP 12135-02 shows the trees to be removed as part of the main contract works and which are to be protected and retained through the duration of the works.
- 7.31 This scheme would provide a number of positive benefits to the overall functioning of the school however would necessarily involve the removal of a large mature (category 'B') Willow tree within the middle of the playground.
- 7.32 This particular tree is notable in this instance because it is historic to the site and forms the basis of the School emblem, and applicant advises that the decision to remove this tree was for the following functional reasons:
 - An arboricultural survey indicated that it would be very difficult to locate
 a new building within the site of the size needed without encroaching
 on the root zones of the Willow tree and other high quality trees
 adjacent to Southey Road. Creating a thinner, more twisted plan to
 avoid the roots in question was considered but was not deemed to be
 feasible as it resulted in untenable class room shapes and overly
 circuitous corridors.
 - A long, rectangular plan would be more conducive to the creation of more practically shaped teaching and administration spaces. It would also allow the integration of straighter corridors which is desirable in a school environment to aid supervision. Basing the design so heavily around the position of a tree was not deemed to be prudent when

considering the likely lifespan of the building. If the willow tree was to die, the rationale behind the form of the building would be lost.

- There are logistical concerns regarding the proximity of the Willow tree to site traffic, scaffolding, drainage, and other external works.
- The retention of the Willow tree would severely restrict the optimization of useful play space within the playground.
- The retention of the Willow tree would result in the building having to be set much closer to the Southey Road boundary of the site, which would not be acceptable in streets scene and amenity terms.
- The proposed rectangular plan allows the structure of the building to be rationalised thus resulting in a more economic solution. The point at which the retention of a single tree becomes financially unviable is debatable, but clearly such a threshold must exist.
- Repositioning the extension away from the east of the site (and therefore the Willow tree) was not considered to be viable. There is not the space on the northern edge of the site, the western edge is bordered by two storey residential dwellings, and the southern side of the site is too far away from the existing school.
- 7.34 By way of compensation for the loss of the Willow tree, the applicant proposes to plant 15 new trees that will include the replacement of trees approved for removal under planning ref: 13/P1042 and the new trees include several native species which will enhance the wildlife value of the site. 3 trees will be planted along the boundary with Southey Road to provide increased amenity value to the street frontage and 6 native trees will be planted within the wildlife and habitat area. 6 trees will also be planted within the school play areas to provide colour, seasonal variation, and shade. Of these, 4 trees will be feature trees and planted as a large specimen. Shrub and herbaceous plants will provide seasonal interest and colour throughout the site and species will be selected which will enhance wildlife value and habitat provision.
- 7.35 The Council's Tree Officer has assessed the scheme and raises no objections subject to conditions in respect of the submitted tree survey, tree protection, landscaping, and site supervision being added to any approval.

7.36 **Disabled Access**

The new extension would include ramp and stair accesses and a lift is proposed, therefore there will be full access to the new building and also the first floor of the adjoining existing building which will be linked to the new extension.

8 SUSTAINABILITY AND ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENTS

- 8.1 The proposal does not constitute Schedule 1 or Schedule 2 development. Accordingly there is no requirement for an EIA submission.
- 8.2 The building has been design to achieve a BREEAM rating of 'Very Good'.

9. **CONCLUSION**

9.1 The proposed three storey building and associated works to the school grounds are necessary to meet demand for additional school places within the borough. This proposal is acceptable in policy terms and design terms, and would not result in a detrimental impact on the visual amenities of the street scene, the residential amenities of the occupiers of adjoining and surrounding properties, or on traffic and parking circumstances within the locality of the site.

A landscaping has also been submitted which is considered will adequately compensate for the loss of the mature Willow tree and enhance the site above existing.

RECOMMENDATION

GRANT PLANNING PERMISSION

Subject to the following conditions and informatives:-

- 1. A1 Commencement of Development (full application)
- 2. A7 Plan Numbers
- 3. B1 External Materials to be Approved
- 4. B5 Details of Boundary Treatments
- 5. C6 Refuse and Recycling
- 6. C7 Refuse and Recycling Implementation
- 7. C8 No Use of Flat Roof
- 8. D5 Soundproofing and Plant and Machinery
- 9. D6 Kitchen Ventilation Extract Systems
- 10. D.10 External Lighting Sited to Avoid Light Spillage
- 11. D11 Construction Times
- 12. E5 New Building for School Use Only

- 13. F4 Approved Tree Survey
- 14. F5P Tree Protection
- 15. F8 Site Supervision (Trees)
- 16. Non Standard Condition: Landscaping: The soft landscaping shown on the approved planting plan drawing ref: '1254/LP/301 Rev.C' shall be planted in accordance with the approved details. The approved works shall be carried out prior to the occupation of any part of the development, or within the first available planting season, whichever is the sooner, and any trees which with a period of 5 years from the time of planting die, are removed or become seriously damaged or diseased or are dying shall be replaced in the next planting season with others of the same specification, unless the LPA gives written consent to any variation.

Reason: To enhance the appearance of the development in the interest of the amenities of the area and to comply with policy CS13 of the Adopted Merton Core Planning Strategy 2011.

- 17. Non Standard Condition: Tree pits: No development shall commence until details of the proposed design, materials and method of construction of the tree pits located in the tarmac and synthetic grass areas shall be submitted to and approved in writing by the LPA and the work shall be carried out in accordance with the approved details. Reason; To protect the long term health of the new trees to be planted and to protect the surface play areas, and to enhance the appearance of the development in the interest of the amenities of the area and to comply with policy CS13 of the AMCPS 2011.
- 18. F9 Hardstandings
- 19. H6 Cycle Parking (Details to be Submitted)
- 21. H7 Cycle Parking (Implementation)
- 22. H12 Delivery and Servicing Plan to be Submitted
- 23. H13 Construction Logistics Plan to be Submitted (Major Development)
- 24. Non Standard Condition: The car parking spaces as shown on the approved drawing to serve the development shall be provided before occupation of the uses hereby permitted and thereafter shall be kept free from obstruction and shall be retained for parking purposes for users of the development and for no other purpose, unless otherwise agreed with the Local Planning Authority.

Reason: To ensure the provision of a satisfactory level of parking and

- to ensure compliance with policy CS20 of the Adopted Merton Core Planning Strategy 2011.
- 25. Non-standard Condition Within 6 months of first use of the school expansion hereby permitted, a School Travel Plan shall be submitted to and approved in writing by the Local Planning Authority. The Plan shall follow the current 'School Travel Plan Guidance' issued by TfL and shall include:
 - i) Targets for sustainable travel arrangements;
 - ii) Effective measures for the ongoing monitoring of the Plan;
 - iii) A commitment to delivering the Plan objectives for a period of at least 5 years; and
 - iv) Effective mechanisms to achieve the objectives of the Plan by both present and future occupiers of the extension.

The Travel Plan shall be updated and submitted to and approved in writing by the Local Planning Authority and TfL on a yearly basis and the development shall be implemented only in accordance with the approved Travel Plan.

Reason: To promote sustainable travel measures and comply with policies CS18, CS19 and CS20 of the Adopted Merton Core Planning Strategy 20111.

- 26. L6P BREEAM (Pre-Commencement) ('Good' rating)
- 27. L7 BREEAM Pre-Occupation
- 28. M2 Contaminated Land

Informatives:

- 1. Note to Applicant 1
- You are advised of the necessity to consult the Council's Highways team prior to the commencement of construction in order to obtain necessary approvals and licences prior to undertaking any works within the Public Highway including Scaffolding, Temporary/Permanent Crossovers, Oversailing/Undersailing of the Highway, Drainage/Sewer Connections, Hoarding, Excavations (including excavations adjacent to the highway such as basements, etc), Temporary Full/Part Road Closures, Craneage Licences etc.
- 3. It is current Council policy for the Council's contractor to construct new vehicular accesses and to reinstate the footway across redundant accesses. The developer is to contact the Council's Highways team, prior to the commencement of construction, to arrange for any such work to be done. If the developer wishes to undertake this work the Council will require a deposit and the developer will need to cover all

the Council's costs (including supervision of the works). If the works are of a significant nature, a Section 278 Agreement (Highways Act 1980) will be required and the works must be carried out to the Council's specification.

- 4. INF12 (Works Affecting Public Highway)
- 5. INF19 (Kitchen Ventilation Extract Systems)

Reason for Approval:

The proposed development is acceptable in policy terms and design terms, and would not result in a detrimental impact on the visual amenities of the street scene, the residential amenities of the occupiers of adjoining and surrounding properties, or on traffic and parking circumstances within the locality of the site.

The policies listed below were relevant to the determination of this proposal:

Adopted Merton Unitary Development Plan (October 2003)

The relevant policies contained within the Adopted Merton Unitary Development Plan (October 2003) are:

L.11 (The Protection of Existing Facilities and Land)

C.14 (Non Council Schools/Other Educational Facilities)

BE.15 (New Buildings and Extensions; Daylight, Sunlight, Privacy, Visual Intrusion and Noise)

BE.16 (Urban Design),

BE.22 (Design of New Development),

BE.15 (New Buildings and Extensions; Daylight, Sunlight, Privacy, Visual Intrusion and Noise),

BE.22 (Design of New Developments)

E.2 (Access for disabled people)

PE.2 (Pollution and Amenity)

PE.3 (Light Pollution)

Adopted Merton Core Strategy (July 2011):

CS 11 (Infrastructure)

CS 13 (Open Space, Nature Conservation, Leisure and Culture)

CS 14 (Design)

CS 15 (Climate Change)

CS 18 (Active Transport)

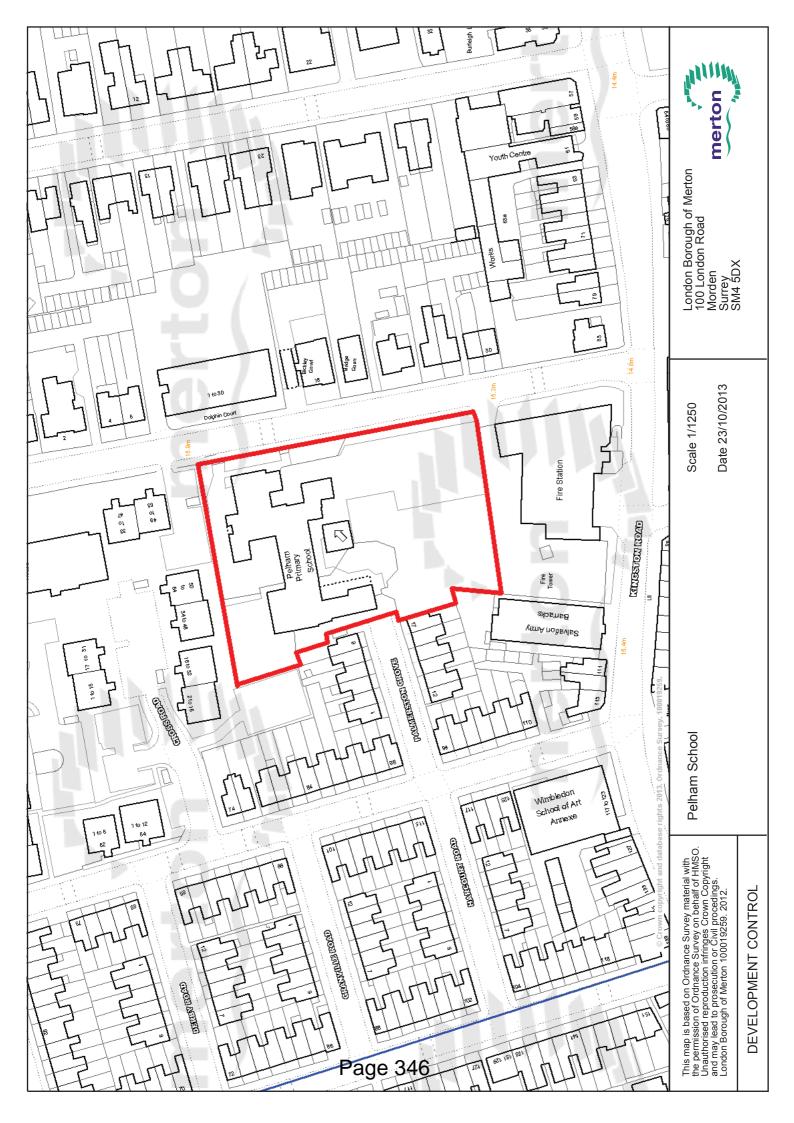
CS 19 (Public Transport)

CS 20 (Parking, Servicing and Delivery)

London Plan 2011:

- 3.18 (Education Facilities)
- 5.2 (Minimising Carbon Dioxide Emissions)
- 5.3 (Sustainable Design and Construction)
- 5.7 (Renewable Energy)
- 7.2 (An Inclusive Environment)
- 7.4 (Local Character)

National Planning Policy Framework (March 2012)



REV	DATE	BY	CHCK	APPR	DESCRIPTION



Site Boundary



London Borough of Merton

JOB TITLE:

Pelham Primary School

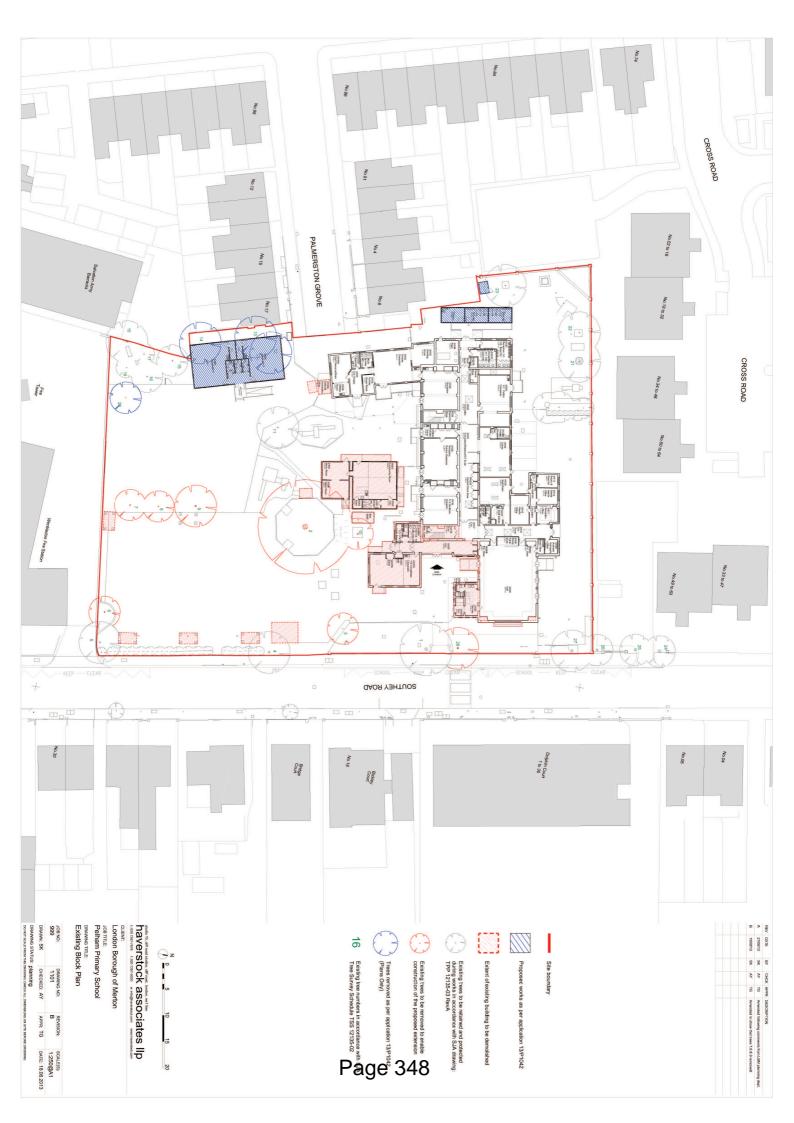
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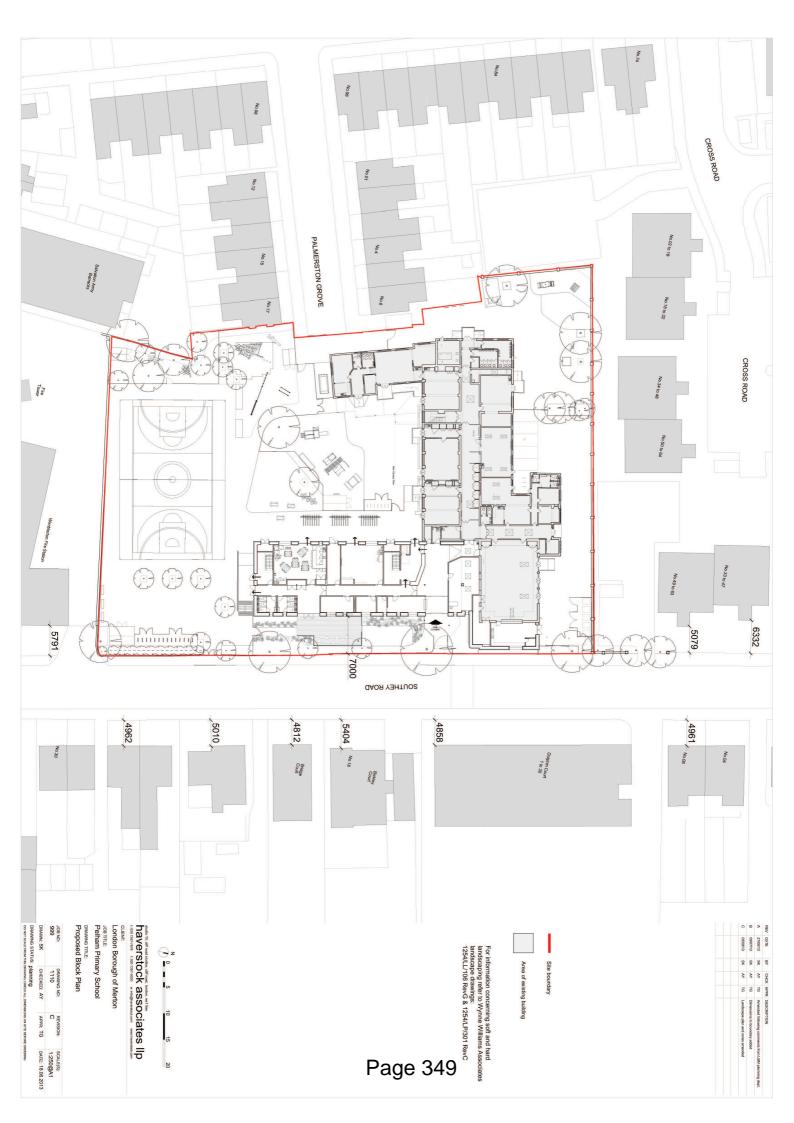
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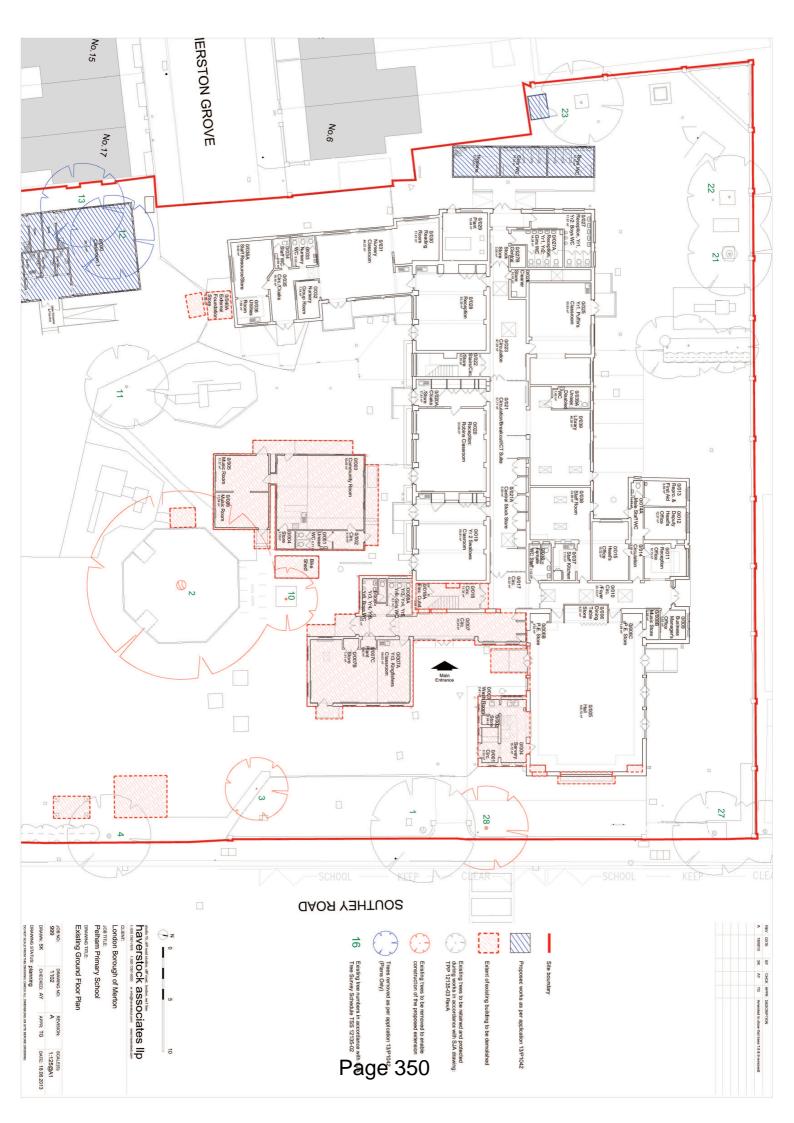
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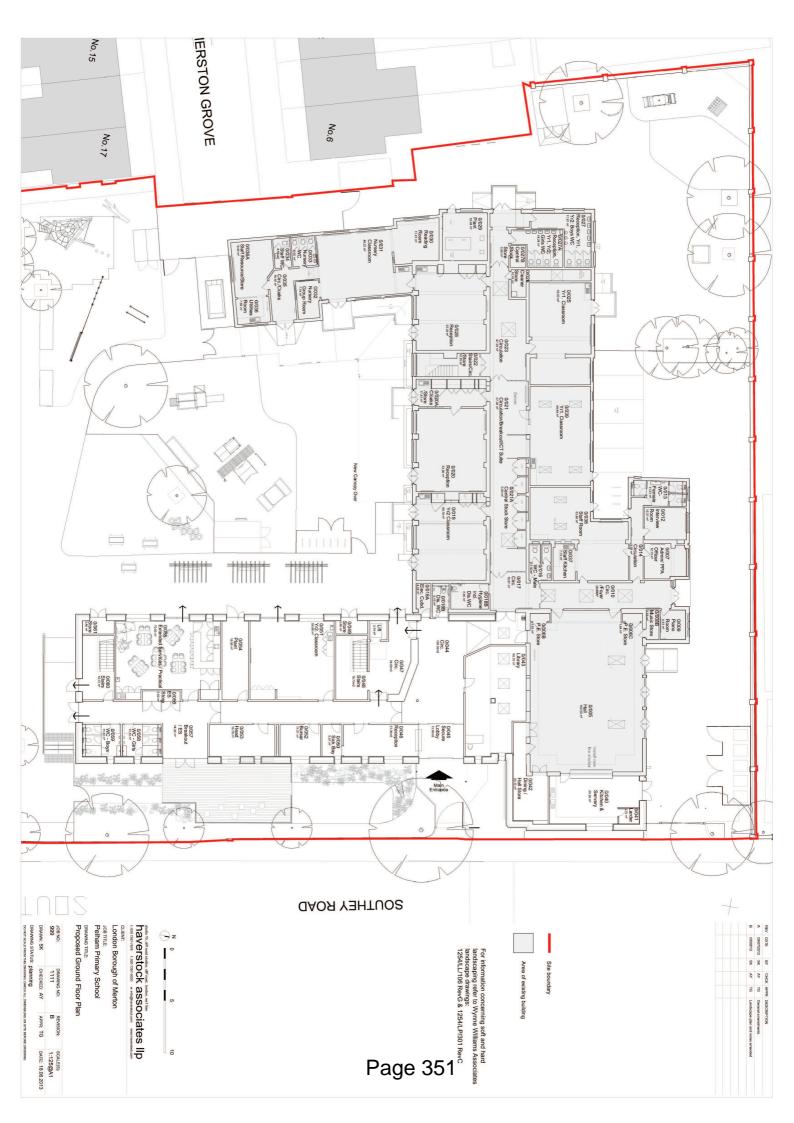
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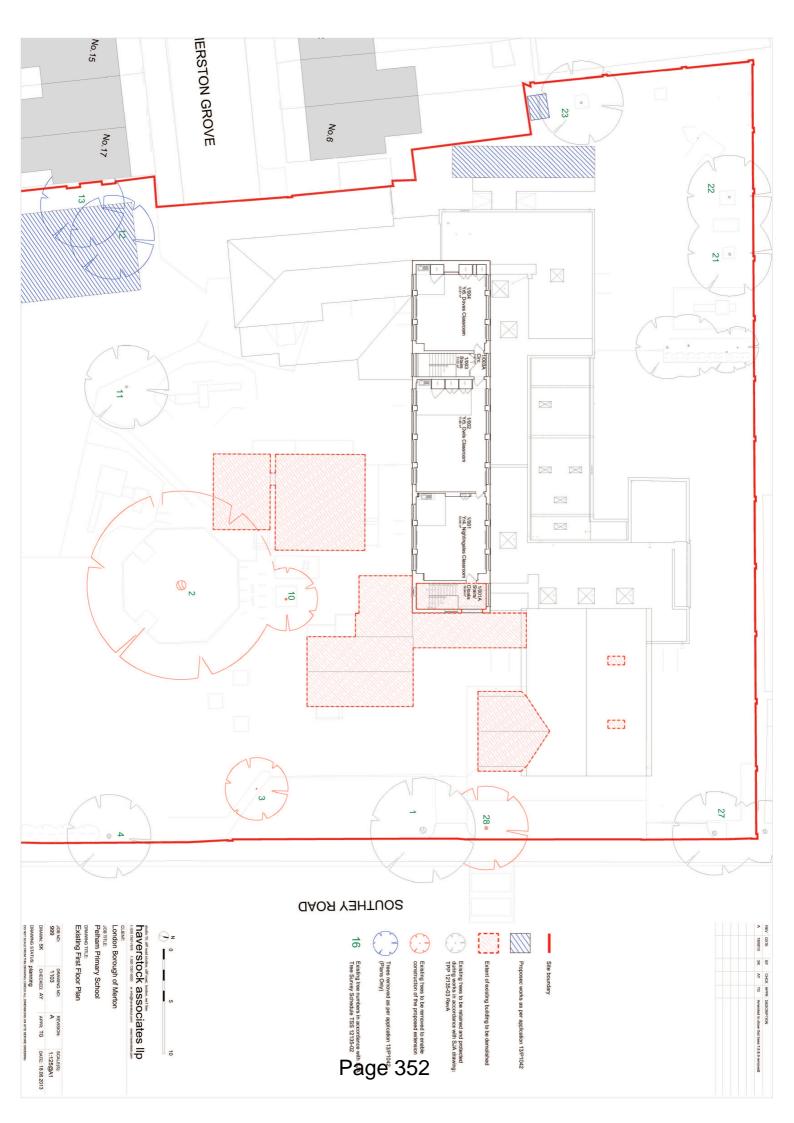
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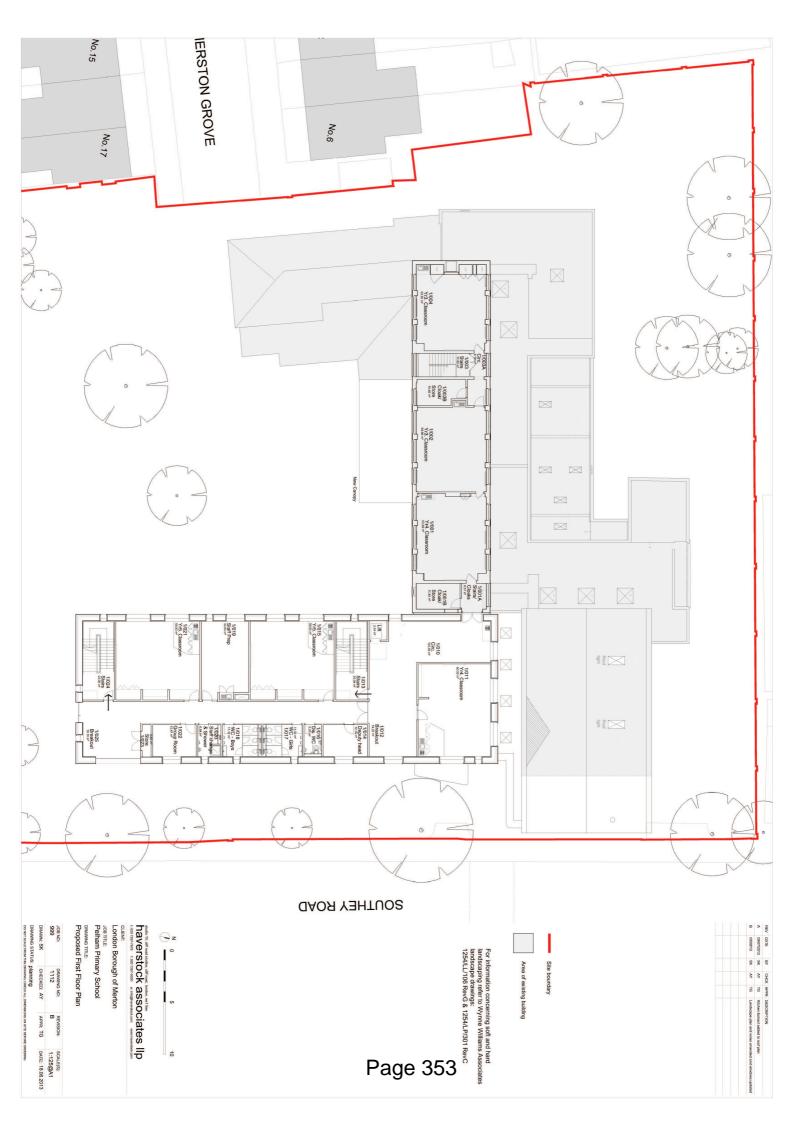


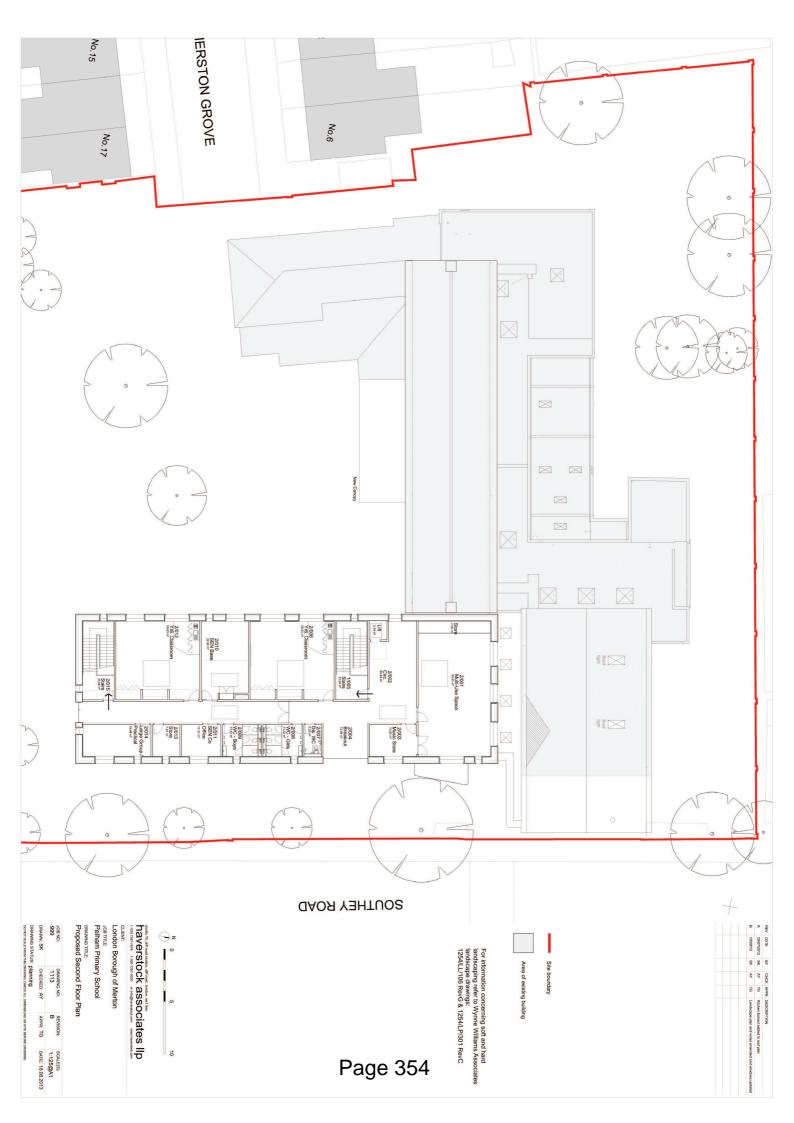


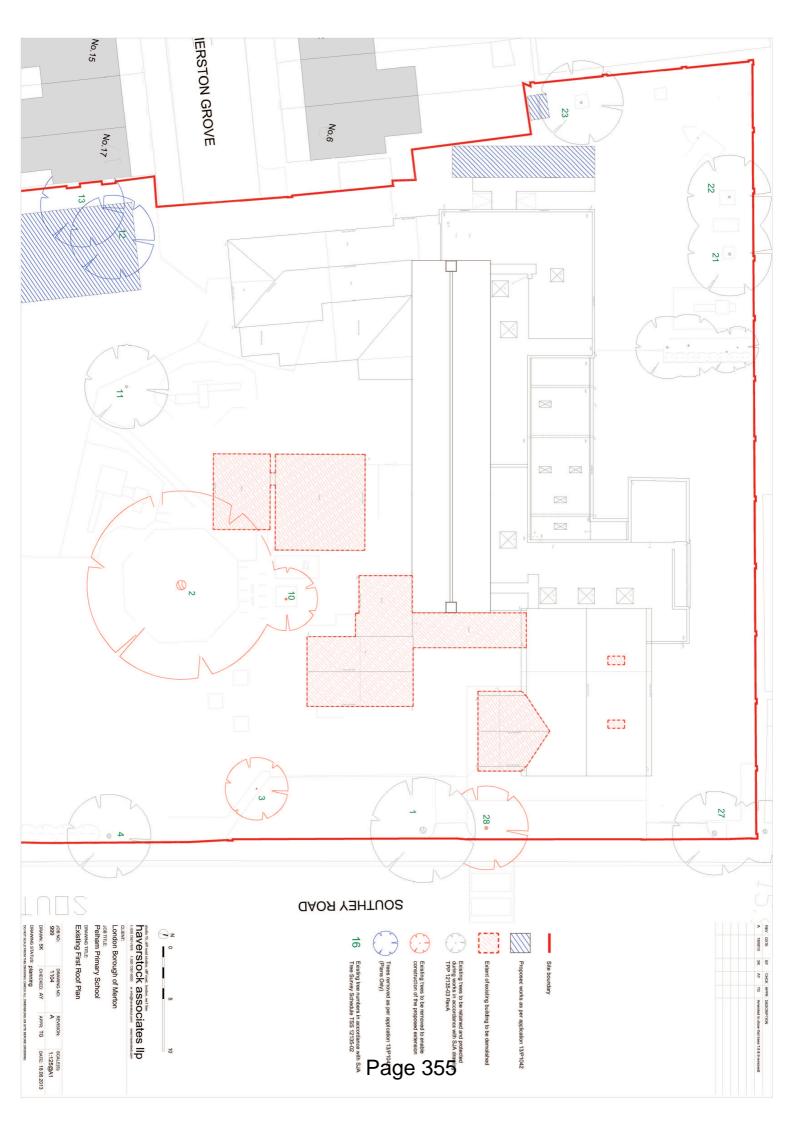


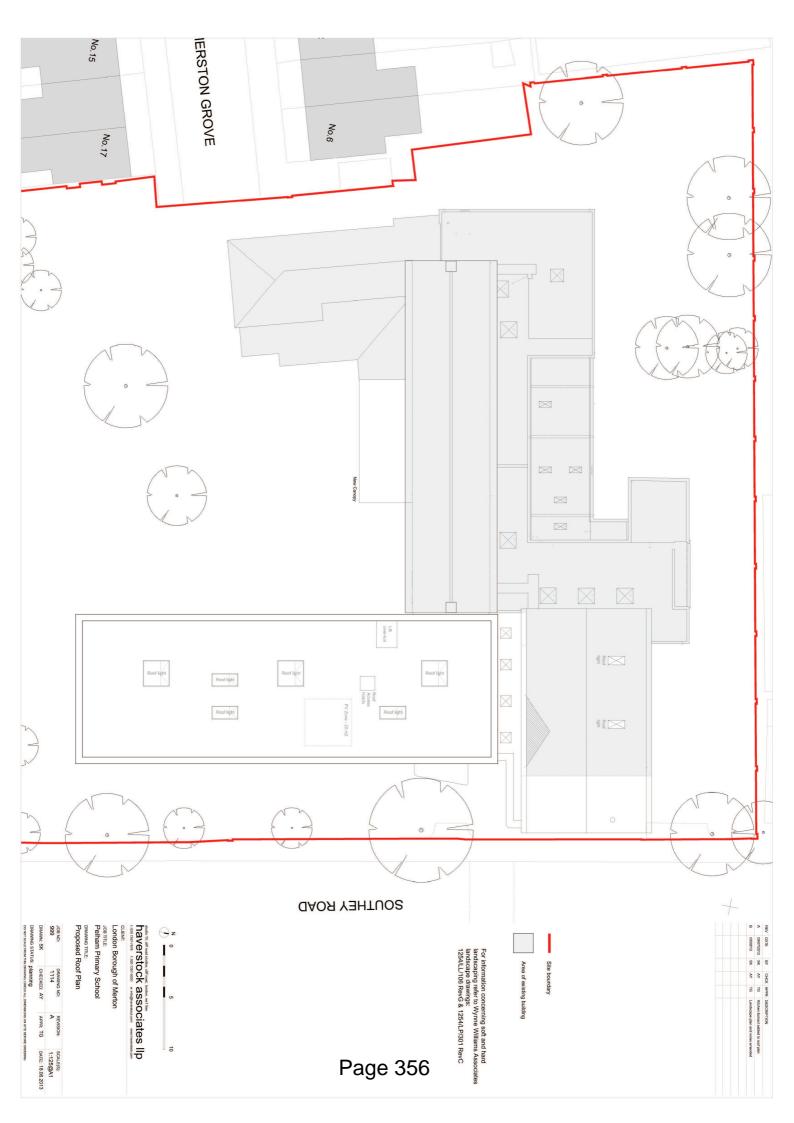


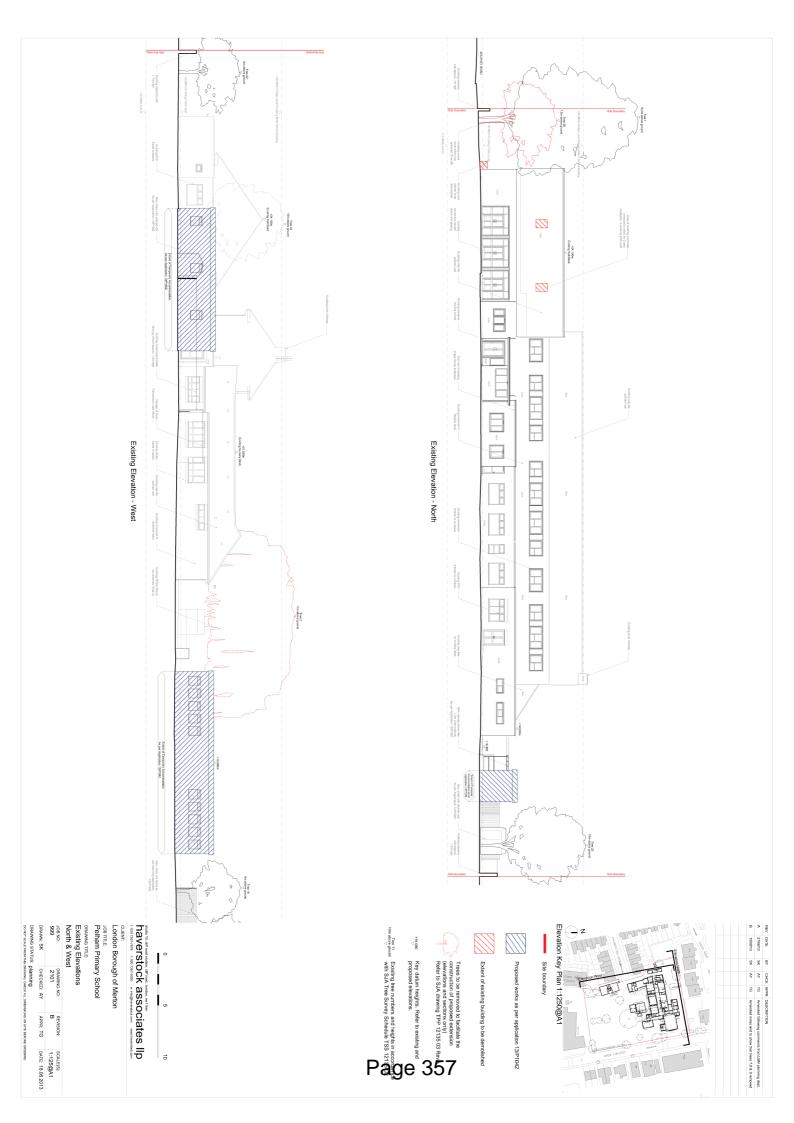


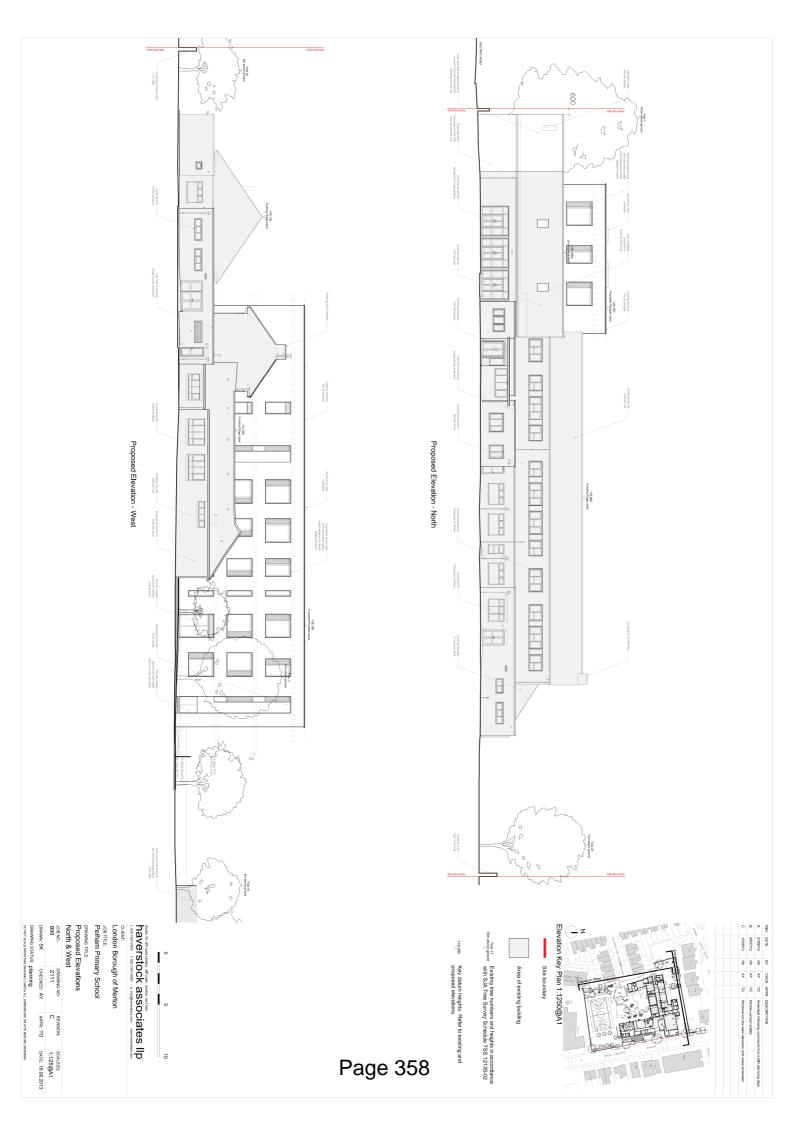




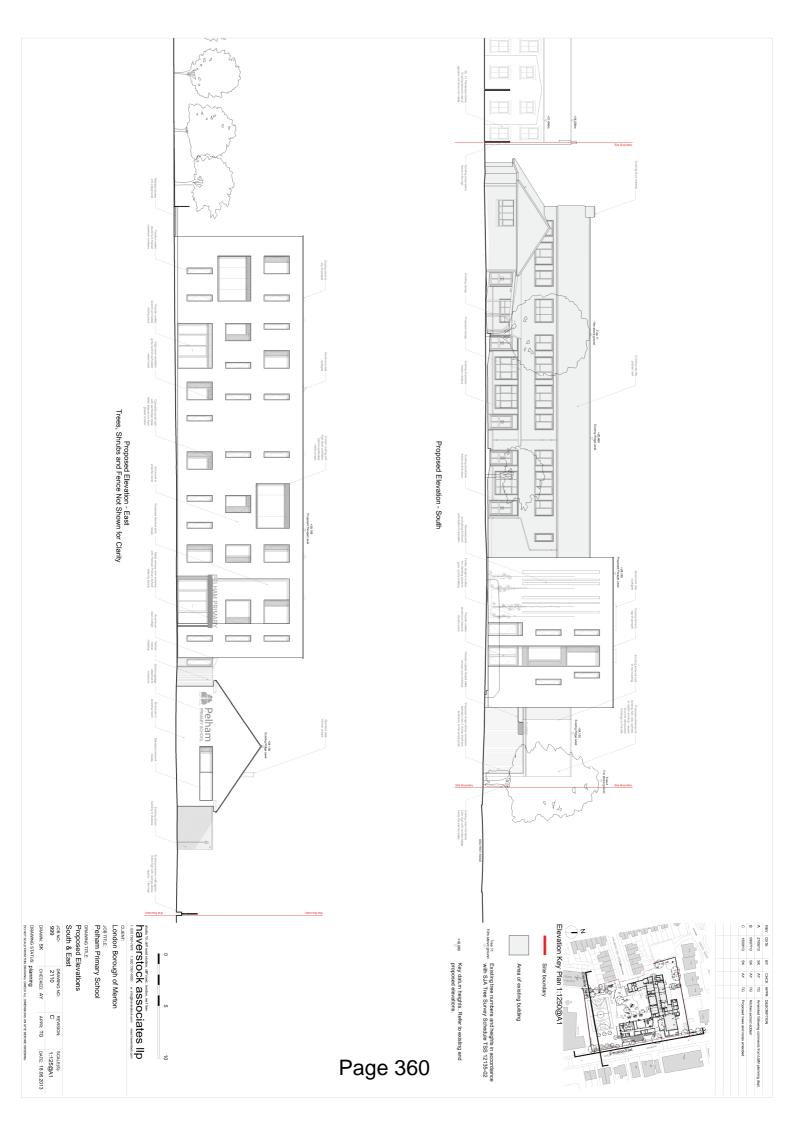


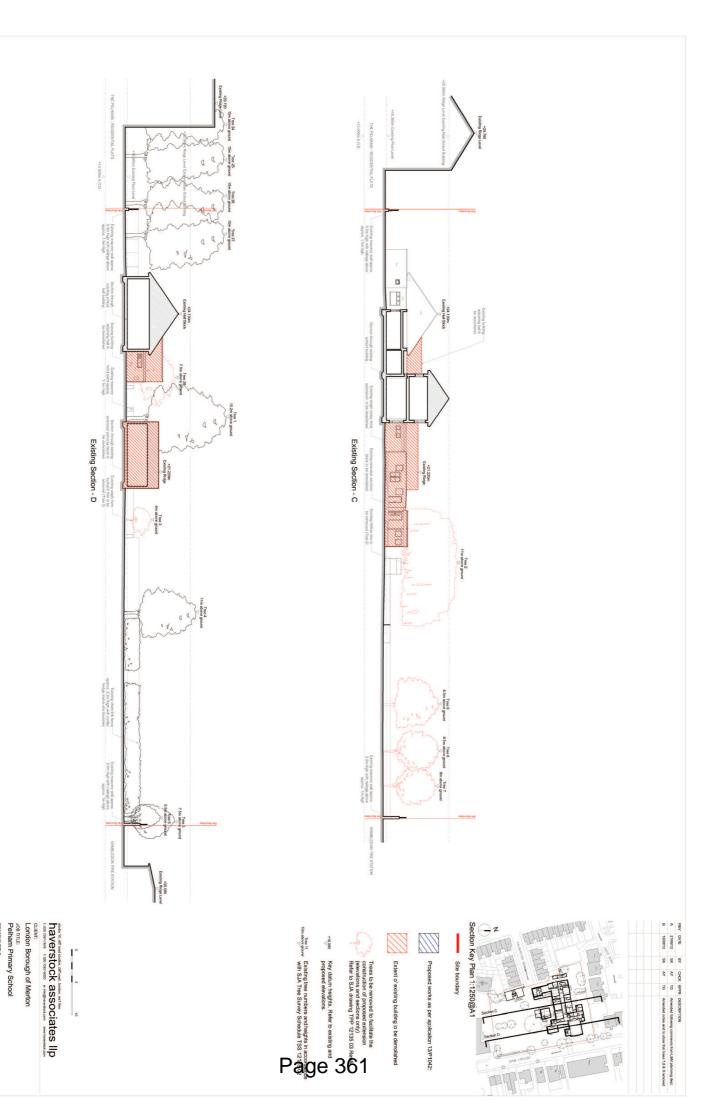












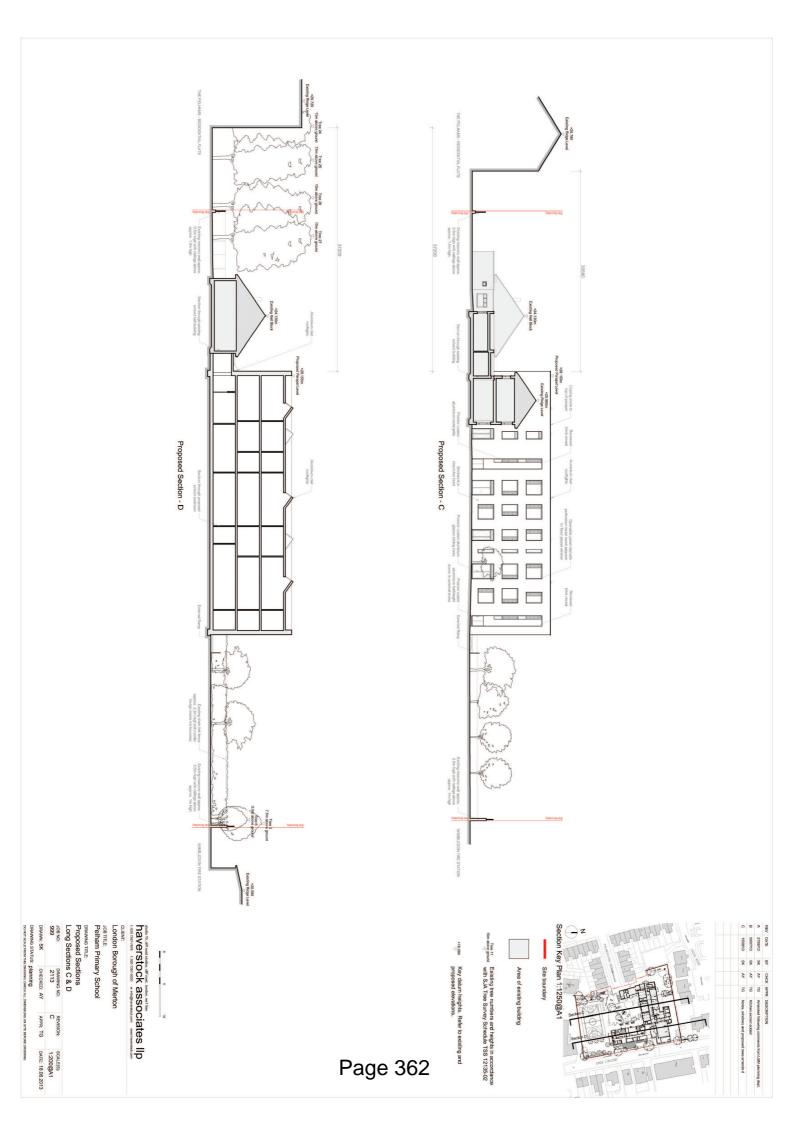
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Long Sections C & D

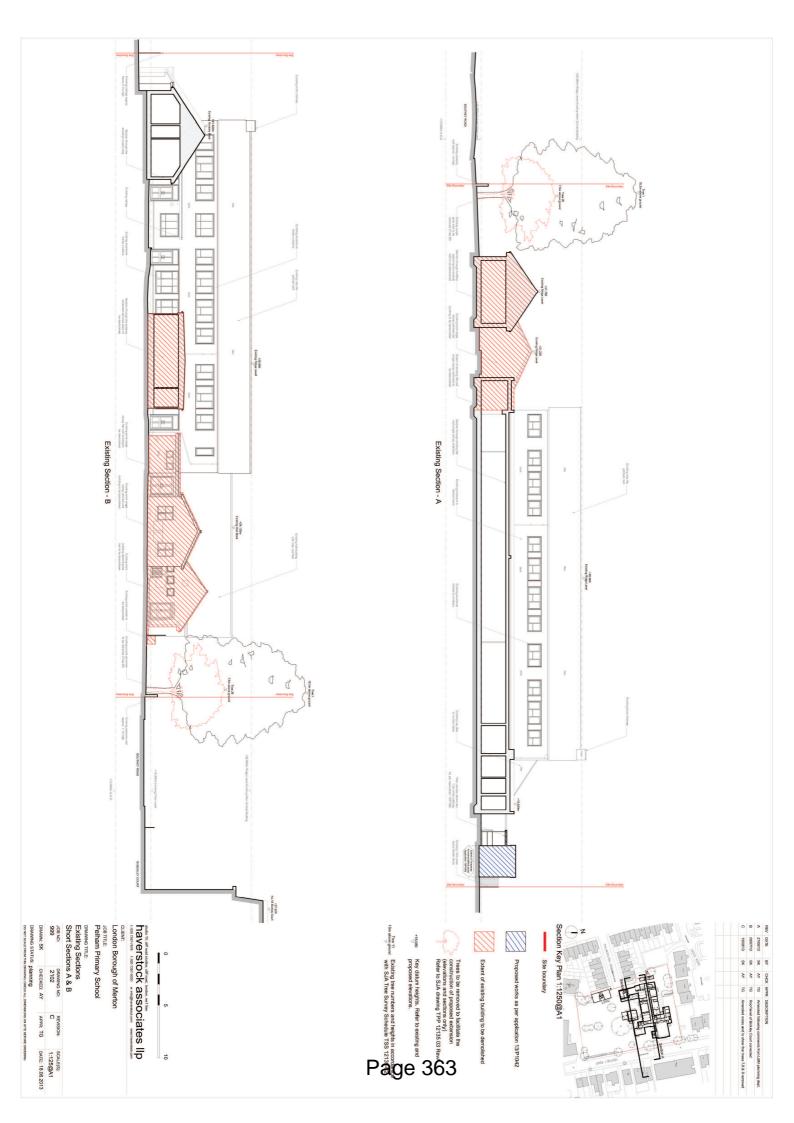
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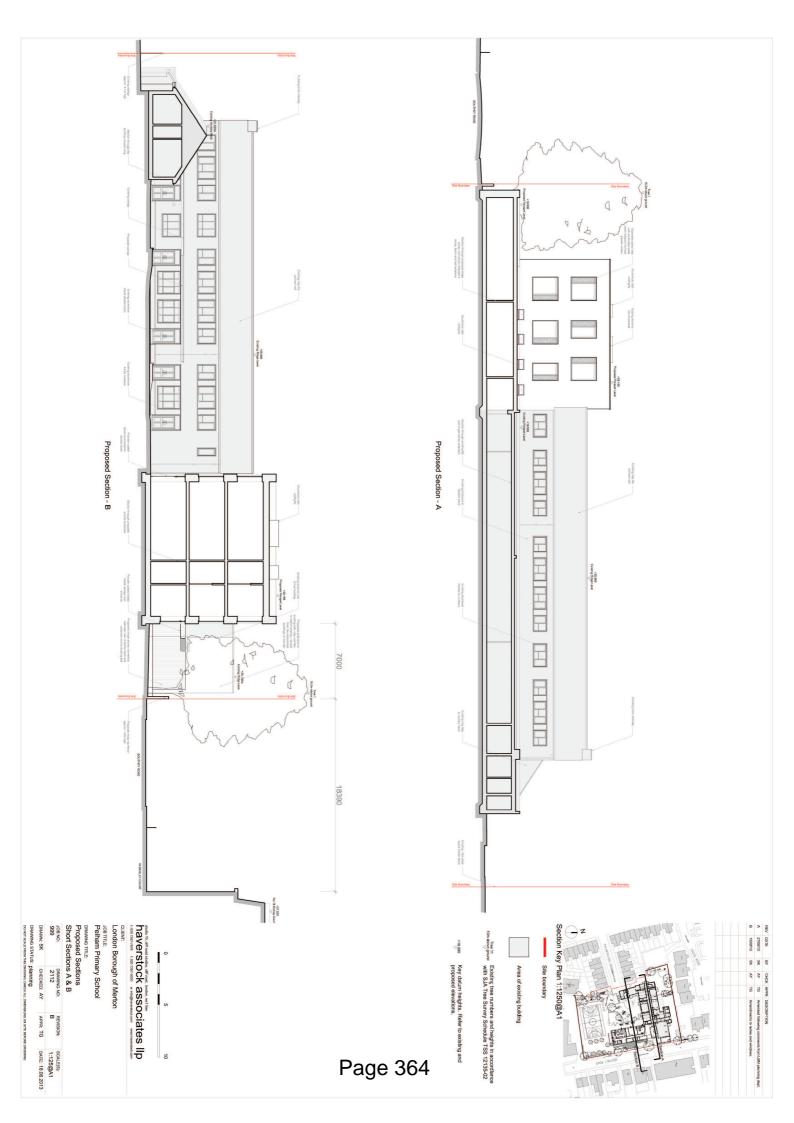
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APPR: TG

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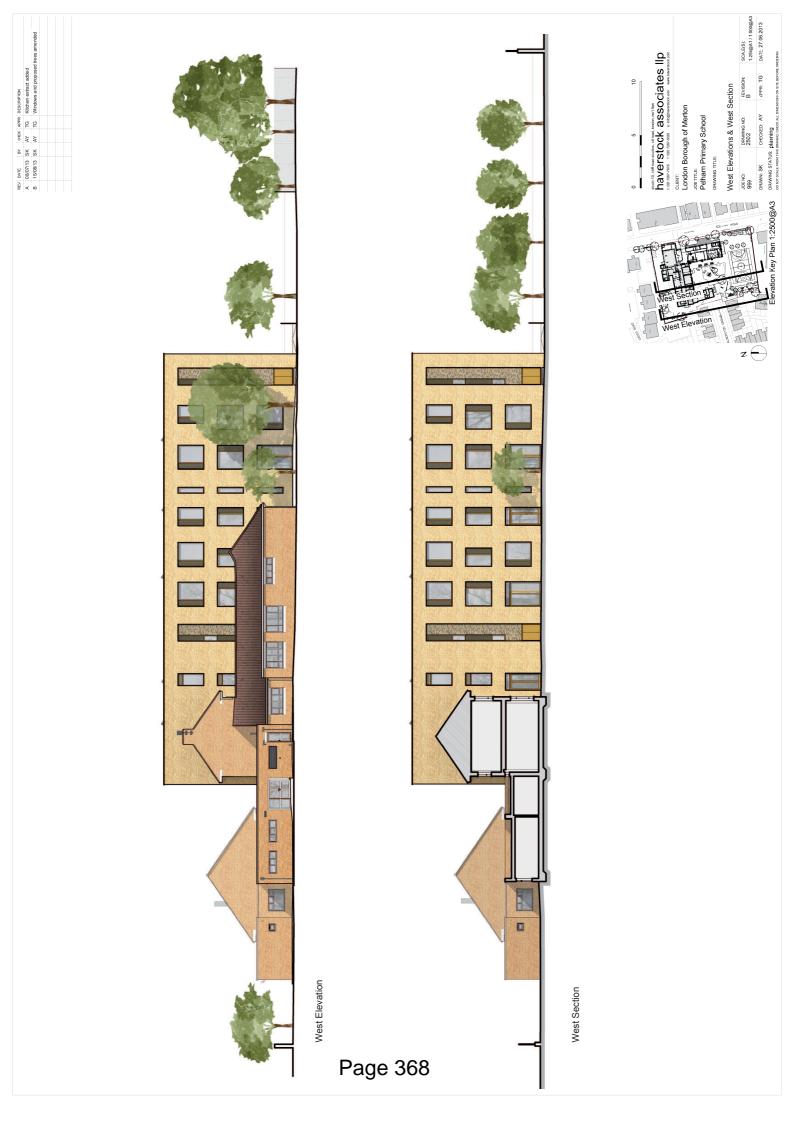




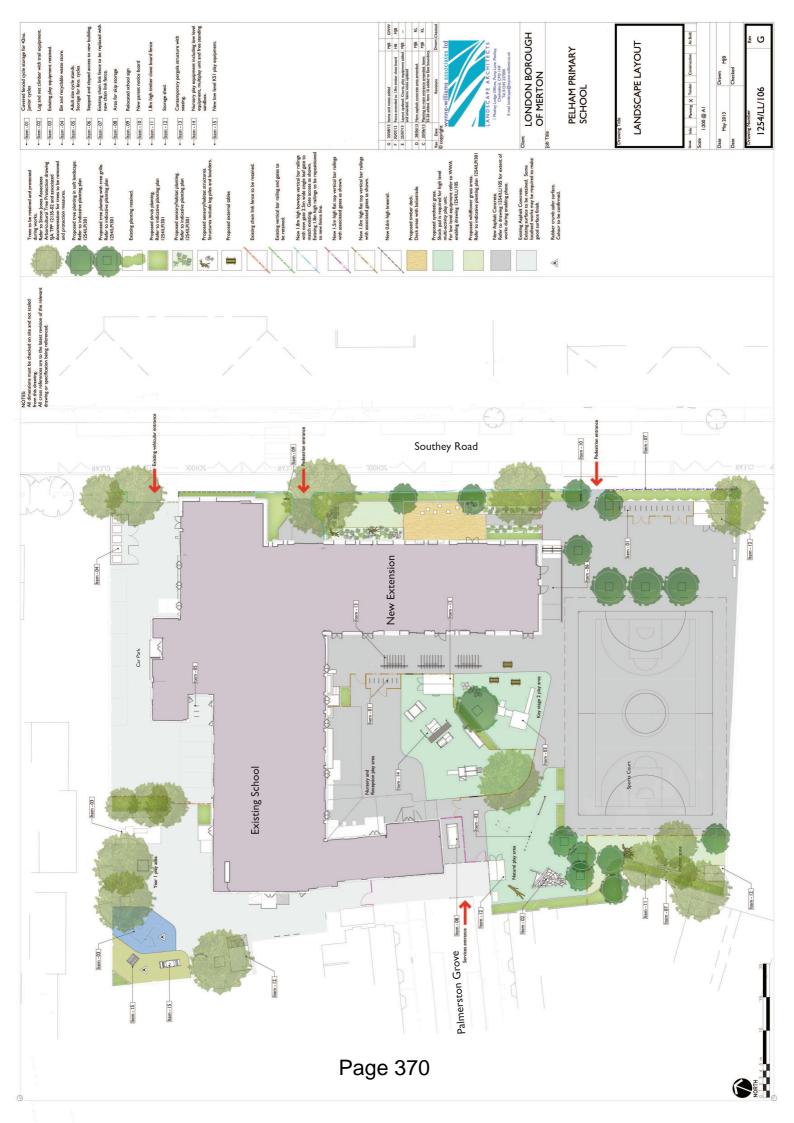












Pelham Primary School – Proposed Extension

BREEAM UK 2011: Non-domestic Buildings

Appendix 1 Appendices 3 - 8

Appendix 1 Report Verification

Appendix 1: Section B2 – Report Verification

If the appointed ecologist does not meet the requirements of a Suitably Qualified Ecologist, the report must be verified by an individual who does meet these requirements. Otherwise the ecology report cannot be used in the Code assessment.

1. The person who verifies the report must provide written confirmation that they meet the requirements of a Suitably Qualified Ecologist in accordance with Section B1.

Suitably Qualified Ecologist - Dr David W Smith.

Do you hold a degree (or equivalent qualification, e.g. N/SVQ level 5) in ecology or related subject?

Yes

If Yes, please provide details

First class honours degree in Ecology (BSc) awarded by the University of East Anglia and PhD awarded by the University of Reading.

Are you a practising ecologist with a minimum of 3 years relevant experience within the last 5 years?

Relevant experience must clearly demonstrate a practical understanding of factors affecting ecology in relation to construction and the built environment and will include acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures, e.g. ecological impact assessments.

Yes

If Yes, please provide details:...

2003 – 2006 PhD at the University of Reading – research focused on habitats and management that enhanced the value of land for birds and orthoptera.

April 2007 – June 2009: Consultant ecologist and business owner of DWS Ecology. Completed various survey and mitigation work.

June 2009 – present: Senior Ecologist between 2009 and July 2012, then Principal Ecologist since July 2012. Work includes habitat surveys, protected species surveys, designing mitigation, completing reports for planning (including EcIA) and making recommendations to improve the ecological value of habitats.

I have been undertaking Code for Sustainable Homes & BREEAM assessments since 2009. In 2012, published an article on how these schemes can be used to deliver benefits for species of conservation priority in urban environments.

Are you bound by a professional code of conduct and subject to peer review*?

A full member of one of the following organisations will be deemed suitable: Chartered Institution of Water and Environmental Management (CIWEM); Institute of Ecology and Environmental Management (IEEM); Institute of Environmental Management and Assessment (IEMA); Landscape Institute (LI).

Yes

If Yes, please provide details:

*Peer review is defined as the process employed by a professional body to demonstrate that potential or current full members maintain a standard of knowledge and experience required to ensure compliance with a code of conduct and professional ethics.

Full member of IEEM

Report Verification

- I, Dr David W Smith, confirm that I comply with the definition of a Suitably Qualified Ecologist (as detailed above). I confirm that I have read and reviewed the report and find it to:
- represent sound industry practice
- report and recommend correctly, truthfully, and objectively
- be appropriate given the local site conditions and scope of works proposed
- avoid invalid, biased, and exaggerated statements.

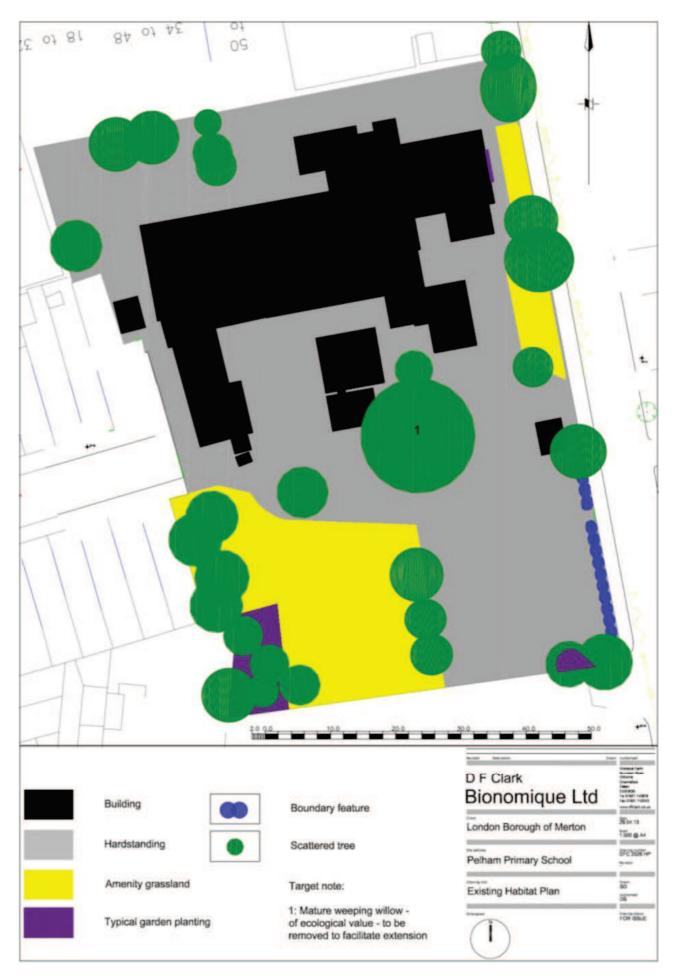
I confirm that the information provided in this document is truthful and accurate at the time of completion.

Name of ecologist: Dr David W Smith

Signature of ecologist:

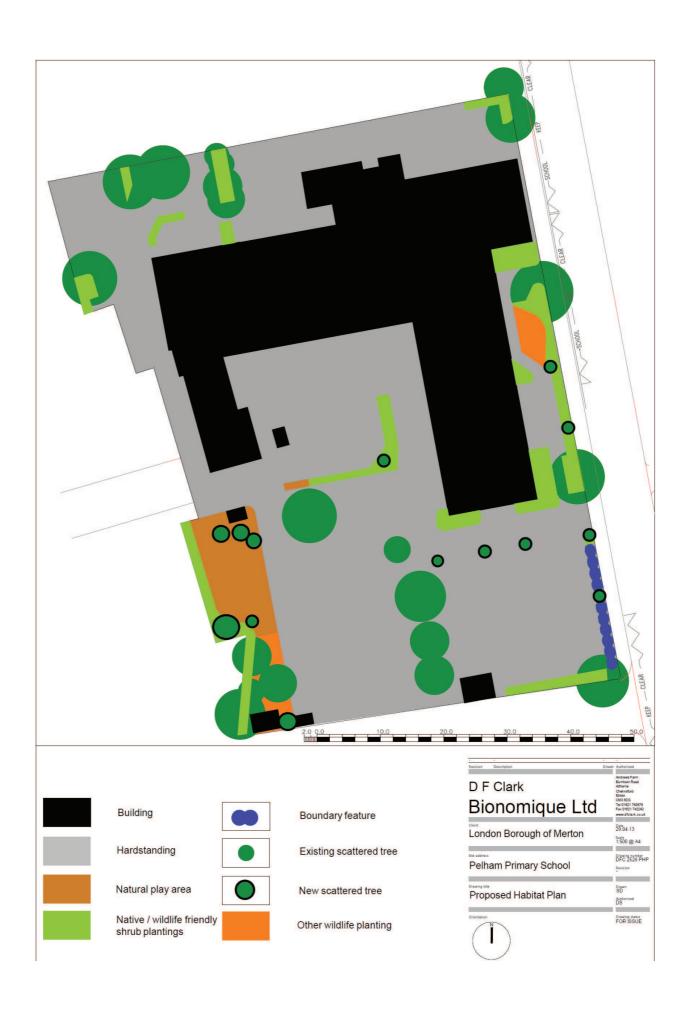
Date 01/05/2013

Appendix 3 Existing Habitat Plan



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Appendix 4 Proposed Habitat Plan



Appendix 5

Pelham Primary School – Proposed Extension

MANAGEMENT PLAN

April 2013

The aim of this management plan is to:
 Provide mixed species shrub plantings to benefit invertebrates and birds Provide flowers to benefit invertebrate pollinators Enhance the aesthetic value of the site
The mix of habitats will help invertebrates and birds such as dunnock and song thrush. Some of these species have been identified as species of principle importance by the NERC Act 2006.
This management plan may be subject to review in the future if required as new information is presented regarding site layout and subsequent management actions.

Year after completion	·		Completed	
1	As soon as construction is complete	Appoint someone who will ensure that the management plan is implemented		
1	As soon as construction is complete	Install one external house sparrow box, and one external robin bird box on the new building and two bird boxes on trees in the 'habitat area' as per the recommendations made under section LE 04 of the 'Pelham Primary School. BREEAM 2011 Ecology Report'		
1	Nov - March	Plant 350-360m² of native shrub species in the locations shown on drawing '1254/LL/103 Rev C', here attached under 'Appendix 3: Plan of Proposed Development' of the Ecological Survey Report (the report itself can be found in the separate Appendix 2 document). Plant in weed free soil and incorporate a suitable compost. Mulch with wood chip after planting. Maintain a weeding regime to ensure establishment.		
1	September (or alternatively, Spring of Year 2)	Plant 15m² of 'dry river', 15m² of 'grass with wildflower seeding' and 70m² of 'habitat area' with native or non-invasive wildlifebeneficial plant species in the locations shown on drawing '1254/LL/103 Rev C', here included under 'Appendix 3: Plan of Proposed Development' of the Ecological Survey Report. Plantings should be as per the numbers of species specified under section LE 03 of the 'Pelham Primary School. BREEAM 2011 Ecology Report' and as per the species list included under Appendix 8 of this document.		
1	As soon as construction stops	Create two stag beetle loggeries, one within the native shrub plantings and one within the 'habitat area', as per the guidance set out in Appendix 8		
1	As soon as construction stops	Install an insect house within the 'habitat area'		
1	As soon as construction stops	Optional: Plant green walls wherever possible, as per the recommendations made in the Ecological Survey Report (the report can be found in Appendix 2 of the document 'Appendices 1 – 8. DFCP 2526. Pelham Primary School extension')		
2	January	Prune on-site trees and shrubs if necessary		
2	April - September	Remove weeds from shrub plantings		
2	Mid Aug – end September	Mow area of 'grass with wildflower seeding'		
3	Mid Aug – end September	Mow area of 'grass with wildflower seeding'		
3	January	Mulch shrub plantings		
4	January	Prune on-site trees and shrubs if necessary		
5	Mid Aug – end September	Mow area of 'grass with wildflower seeding'		

Appendix 6: Additional text for Ecologist's Report to BREEAM:

Text for 'Section C: Site Survey' Box 1/1

Recommendations for LE 04: Enhancing Site Ecology

Text for 'Section C: Site Survey' box 1/1:

An Extended Phase 1 Habitat Survey was carried out at Pelham Primary School on the 17th April 2013 by two experienced ecologists from DF Clark Bionomique Ltd.

This survey aimed to:

- -Accurately assess and record the existing habitats on site;
- -Highlight any potential protected species presence and make recommendations for further surveys where appropriate;
- -Identify any statutory or designated sites within the zone of influence of the proposed development;
- -Summarise the overall ecological value of the site, which must now be considered as part of the planning process.

The survey was carried out in April, an optimal time of year for botanical identification which is generally considered to be from April – October. The survey was undertaken prior to the commencement of initial site preparation works.

Text for 'LE 04: Enhancing Site Ecology' box 1/1:

- All planting on site should use native species or those non-invasive non-native species with
 a recognised value to local wildlife. Planting should include shrubberies, a habitat area, a
 natural play area, an area of grass with wildflower seeding, and, where possible, green walls
 should be investigated;
- The adoption of horticultural good practice (e.g. low, or no, use of residual pesticides);
- Provide one house sparrow box on the exterior of the new construction. Facing east, located beneath the eaves of buildings, and out of reach of windows;
- Provide one robin bird box on the north face of the new construction, out of reach from the ground and windows;
- Provide two bird boxes on the north face of mature trees within the 'habitat area';
- Create one stag beetle pile amongst the native shrub planting and one stag beetle pile within the 'habitat area'. Use dead wood as per the guidance provided in 'Creating a stag-beetle loggery' in Appendix 8.
- Include an insect house within 'habitat area', to provide over-wintering sites for beneficial insects such as lady birds and lacewings;
- Use a mulch of wood chip in and around shrub plantings. Top the mulch up every 3-5 years.

Appendix 7

Pelham Primary School – Proposed Extension

Information Necessary to Gain Additional Credits for Section LE 05

April 2013

Two additional criteria for section LE 05 will need to be met to achieve one credit. Four or more additional criteria will need to be met to achieve two credits.

Potentially applicable additional criteria to this project are 5, 6, 7, 9 and 10.

- 5. The principal contractor nominates a 'Biodiversity Champion' with the authority to influence site activities and ensure that detrimental impacts on site biodiversity are minimised in line with the recommendations of a suitably qualified ecologist.
- 6. The principal contractor trains the site workforce on how to protect site ecology during the project. Specific training must be carried out for the entire site workforce to ensure they are aware of how to avoid damaging site ecology during operations on site. Training should be based on the findings and recommendations for protection of ecological features highlighted within a report prepared by a suitably qualified ecologist.
- 7. The principal contractor records actions taken to protect biodiversity and monitor their effectiveness throughout key stages of the construction process. The requirement commits the principal contractor to make such records available where publicly requested.
- 8. Where a new ecologically valuable habitat, appropriate to the local area, is created. This includes habitat that supports nationally, regionally or locally important biodiversity, and/or which is nationally, regionally or locally important itself; including any habitat listed in the UK Biodiversity Action Plan (UK BAP)¹, Local Biodiversity Action Plan (LBAP), those protected within statutory sites (e.g. SSSIs), or those within non-statutory sites identified in local plans.
- 9. Where flora and/or fauna habitats exist on site, the contractor programmes site works to minimise disturbance to wildlife. For example, site preparation, ground works, and landscaping have been, or will be, scheduled at an appropriate time of year to minimise disturbance to wildlife. Timing of works may have a significant impact on, for example, breeding birds, flowering plants, seed germination, amphibians etc. Actions such as phased clearance of vegetation may help to mitigate ecological impacts. This additional requirement will be achieved where a clear plan has been produced detailing how activities will be timed to avoid any impact on site biodiversity in line with the recommendations of a suitably qualified ecologist.

Additionally for Education building types only (criterion 10.)

- 10. A partnership has been set up by the design team with a local group that has wildlife expertise (e.g. local wildlife trust or similar local body) and the group has:
 - a. Provided advice early in the design process regarding protecting and/or providing habitat for species of local importance on the site.
 - b. Provided advice to ensure the design is in keeping with the local environment. In particular this should draw on their local knowledge of any features or species of ecological interest on or near the site.
 - c. Provided or will continue to provide ongoing support and advice to the educational establishment to help them manage, maintain and develop the outdoor space in the longer term.

(Taken from BREEAM New Construction: Non-domestic Buildings Technical Manual SD5073 - 3.1: 2011).

- 1) Nomination of a Biodiversity Champion who's duties may include making sure that:
 - Vegetation clearance is carried out between October and February inclusive, or that an ecologist has checked suitable nesting habitats and declared that no nests are present
 - Ensuring the landscaping is implemented in accordance with the agreed drawings.
 - Ensure tree protection measures are carried out in accordance with all relevant guidance in BS5837 2005 'Trees in relation to construction' and as detailed in section LE 02 of 'Pelham Primary School. BREEAM 2011 Ecology Report'.
- 2) And, training of site workers on how to protect site ecology. This would include the protection of trees and ensuring workers are aware of the possible presence of nesting birds within the hedges and trees between March and September. The talk should also highlight that where there is doubt about a particular ecological issue, the biodiversity champion should be contacted.

NOTE: It will be necessary to keep records of these actions having taken place in order to show the BREEAM Assessor should this credit be achieved.

NOTE: A suggested form to be signed by site personnel after training is provided below. This would provide evidence to the BREEAM assessor that requirements of LE 05 have been met.

Site Biodiversity Champion (name):
All of the undersigned confirm that they have been informed of all of the issues detailed
above and will comply with all measures to protect flora and fauna on site

Name	Position	Signed	Date

...etc

Legal notes:

Nesting birds and their nests are protected under the Wildlife and Countryside Act 1981 (as amended). Vegetation clearance should be undertaken during the period October to February (inclusive) to avoid the bird nesting season. If this is not possible, prior to commencement an onsite a check for nesting birds should be undertaken by a suitably qualified ecologist.

Appendix 8 Habitat Creation Guidance Wildlife-friendly Plant Species – Examples Stag Beetle Loggery Creation - Method

PLANTING LIST - SPECIES OF BENEFIT TO WILDLIFE

All of the plants recommended below are of recognized benefit to wildlife. This may be via the production of nectar for insects, berries and seeds for birds and mammals, foliage to support a range of insects, early flowering to provide an early source of nectar for insects, or provision of nesting, roosting and overwintering cover for a range of wildlife.

Further species to those listed below can be found on Natural England's Gardening with Wildlife in Mind website, at http://www.plantpress.com/wildlife/search.php.

Native wildflower mixes (if applicable) can also provide a large number of additional species and can be found for a variety of meadow soils as well as woodland glades, woodland edges, hedgerows and ponds. The species listed in such mixes can also be used separately within any planting scheme.

Trees and shrubs

Acer campestre - Field maple

Alnus glutinosa – Alder

Amelanchier lamarkii - Juneberry

Aucuba japonica – Spotted laurel

Berberis spp.

Betula pendula 'Tristis' or 'Purpurea' - Silver birch

Betula pubescens - Downy birch

Buddleia spp.

Buxus sempervirens - Box

Calluna vulgaris - Heather

Caryopteris clandonensis – Blue spiraea

Castanea sativa – Sweet chestnut

Carpinus betulus - Hornbeam

Ceanothus spp.

Chaenomeles spp. - Quince

Cotinus coggygria – Smoke bush

Cotoneaster spp.

Cornus sanguinea - Dogwood

Corylus avellana - Hazel, including 'Contorta' and 'Pendula'

Crataegus monogyna - Hawthorn - this species only flowers and fruits on old growth, so should

preferably be considered for planting as a tree *Crataegus oxyacantha* – Midland hawthorn

Cytisus scoparius - Broom

Daphne odora - Daphne

Daphne laureola – Spurge laurel

Daphne mezereum - Mezereon

Elaeagnus macrophylla – Broadleaved oleaster

Elaeagnus umbellate - Spreading oleaster

Erica cinerea - Bell heather

Erica tetralix - Cross leaved heather

Escallonia macrantha - Escallonia

Euonymus europaeus - Spindle

Euonymus fortune – Winter creeper

Fagus sylvatica - Beech

Forsythia suspensa

Frangula alnus – Alder buckthorn

Fuchsia magellancia - Fuchsia

Hebe spp.

Helichrysum italicum – Shrubby helichrysum

Hydrangea spp. - Hydrangea

Hypericum androsaemum - Tutsan

Hypericum calycinum – St John's Wort

Hyssopus officinalis - Hyssop

Ilex aquifolium 'J C van Tol' or 'Pyramidalis' - Holly

Juniperus communis - Juniper

Larix decidua – European Larch

Lavandula spp. – Lavender

Ligustrum vulgare and not the commonly available L. ovalifolium - Privet

Liriodendron - Magnolia

Mahonia aquilfolium - Barberry

Mahonia x media 'Charity'

Malus domestica - Apple

Malus 'Golden Hornet', 'John Dowie', 'Profusion' – Crab apple

Olearia macrodonta – New Zealand Holly

Olearia haastii - Daisy bush

Philadelphus coronarius - Mock orange

Picea abies - Norway spruce

Pinus sylvestris - Scots pine

Populus alba – White poplar

Populus nigra - Black poplar

Populus tremula - Aspen

Potentilla fruticosa – Shrubby cinquefoil

Prunus avium - Wild cherry

Prunus domestica – Wild plum

Prunus padas - Bird cherry

Prunus persica - Peach

Prunus spinosa - Blackthorn

Pyracantha 'Orange Glow', P.rogersiana

Pyrus communis - Pear

Pyrus pyraster – Wild pear

Pyrus salicifolia 'Pendula'

Quercus spp. - Oaks

Ribes spp.

Rhamnus catharticus - Buckthorn

Rosa rugosa, R. arvensis, R. pimpinellifolia, R. spinosissima, R. rubiginosa, R.moyesii, R.idaeus

Rosemarinus officinalis - Rosemary

Rubus loganobaccus - Loganberry

Salix caprea, S.cinerea, S.fragilis, S.pentandra - Willows

Sambucus nigra - Elder

Senecio greyi – Shrubby ragwort

Skimmia japonica - Skimmia

Sorbus aucuparia 'Fastigiata', 'Beissneri', 'Pendula' - Rowan

Sorbus aria - Whitebeam, inc. 'Lutescens'

Sorbus torminalis - Wild Service Tree

Spiraea arguta – Bridal wreath

Symphoricarpus albus - Snowberry

Syringa vulgaris - Lilac

Taxus baccata - Yew

Tilia europaea - Lime

Ulex europaeus - Gorse

Ulmus procera - English Elm

Ulmus hollandica – Dutch Elm

Ulmus glabra - Wych Elm

Viburnum lantana, V.x bodnantense 'Dawn', V.tinus, V.opulus or for smaller gardens V.compactum

Weigela florida - Weigela

Bulbs

Bulbs can be planted amongst shrubs, or in beds beneath trees, where they provide an early source of pollen and nectar, and early colour for gardens. *Anemone nemorosa, Crocus tommasinianus, Narcissus pseudonarcissus, Eranthis hyemalis, Convallaria majalis, Ranunculus ficaria, Fritillaria melegris, Allium ursinum* and *Galanthus nivalis* are all suitable, and if blue-bells *Hyancinthoides nonscripta* are to be planted, they must be sourced from a reputable supplier of the native, English species.

Climbers

Walls and fences provide a surface upon which a variety of plants can thrive, and provide alternative habitat for roosting, nesting and feeding. The species highlighted below are native or recommended by wildlife organizations. Some are evergreen, and will cover an unsightly wall or fence, softening the appearance of a new development.

Clematis montana, C.alpina, C.macropetala, C.tangutica, C.vitalba, C.viticella Hedera helix (and varieties) - Ivy
Humulus lupulus 'Aureus' — Golden hop
Hydrangea petiolaris - Hydrangea
Jasminum officinale — Common jasmine
Lathyrus latifolius — Everlasting pea
Lonicera periclymenum - Honeysuckle
Lonicera japonica - Honeysuckle
Parthenocissus quinquefolia — Virginia creeper
Parthenocissus henryana — Chinese Virginia creeper
Parthenocissus tricuspidata - Boston ivy
Solanum dulcamara — Woody nightshade inc. 'Variegata'
Wisteria floribunda — Japanese wisteria

Herbaceous plants

Achillea (improved varieties) - Yarrow Alyssum saxatile - Rockery alyssum Aruncus dioicus - Goats beard Aster spp. Aubretia Bergenia cordifolia – Elephant's ears Calendula spp. Centaurea montana - Corn flower Centranthus ruber – Valerian Convolvulus minor Dipsacus fullonum - Teasel Dianthus barbatus - Sweet william Echinops ritro – globe thistle Erysimum - Wallflower Helichrysum spp. *Heliotropium x hybridum* – Heliotrope Hesperis matronalis – Dame's violet *Iberis spp* – Candytuft Liatris spicata - Gayfeather Lavatera rosea - Mallow Limnanthes douglasii - Pouched egg plant Linaria vulgaris – Toadflax Lythrum salicaria - Purple loosestrife Malva moschata - Musk mallow Nepeta cataria - Cat mint

Nemophila – baby blue eyes Nicotiana affinis – Tobacco plant *Origanum vulgare* – Wild marjoram Petunia spp. Phacelia tanacetifolia - Scorpion weed Primula spp. Potentilla erecta - Tormentil Polyanthus spp. Pulmonaria spp. Rudbeckia hirta 'Marmalade' - Coneflower Sedum spectabile - Ice plant Solidago virgaurea - Goldenrod Stachys officinalis - Betony *Trollius europaeus* – Globe flower Tropaelumm majus - Nasturtium Valeriana officinalis - Common Valerian Verbena spp.

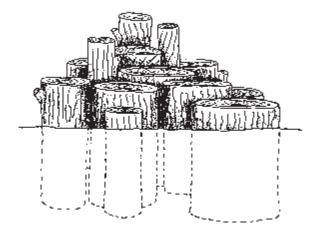
Ground cover plants

Aubretia Ajuga reptans - bugle Bergenia cordifolia – Elephant's ears Brunnera macrophylla - Brunnera Cornus canadensis – Creeping dogwood Erica carnea - Winter flowering heather Geranium spp. Helianthemum spp. Lamium maculatum - Deadnettle Lysimachia nummularia – Creeping jenny Nepeta x mussinii – Cat mint Polygonum affine, P.bistorta – Knot weed Rubus tricolor – Creeping bramble Sedum acre – Stone crop Thymus spp. Vinca minor - Periwinkle Waldsteinia ternata - Waldsteinia

[Taken from: 'Stag Beetle: An advice note for it's conservation in London', produced by English Nature (now Natural England) and London Wildlife Trust]:

Creating a stag beetle loggery

Loggery



Large logs (10-50cm diameter) of hardwood (e.g. oak, beech, sycamore, ash) with bark still attached sunk c60cm into the ground, in partially shaded areas.