APPENDIX 4: City of London comments (Chief) officer comments

RICHARD CLOUDESLEY SCHOOL SITE City planning application ref:17/00770/FULL CHIEF PLANNING OFFICER INITIAL COMMENTS TO LBI

<u>Context</u>

The below provides the initial evaluation of the Chief Planning Officer of the City of London and does not take account of Members' views It is an initial officer view only. It is subject to any further consultation responses and views provided by LBI prior to a decision being taken Any decision whether or not to grant planning permission will be taken by the City's Planning and Transportation Committee.

Site Location and Current Buildings

- 1. The 0.4 hectare site is currently occupied by predominantly single storey buildings comprising the former Richard Cloudesley School, garages, the City of London Community Education Centre and a sub-station. The majority of the site falls within the London Borough of Islington and a small part of the site falls within the City of London.
- 2. The current site comprises a single-storey low-slung building with surrounding tall boundary walls. To the south and west is the Golden Lane Estate: an arrangement of 4-6 storey blocks enclosing generous, open and spacious landscapes comprising a series of raised circulation routes and sunken open spaces of various character. The whole pivots off a central tower, Great Arthur House, which is 16 storeys anchors the surrounding townscape. Further to the south on Golden Lane, south of Fann Street, is a new residential scheme, the Jewin Welsh Chapel and 12-storey Cripplegate House before the scale of development steps up to the composition of Barbican podium and towers on the skyline. In Islington, to the north and east, is a more disparate modern townscape of tall towers and medium-rise residential blocks and the School of Fashion.
- 3. The site has a Public Transport Accessibility Level (PTAL) of 6a (Excellent).

Proposals

4. The architectural concept is for a new podium tower comprising a distinct brick-clad 'base' and rising tower element enclosing an open school yard running through the spine of the site, providing a mix of sport/recreational play space, which is also enclosed by a 1.5 storey school hall and an 'L'-shaped school/nursery building in the north/west corner of the site.

5. On Golden Lane, the 4-storey podium would comprise the school entrance, workspace and the residential lobby at ground floor level with residential above over 3-storeys. The tower element would be over 13 storeys, approx. 35m wide x 46m tall x 16m deep. The proposed school hall would be in the south west corner of the site (approximately 32m long x 3.5m/5.5m tall x 14m wide). In the north-west corner would be a building comprising a school/nursery in an 'L'-shaped plan form with the main body fronting the proposed play area 16m tall x 13.5m deep x 45m long and with play space at roof level.

Cross boundary Application

6. The majority of the site is in the London Borough of Islington. A singmall part is within the City's. Therefore, in accordance with the required procedure for cross-boundary applications, the applicant has submitted two duplicate planning applications, one to each local planning authority. Leading Counsel's advice has been obtained on the proper approach to be taken by the City as local planning authority in consider the application. The proper approach is for each authority to determine the whole application, in accordance with the considerations below. (However, the permission issued by the City will only be granted insofar as it relates to land in the City).

Consultations

- 7. The views of other City of London departments have been taken into account in considering the amended scheme and detailed matters will be covered under conditions and the Section 106 agreement.
- 8. The application has been advertised in the press and a site notice was put up around the site, and statutory and non-statutory bodies were consulted.
- 9. The London Borough of Islington has not commented on the application. The Islington Application will be determined by the London Borough of Islington by their Planning Committee on 1st March 2018 and the Officers report and the minutes of that meeting will be made available to the members of the City of London's Planning and Transportation Committee when it is determined by them at their meeting of 26th March 2018. If necessary the evaluation will be updated to take account of LB Islington's evaluation of the application and any further comments received.
- 10. The Twentieth Century Society object to the application on the grounds that they do not consider that the benefits outweigh the harm caused. "Although we recognise that the proposed scheme will provide public benefit it is our consideration that this will be seriously undermined by what is a clear overdevelopment of the site in question. There is great potential for a less massive, less dense development that would cause less or no harm to the

adjacent listed buildings, and that would provide a better quality of space for the new users and the existing Golden Lane Estate residents".

- 11. Save Britain's Heritage object on the grounds that "the proposals will have a harmful and detrimental impact on adjacent and surrounding heritage assets, notably the Grade II* and Grade II listed Golden Lane Estate".
- 12. Heritage England have responded by forwarding the pre-application advice they provided to the applicant. The summary of this advice is as follows: "Whilst I do not object in principle to a taller building on this site, it will clearly impact on the designated heritage assets on the Golden Lane Estate and neighbouring streets within the conservation area. These impacts should be fully explored as part of the design process in order to understand, and where possible mitigate against, any harmful impacts. This is particularly important where the proposal is of a similar height to Great Arthur House. Exceeding the height of the listed tower would require a high level of justification and require further scrutiny to assess its acceptability in principle. The design quality of any proposals on this site will be key and whilst it should not seek to replicate the listed buildings, it is, in my view, important that it seeks to respond to it and reflect this in its design as far as possible".
- 13. There have been four rounds of formal consultation in relation to the:
- 1. Original application;
- 2. Amended application;
- 3. Amended application with corrections; and
- 4. Amendments to the ground floor of the residential block to include a basement and affordable workspace on the ground floor.
- 14. To date a total of 151 representations have been received across the three rounds of consultations objecting to the application. The issues raised are as follows:

Торіс	Objection
The principle of residential development	 Insufficient number of social housing units proposed Is there demand for key worker housing considering the closures of accommodation Lack of family homes Loss of caretaker's house is loss of housing The City is undertaking 'social cleansing' Failure to achieve mixed communities
The principle of the	No need for school

provision of a school and the loss of the Adult	 School is too big for the site Site should be used as a Further
Education Centre	
	Education Collage for children from Richard Cloudesley School
	 School hall should be at the front of the
	site for b theetter public access
	 School hall is not a beneficial resource
	to the local area. Already have a
	community hall
	Community Education Centre will not be
	replaced
Design: Height, Bulk,	Unsympathetic to the listed Golden
Massing, Form, Architectural	Lane Estate and other heritage assets
Expression, Urban Grain,	 The proposal is not assessed against
Streetscene and	the Golden Lane Estate Listed Building
Landscaping, and impact on	Management Guidelines in the
Heritage Assets	application
	The east side of the Golden Lane Estate
	is designed to allow views into the
	estate. The proposal should follow this
	principle. The proposal blocks views into
	estate
	Overdevelopment/ Too dense
	Outside Islington's tall buildings area
	 Height and bulk is out of proportion with
	the surrounding buildings
	Harm to views across the estate
	 Misleading CGIs - show tower with white forced a but the details state that it would
	façade but the details state that it would be coloured
	 Historic England are considering listing
	the garages and workshops that are to
	be demolished
	 Sterile ground floor of residential block.
	Services should be in a basement
	 Building a basement would give more
	design options
	 Lack of natural surveillance from the
	ground floor of the tower
Open space and urban	 No children's play space
greening	 Lack of open space
	 Fortune Street Park will be dark and
	overcrowded
	Fortune Street Park should be extended
	• The wall and fencing on the southern
	boundary of the site should be fully
	greened up to its full height
	 How can the new residents' use of the school's play grass be guaranteed
	school's play areas be guaranteed

Noise	Ochool hall will be bired out maine
NOISE	School hall will be hired out - noise
	Noise from playground
	Noise and odour from school hallNoise
Residential amenity	
Residential amenity	Overlooking Impact on Restartiald House
	 Impact on Basterfield House Residential tower will block views
	Light pollution
	 No defensible space in front of Basterfield House flats
	 Unacceptable sense of enclosure to Basterfield House
Impact on daylight and	Loss of light to the allotments
sunlight	 Loss of light to neighbouring properties
Sumght	 Loss of light to the Golden Lane Estate
	children's play area
	 School will be dominated by the tower
	and the playground will get no morning
	light
	 Loss of light to neighbouring properties
Traffic and parking	Air quality
	 Safety of pedestrians and cyclists
	Increased traffic
	 Traffic congestion caused by school as
	children will be travelling in from outside
	area
	 Servicing hours
	 Siting of the school and hall will make
	deliveries and rubbish collection
	inconvenient and inadequate
	No provision for off-street parking
	 Loss of parking including disabled
	parking
	Inadequate cycle parking spaces
	 Cycle parking on decks will create an unsafe and unmanageable situation for
	elderly and disabled people
	 Service access and out of hours access
	to the school and the hall will cause
	disturbance to Hatfield House
	 The access road is a vital route for
	council contractors and is not regularly
	used without permission
	Increase in footfall
	Risk of collisions on Baltic Street West
Trees and biodiversity	
-	 Loss of trees
	Loss of treesImpact on biodiversity

residential accommodation	 Poor living accommodation. Communal access route passes by bedroom windows
	Overcrowded housing
	 Balconies at the top of the tower won't be used
	 High rise housing is bad for the people living in it and expensive to maintain
	Bedrooms face the access deck
	resulting in no natural surveillance and
	compromised privacy, safety, natural
	ventilation and noise protection
Impact on allotments	Boundary wall between site and the
	Golden Lane Estate should be retained
	as it defines the edge of the estate and
	supports plants on allotments
	No mitigation measures for damage to
	allotments or impact on use during
	demolition/construction
Other Material	• The access road is to be narrowed. How
Considerations	will 24hr fire access be maintained
	Cumulative impact of other
	developments
	Strain on local amenities
	Potential for significant archaeology on
	the site
	No additional health provision has been
	made - the local service is heavily
	oversubscribed
	Security issues
	Query notices (certificates)
	 The workspace adds to the intensification of use of the site
	 Refuse store for the school is
	Refuse store for the school is inadequate
	 Roof of the school is a playground and
	not a roof terrace as stated
Other Non-Material	Consultation period in August
Considerations	 Too little consultation and too late in the
	design process
	Proposals are politically driven
	Cross boundary application makes the
	process more confusing
	Why is London College of Art not
	incorporated
	It is not clear if this is an extension of
	the Golden Lane Estate. If it is
	additional funding is needed.
	If the access road is gated leases will

r	
	need to be renegotiated
	 To minimise public access into the
	Estate the wall by Basterfield Service
	Road access gate should not be
	lowered
	As Members are on the board of the
	City of London Academy Trust, I
	presume they will be declaring an
	interest and absenting themselves from
	the Planning & Transportation
	Committee
	 School could be housed in the building
	currently occupied by the London
	School of Fashion leaving more land for
	housing and open space
	Inadequate fire escape especially
	following the Grenfell Tower tragedy
	 The City doesn't maintain the Golden
	Lane Estate and won't maintain the new
	building
	How will the structure of the first floor of
	the school be supported?
	 Social housing should have been
	provided at Bernard Morgan House
	• The site boundary is wrong as it doesn't
	include the Basterfield Service Road
	where works are taking place
	 Statement of Community Involvement
	fails to mention the petition
	• The number of school staff stated on the
	application form is incorrect
	 School - internal circulation space is
	inadequate and playground area is less
	than Department of Education
	guidelines
	 Land grab means that the bin store
	cannot be accessed - loss of right of
	way
	 Community response to public
	consultation mis-represented
	 A school could be provided on the
	Bernard Morgan House site
	 If the estate is to be used as a service
	route leases will need to be rewritten
	Provision should be made for reinforcing
	and the repairing the estate access road
	 Double glazing should be provided for
	Basterfield House and Hatfield House
· 1	

- 15. To date 31 representations have been received in support of the application. The following issues have been raised:
 - The need for the school;
 - The high quality of the education provided by CoLPAI
 - The lack of choice of state schools in the local area; and
 - The need for affordable housing.

This is a summary of the comments received to date

Policy Context

- 16. The development plan consists of the London Plan, the Draft London Plan (out for consultation) and the City of London Local Plan. The London Plan and Local Plan policies that are most relevant to the consideration of this case are set out in Appendix A to this report.
- 17. Although Islington's policies do not form part of the development plan, for the purposes of determining the City Application, the policies and Islington's identification and analysis of its policies relevant to the Islington Application are a material consideration and should be taken into account. The City's evaluation will be updated if appropriate once that information is known.
- 18. Government Guidance is contained in the National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG).

Considerations

19. The Corporation, in determining the planning application has the following main statutory duties to perform:

To have regard to the provisions of the development plan, so far as material to the application and to any other material considerations (Section 70 Town & Country Planning Act 1990);

To determine the application in accordance with the development plan unless other material considerations indicate otherwise (Section 38(6) of the Planning and Compulsory Purchase Act 2004);

(The relevant development plan is the London Plan and the City's Local Plan, including adopted Supplementary Planning Guidance)

20. As the development affects the setting of listed buildings, the Corporation is required to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses (S66 (1) Planning (Listed Buildings and Conservation Areas) Act 1990) and;

- 21. Paragraph 131 of the NPPF advises, "In determining planning applications, local planning authorities should take account of:
 - the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
 - the positive contribution that conservation of heritage assets can make to sustainable
 - communities including their economic vitality; and
 - the desirability of new development making a positive contribution to local character and distinctiveness."
- 22. The NPPF states at paragraph 14 that "at the heart of the NPPF is a presumption in favour of sustainable development which should be seen as a golden thread running through both plan-making and decision-taking. For decision-taking this means: approving development proposals that accord with the development plan without delay..." It further states at Paragraph 2 that:

"Planning Law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise".

- 23. It states at paragraph 7 that sustainable development has an economic, social and environmental role.
- 24. In considering the planning application account has to be taken of the statutory and policy framework, the documentation accompanying the application, and views of both statutory and non-statutory consultees.
- 25. The Human Rights Act 1998 incorporates the key articles of the European Convention on Human Rights into domestic law. These include:
- 26. Article 1 of the First Protocol: Protection of property. Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.
- 27. Article 14: Prohibition of discrimination. The enjoyment of the rights and freedoms set forth in this Convention shall be secured without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth, or other status.
- 28. Members of the Committee must be aware of the rights contained in the Convention (particularly those set out above) when making any Planning decisions. However most Convention rights are not absolute and set out

circumstances when an interference with a person's rights is permitted. Any interference with any of rights contained in the Convention must be sanctioned by law and be aimed at pursuing a legitimate aim and must go no further than is necessary and be proportionate.

29. The Equality Act 2010 provides protection from discrimination in respect of certain protected characteristics, namely: age, disability, gender reassignment, pregnancy and maternity, race, religion or beliefs and sex and sexual orientation. It places the Council under a legal duty to have due regard to the advancement of equality in the exercise of its powers including planning powers. The Committee must be mindful of this duty inter alia when determining all planning applications. In particular the Committee must pay due regard to the need to: (1) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act; (2) advance equality of opportunity between persons who share a relevant protected characteristic and persons who share a relevant protected characteristic and persons who share a relevant protected characteristic and persons who share it.

Principal Issues

30. The principal issues in considering this application are:

- The principle of residential development;
- The principle of the provision of a school and the loss of the Adult Education Centre;
- The principle of the provision of office space;
- Design: Height, Bulk, Massing, Form, Architectural Expression, Urban Grain, Streetscene and Landscaping;
- Impact on Heritage Assets;
- Access and inclusive design;
- Servicing, Transport and impact on public highways;
- The impact of the proposal on neighbouring residential and commercial buildings and spaces, including loss of daylight and sunlight, wind microclimate, air pollution, overlooking, noise, odour and security;
- Loss of trees
- Open space and biodiversity
- Energy and sustainability; and
- The extent to which the proposals comply with Government policy advice (NPPF) and with the relevant policies of the Development Plan.

The principle of residential development

31. Policy CS21 of the Local Plan explains that the City Corporation aims to exceed the London Plan's minimum annual requirement by guiding new housing development to and near identified residential areas...and refusing new housing where it would prejudice the primary business function of the City or be contrary to Policy DM1.1 (protection of office accommodation).

- 32. Policy DM21.1 of the Local Plan states that new housing should be located on suitable sites in or near identified residential areas. The site is adjacent to the Golden Lane area and is an appropriate location for residential development.
- 33. Policy DM21.1 of the Local Plan further states that new housing will only be permitted where development would not: prejudice the primary business function of the City; be contrary to policy DM1.1 (protection of office accommodation); inhibit the development potential or business activity in neighbouring commercial buildings and sites; and result in poor residential amenity within existing and proposed development, including excessive noise or disturbance. The proposed development would not prejudice the primary business function of the City, it does not involve the loss of office accommodation, and would not impact on the development potential of neighbouring commercial buildings. The impact the proposal has on residential amenity will be addressed in the relevant sections of this report.

Density

- 34. London Plan policy 3.3 recognises the need to provide additional housing in London and sets a minimum annual target for the City of London of 141 additional dwellings during the plan period (2015-2025). Policy H1 of the Draft London Plan sets a minimum annual target for the City of 146 additional dwellings. Policy DM21.5 of the Local Plan states that all new housing must be designed to a standard that facilitates the health and wellbeing of occupants and takes account of the London Plan's space standards and complies with the London Plan's Density Matrix standards.
- 35. The site is within a 'central setting', which is defined as 'an area with very dense development, a mix of different uses, large building footprints and typically buildings of four to six storeys, located within 800m walking distance of an International, Metropolitan or Major town centre. The site has a Public Transport Access Level (PTAL) of 6a (excellent), which recommends that the site is developed at a density of 650-1100 habitable rooms/hectare or 215-405 units/hectare considering the size of the dwellings proposed. The proposed residential development is at a density of 930 units/hectare (2437 habitable rooms/hectare) which is higher than recommended. However, paragraph 3.28 of the London Plan explains that the density matrix should not be applied mechanistically 'enabling account to be taken of other factors relevant to optimising potential - local context, design and transport capacity are particularly important, as well as social infrastructure, open space and play'. The London Plan Housing Supplementary Planning Guidance further explains that in appropriate circumstances it may be acceptable for a particular scheme to exceed the ranges in the density matrix, providing important qualitative concerns are suitably addressed'. To be supported, schemes which exceed the ranges in the matrix must be tested against the following considerations: design, local context and character, public transport connectivity, the quality of the proposed accommodation and its compliance with the housing quality standards (found in the London Plan Housing Supplementary Planning

Guidance), and the management of refuse storage and cycle parking facilities. When these considerations are satisfactorily addressed the London Plan provides sufficient flexibility for such higher density schemes to be supported. It is common for new development in central London to exceed the ranges in the density matrix.

36. It is considered that the proposals comply with policies CS21 and DM21.1 of the City of London Local Plan.

The principle of the provision of a school and the loss of the Adult Education Centre

Provision of a school

- 37. Policy CS22 requires that adequate educational facilities and services are provided to meet the community's needs. Policy DM22.1 states that "the development of new social and community facilities should provide flexible, multi-use space suitable for a range of different uses and will be permitted where they would not be prejudicial to the business City and where there is no strong economic reason for retaining office use; in locations which are convenient to the communities they serve; in or near identified residential areas, providing their amenity is safeguarded; as part of major mixed-use developments, subject to an assessment of the scale, character, location and impact of the proposal on existing facilities and neighbouring uses."
- 38. The site is in a residential area, was previously in educational use and the proposal would not result in the loss of offices or be prejudicial to the business city. There is an identified need for a school in this location. Without the CoLPAI scheme, there would be a shortfall of 438 school places in the south of Islington, equating to over 14 forms of entry. Within the City of London, there is only a single state funded primary school, the Sir John Cass Foundation Primary School, which is a Church of England School and predominantly takes pupils from Tower Hamlets due to its catchment area. Other schools in the City are independent. This combination of faith and/or fees provides an extremely limited choice of school within the City. The proposed Academy would have a significant benefit for residents by providing a new state school which has no entry restrictions. It is proposed that the school hall would be available for community use, fulfilling the requirement for the facility to be a multi-use space.

Loss of the Adult Education Centre

- 39. The proposal would result in the loss of an Adult Education Centre on the site which is currently operating.
- 40. Policy DM22.1 states the loss of social and community facilities should be resisted unless "replacement facilities are provided on-site or within the vicinity which meet the needs of the users of the existing facility; or necessary services can be delivered from other facilities without leading to,

or increasing, and shortfall in provision; or it has been demonstrated that there is no demand for another similar use on site".

- 41. The services in the adult education centre, will be retained within the City of London and relocated partly to the Golden Lane Community Centre (which is being refurbished and anticipated to re-open in March 2018) and the City's business library.
- 42. It is considered that the proposals comply with policies CS22 and DM22.1 of the City of London Local Plan.

The principle of the provision of office space

43. Policy DM1.3 encourages the promotion of small and medium sized businesses in the City by encouraging new accommodation suitable for small and medium sized businesses or occupiers; and office designs which are flexible and adaptable to allow for subdivision to create small and medium sized business units. The proposed introduction of affordable workspace on the ground floor of the residential tower is welcomed.

Design: Height, Bulk, Massing, Form, Architectural Expression, Urban Grain, Streetscene and Landscaping and impact on Heritage Assets

Height, Bulk and Massing and Urban Grain

- 44. The podium of the tower proposes a brick-clad base, of four storeys (14m to eaves), broadly following, although sited proud of (by approx. 3m), the strong orthogonal building line on Golden Lane defined by the four-storey (11m to eaves) Stanley Cohen House, in prominent views along Golden Lane (north and south). It would also respond to the size of the six-storey Golden Lane Estate maisonettes blocks, such as Basterfield House running perpendicular opposite. It is considered that the building line and height of the podium, and the setting in of a podium would provide an appropriate townscape response which would add an appropriate scale to Golden Lane relative to its neighbours.
- 45. The remainder of the lower blocks, a four-storey 'L'-shaped school/nursery block and 1.5 storey school hall, are of a disposition and layout which continues, if not in architectural language, in the townscape tradition and urban grain of the Golden Lane Estate: rectilinear, horizontal blocks of human scale following the clean orthogonal building lines defined by Hatfield House and Basterfield House, of perimeter maisonettes blocks enclosing and opening up to a series of raised and sunken courts.
- 46. The main school/nursery block would follow the building line of Hatfield House, while following through with a matching clean eaves line. The return dog-leg would better enclose and address the wedge of Baltic Street West, consolidating the scale of the street which is defined by the north elevation of Hatfield House, to which it would be subservient.

- 47. The proposed school hall, at 1.5 storeys tall with set-back upper part, is in the manner, if not style, of the community facilities of the Golden Lane Estate: low slung simple rectangular boxes flowing into surrounding recreational space, continuing the strong east-west line through the Estate between Golden Lane and the leisure centre, running parallel with Basterfield House opposite.
- 48. Overall, it is considered that the podium, school/nursery block and school hall are of a height, scale massing and disposition which are a good response to the setting of to the Golden Lane Estate.
- 49. The tower element would have the most significant impact in the wider setting in terms of siting, height, bulk and massing. Tall buildings comprise part of the surrounding townscape, including the 16 storey Great Arthur House, 13-storey Peabody Tower, 17 storey Blake Tower and the taller Barbican towers to the south. These towers are set back from the street, often in a generous landscaping.
- 50. The proposed residential tower would rise flush, without setback, from the principal west and in particular east elevation, which addresses Golden Lane, whilst it would comprise over two thirds of the width of the podium. Given the building line, lack of set-back and height relative to the podium, it is considered that the tower element would impact on the human/domestic scale of Stanley Cohen House and the other six-storey maisonette blocks making it more more prominent from much of the Golden Lane Estate than Great Arthur House.
- 51. The siting, height, bulk and mass of the proposed building would be dominant in views along Golden Lane. To a degree, this could be addressed through detailed design.

Detailed Design

- 52. The four-storey podium to the tower, school/nursery block and school hall are proposed to be clad in a plum-coloured brick with 'punched' fenestration set in a reveal to the side elevations and deeply recessed double balconies addressing Golden Lane. The proposed double height inset at first and second floor level with deeply inset brick piers, use of a vernacular brick and projecting balconies echo the core vocabulary of the Golden Lane Estate maisonette blocks. The crowning of the principal elevation is an aluminium stick balustrade, bolted to the rear of a shallow parapet. This could be better terminated, helping create better definition between podium and tower. This could be more emphatically crowned with a clean raised brick with accentuated GRC capping similar to the surrounding Golden Lane Estate blocks.
 - 53. The brick referenced is the Ketley-type recently used at the Barbican and which is a dynamic, high-quality baked brick with warm mottled tones. This

could create a building of high quality which references its distinctive surroundings. Its delivery should be ensured by condition.

- 54. The nursery/school block and school hall would follow the same architectural language, with some subtle difference in vocabulary to add diversity and interest, with incised fenestration and reveals, shadow gap rainwater runs and perforated aluminium accents within a robust solid-tovoid ratio. This approach ensures an overarching homogeneity with the Golden Lane Estate.
- 55. It is considered that the architectural concept of a clean slab block in silhouette, with a simple modernist form, in the manner of Great Arthur House, is appropriate. It will have a glass reinforced concrete (GRC) 'skin', in the form of an expressed frame. The regular rhythm of square profile columns and rounded 'piloti', borrowing the latter from the Golden Lane Estate, ties the principal elevations together with the aim of creating a distinctive sculptural frame, complementing the adjacent Golden Lane Estate. It is considered that if well executed this architectural concept could complement the adjacent Golden Lane Estate.
- 56. It is considered that the proposed depth provided in the balconies and decking of 1.5-2m would be sufficient to relieve and express the frame. This will require the depth of the frame and soffit and the balcony treatment to be well detailed, which could be reserved by condition. It is considered that visible expansion/movement joints, both horizontal and vertical, could significantly undermine the delivery of the architectural concept of a clean and robust sculptural 'skin'. It is recommended that a scheme for removing the need or detailing out of expansion/movement joints should be conditioned.
- 57. There is a high balcony-to-frame ratio. A cross section shows that the balconies and decking would have a short upstand with stick baluster balconies attached or clasped to the rear of it. In addition, the soffit of the decking/balconies would be flush with the upper frame, giving it less relief. These details should be reserved by condition.
- 58. The treatment of the flank elevations are important to the coherence and integrity of the architectural concept and in reducing the apparent bulk, mass and height of the building, in particular on the sensitive approaches along Golden Lane. It is proposed to continue the GRC frame alongside regularly aligned fenestration and brick infill panels. No detail has been submitted of junctions or reliefs and this detail should be dealt with by condition.
- 59. A detail has been added at roof parapet level, an implied shadow gap, providing a subtle 'incident', a characteristic feature of Chamberlain, Powell and Bon. Whilst not clear from the submission, it is apparent that balustrading would potentially need to be accommodated for health and safety which, in addition to potential plant (including photovoltaic tiles),

could breach the clean parapet line, undermining the architectural whole. Further detail should be sought by condition.

- 60. Policy DM 10.1 seeks that external illumination of buildings is carefully designed to ensure visual sensitivity, the discreet integration of light fittings, and minimal energy use and light pollution.
- 61. The nocturnal character of the conjoining Golden Lane Estate is one of relatively low levels of ambient light. A detailed cross section of the proposed balconies or decking has not been provided. The tower would be prominent in views into and from within the Golden Lane Estate. It is considered that the tower's lighting will have a major influence on the character of the Golden Lane Estate. It is considered that the architectural frame, which would appear to have the frame flush with the soffit, would not provide the opportunity for the integration of discreet lighting. As such, it is recommended that a detailed Lighting Strategy is reserved by condition.

Public Realm and Landscaping

- 62. The treatment of the school entrance on Golden Lane should be conditioned to ensure adequate lighting
- 63. The boundary wall between the School and Basterfield Service route would comprise an approximately 3m brick (and possibly timber) wall, with planting, including trees, on the school side. The proposed low level planting beds and green wall on the proposed school hall are welcomed. Details would be dealt with as part of the landscaping condition.
- 64. A row of new trees is proposed on Golden Lane, in accordance with the aspirations of the Public Realm SPD, which will soften and improve the streetscape of Golden Lane. Details should be provided to ensure that good quality semi-mature trees are delivered.
- 65. Overall, on balance, it is considered that the proposals would enhance the public realm surrounding the site and improve the interface with the Golden Lane Estate and comply with Policies CS10, DM10.1 and CS14 of the Local Plan.

Impact on Heritage Assets in the City of London

Historic Environment Context

- 66. The site adjoins the Golden Lane Estate which is grade II and II* (Crescent House) listed. The whole of the Golden Lane Estate is being considered for potential conservation area designation. At present, it is not a conservation area.
- 67. The impact of the proposal on the heritage significance of the heritage assets in the City of London are addressed in this observation.

Legislation and Policy

- 68. The Town Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1), requires the Corporation to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. In effect of this duty under 66(1) it is required to give considerable weight and importance to the desirability of preserving the setting of listed buildings.
- 69. Policy 7.8 of the London Plan states that "Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural detail." Paragraph 7.31A of the supporting text states "Substantial harm to or loss of a designated heritage asset should be exceptional, with substantial harm to or loss of those assets designated of the highest significance being wholly exceptional. Where a development proposal will lead to less than substantial harm to the significance of a designated asset, this harm should be weighed against the public benefits of the proposal, including securing its optimal viable use. Enabling development that would otherwise not comply with planning policies, but which would secure the future conservation of a heritage asset should be assessed to see of the benefits of departing from those policies outweigh the disbenefits."
- 70. Policy CS12 of the Local Plan seeks to conserve or enhance the significance of the City's heritage assets and their settings by: safeguarding the City's listed buildings and their settings, while allowing appropriate adaptation and new uses, and preserving and enhancing the distinctive character and appearance of the City's conservation areas, while allowing sympathetic development within them.
- 71. Policy DM12.1 of the Local Plan relates to managing change affecting all heritage assets and ensuring that the proposals sustain and enhance heritage assets, their settings and significance. Policy DM12.2 relates to development within conservation areas. It seeks to ensure that development in consideration areas is only permitted where it preserves and enhances the character or appearance of the conservation area. Policy DM12.3 relates to listed buildings and seeks to ensure that listed building consent is granted for the alteration of a listed building only where this would not detract from its special architectural or historic interest, character and significance or its setting.
- 72. Furthermore that "Development will be required to respect the significance, character, scale and amenities of surrounding heritage assets and spaces and their settings". (12.1.4)
- 73. Chapter 12 of the NPPF is relevant in this instance as it sets out key policy considerations for applications relating to designated and non-designated heritage assets. Other relevant guidance is provided by Historic England

including the documents Conservation Principles, Good Practice Advice Notes, including Note 1, Conservation Area Designation and Management, Note 3 The Setting of Heritage Assets and Building in Context (HE/CABE)

- 74. The NPPF, core principle 10 (paragraph 17), seeks to conserve heritage assets in accordance with their significance. It establishes, at paragraph 132, that great weight should be given to conservation and that the significance of an asset can be harmed by development in the setting of that asset. Commensurate with the level of harm, paragraphs 133 and 134 are triggered which require a balancing exercise to be undertaken.
- 75. At paragraph 134 the NPPF states that "Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including securing its optimum viable use".
- 76. Paragraph 135 of the NPPF states that "The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset."
- 77. The setting of a heritage asset is described as:

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

78. The National Planning Practice Guidelines state that when assessing the setting of an asset, whilst visual considerations are important, the way an asset is experienced can also be influenced by other factors such as noise or use and, whilst two places might not be visible from one another, they may still have a historic or aesthetic connection that amplifies the experience of the significance of each.

Principle of Demolition

- 79. The proposal will result in the total demolition of the current building comprising the former vacant Richard Cloudesley School, garages and Adult Learning Centre. Other than the use of a complementary plum brick in the school, the development in architectural or urban design terms does not contribute to the significance of the adjacent Golden Lane Estate.
- 80. It is noted that Historic England have welcomed the redevelopment of the site, in principle.
- 81. The principle of the demolition is considered acceptable.

Impact on the Special Architectural and Historic Interest and Significance of the Golden Lane Estate

The Significance of the Golden Lane Estate

- 82. The Golden Lane Listed Building Management Guidelines Supplementary Planning Document (the Guidelines) (September 2013) identifies the nature and extent of the special architectural and historic interest of the Estate. The Guidelines are a material consideration in assessing the current planning application.
- 83. The Golden Lane Estate is an exemplar of post-war comprehensive redevelopment following the Blitz, executed on a pioneering and cohesive scale under the auspices of a single ambitious landowner, the City of London Corporation. The Guidelines acknowledge that much of the character and special interest derives from the architects' pursuit of a modern exemplar of high-density urban living. This expresses itself on a macro-level through the meticulously planned townscape and generous open landscape and on micro-level through the detailing and layout of individual flats. It should, as acknowledged in the Guidelines, be viewed in its entirety as an ensemble: a piece of architecture, urban design and townscape. The qualities of light, space, transparency, function and communality run through the Estate, from the (unique) large curtain wall landscape window of the community centre raised above the ornamental sunken garden to the finely detailed 'picture frame' curtain wall windows defining the principal aspects of the flats providing views over the generous landscaping.
- 84. The height and disposition of the blocks was meticulously considered to create varied public/private space, delivering a comfortable sense of enclosure while also feeling open and permeable. The pioneering use of glass curtain walls, in striking primary colours, add light and energy, while the overarching use of a pleasant plum brick ties the architectural whole together.
- 85. The blocks are disposed to maximise daylight, sunlight, privacy and a sense of spaciousness and transparency. These spatial qualities continue inside where all flats are defined, where possible, by a principal south-aspect, dual aspect, floor-to-ceiling glazing overlooking well-landscaped courts and private balconies on flats which are orientated to avoid direct overlooking from directly facing principle aspects revolutionary at its time. This openness and the extensive glazing creates a seamless transparency between inside and out, creating internal spaces defined by the relationship with the landscape outside.
- 86. Great Arthur House was, on completion in 1957, the tallest residential building in Britain and a pioneer of high-rise urban living which came to define post-war urban Britain. It anchored the Estate, from which the open space and maisonette blocks pivot, acting as its landmark centrepiece.

The height allowed Chamberlain, Powell and Bon to achieve the required density, allowing the generous open landscape and human-scale of the remainder of the Estate. The refined aluminium-framed glass curtain wall with striking yellow 'Muro' glass still to this day is striking. Its rectilinear slab silhouette is enlivened by the foil of its curvilinear canopies, which mark the innovative formal communal garden at roof level, inspired by Le Corbusier's Unité d'habitation.

The Contribution Setting makes to that Significance

- 87. The NPPF states that elements of the setting of a heritage asset can make a positive, neutral or negative contribution to its heritage significance and a viewer's ability to appreciate that significance.
- 88. There is no specific section in the Guidelines dedicated to the Estates' setting, or which seeks to identify particular elements of that setting which are deemed to make a positive, negative or neutral contribution to it. However, in Part 2 (section 1.2.1), "Key conclusions and recommendations", under Holistic Significance, it states:
- 89. The views from as well as into the estate are important. Part of the special architectural interest of the estate lies in its relationship with adjacent buildings, their height, scale, mass, form, materials and detailing could, for example, have an impact on that special interest.
- 90. Part 1.2.1.2 of the Guidelines continues:

The estate should be appreciated in its entirety: not only its various components – residential, community, recreational, commercial and the external spaces between buildings – but also its setting within the surrounding urban fabric. The views from and into the estate have become important, and part of its special architectural interest lies in its relationship to adjacent buildings. Any developments on the immediate boundaries of the listed area should take into account the significance of the estate's setting.

- 91. The Guidelines acknowledge that the Estate was planned with a strong sense of enclosure and, in the words of the architect, was "inward looking", given the bleak wasteland setting following WWII.
- 92. It should be acknowledged that the setting of the Estate has changed significantly since the 1950s, and will continue to change. The Peabody Towers, Braithwaite Tower, Cripplegate House (as extended), Blake Tower and 121-167 Roscoe Street are all visible above the perimeter blocks from views within the Estate, placing it in an evolving and dynamic urban context. To the south it can be viewed with the backdrop of the Barbican tower and podium composition; reflecting continuity in architect and the development of Modernism.

- 93. In this regard, the only specific reference in the Guidelines to an important aspect of setting is reference to the view along Goswell Road of Crescent House with the backdrop of the Barbican Towers, identified as being of (fortuitous, if not intended) interest, given the continuity in architect and an appreciation of the development of Modernism. The Barbican towers and podium dominate the skyline to the south, providing an important visual reference and transition, contributing to the significance of Golden Lane Estate.
- 94. It is considered that the following elements of the setting of the Golden Lane Estate contribute to its significance:
 - The visual relationship with the Barbican to the south; in particular in the views from Goswell Road of Great Arthur House, Crescent House and the Barbican towers and the north-south axis view from the Bastion through the central piazza towards the tower of the Jewin Chapel on alignment with the Shakespeare Tower;
 - The strong sense of enclosure and unity felt in the sunken gardens, on a whole unfettered by looming development in the immediate vicinity;
 - The retention of open diagonal views across the whole site with limited bulky development in the immediate setting to break up the unity and inter-visibility of the enclosing residential blocks;
 - An ability to appreciate the Estate from outside views in, the dominance of Great Arthur House, in contrast to the more humble scale of the perimeter blocks;
 - An ability to appreciate the interrelationship between the interior of the maisonette flats and the external spaces.

Impact on the significance of the Golden Lane Estate

- 95. The residential tower would be visible on approach to the Estate from Aldersgate Street, Goswell Road, Baltic Street West, Golden Lane and Viscount Street in the City of London. It would also be visible from in the Estate from the western forecourt to Great Arthur House, the former community piazza, the bastion, Basterfield Lawn, the tennis courts and associated circulation space enclosed by Cullum Welch House, Crescent House and Hatfield House.
- 96. It is considered that, by reason of its height, bulk and mass, the proposed tower would appear dominant on the principal approach to the Estate from Golden Lane (north and south), and from views within the Estate, in particular from the bastion and raised circulation space around Basterfield Lawn. On approach, and to a lesser degree from within the Estate, it is considered that the bulk/mass of the proposed tower would to a degree diminish the primacy of Great Arthur House on the skyline of the Estate. The siting, alignment, grain, height, scale, massing and detail of the lower podium, 'L'-shaped school block and school hall are considered an appropriate response to the Estate. This harm is considered "less than substantial", and should be weighed against the proposed public benefit.

- 97. The emerging view from Old Street is currently defined by the human scale of Basterfield and Stanley Cohen House, of the strong rectilinear orthogonal blocks and a skyline defined by Great Arthur House and the Barbican tower and podium composition. This offers a rich appreciation of a multi-layered and comprehensive Post-War townscape by a single notable architectural practice. This view would be impacted by the proposed tower, restricting views of Great Arthur House and the Barbican Tower and impacting on the scale of the perimeter blocks.
- 98. On approach from the south, from Beech Street, the proposed tower element, again due to its siting, terminating the strong horizontality of Stanley Cohen House, and significant height, bulk and mass, would diminish the of Great Arthur House and an appreciation and understanding of its significance, but to a lesser extent than from the north.
- 99. The proposal would have a less significant impact on the east-west approaches, where Great Arthur House would retain its primacy, in particular in views from Goswell Road and Fortune Street/Fortune Street Park.
- 100. From within the Estate, it is considered that the overall sense of enclosure, openness, light and sightlines would be preserved, but the sheer height, and in particular the bulk and massing of the proposed tower, would have an apparent overbearing impact on views from the raised circulation spaces surrounding the Bastion/Basterfield Lawn, the space around the children play area the tennis courts. From these, it would challenge the primacy of Great Arthur House, diminish an appreciation of the scale of the blocks and reduce the integrity of their clean parapet lines. It is acknowledged that these views would be transient, in places fleeting/glimpsed and generally oblique, whilst from significant spaces such as the community piazza, sunken ornamental garden, community centre and western piazza, the impact would at times be removed or much diminished.
- 101. Overall, it is considered that in the majority of instances, Great Arthur House would continue to define the Estate, not least because of its distinctive silhouette and striking primary yellow Muro glass curtain wall façade, and that the disposition of the maisonette blocks and strong enclosure of its spaces would still allow it to retain a significant degree of primacy over the Estate as a whole. The proposed tower would be no higher or wider than Great Arthur House, whilst its more understated design would not detract from an appreciation of it.
- 102. The 'L'-shaped nursery/school and school hall would be of a disposition, orientation, scale and appearance which would complement the Estate providing a continuation of scale, building lines, views and routes through the Estate. The overarching use of a complementary brick, defining rectilinear horizontal blocks with a consistent rhythm of cross walls and balcony modelling, would be distinct, but sensitive to the estate, whilst not competing with it.

Impact on the Special Architectural and Historic Interest and Significance of the Barbican

The Significance of the Barbican and the Contribution Setting makes to that Significance

- 103. The principal significance of the Barbican, including the associated landscape, is as a leading example of a Modernist project in the High Brutalist style, and is perhaps the seminal example nationally of a comprehensively planned Post-War, mixed-use, Modernist community.
- 104. It comprises a series of long slab blocks at a raised podium level, separating pedestrians from vehicular traffic, and a composition of towers which encloses private and public landscaped open spaces centred on a lake which incorporates formal planting and ancient monuments in a Le Corbusian manner.
- 105. It is necessary to consider the contribution of setting to the significance of the Barbican. The Estate was designed to be like a modern 'fortress', defining its own setting, and whilst there had originally been planned relationships with its surroundings, many were never implemented.
- 106. The Barbican has 'hard edges' with the surrounding townscape and, other than the Blake Tower, it does not form a strong architectural relationship with surrounding buildings or landscapes. However, as discussed, the clear juxtaposition between the Golden Lane Estate and the Barbican is an important relationship which contributes to the significance of these 20th Century landscapes. An appreciation of the Barbican, on approach from the north from Golden Lane and Goswell Road, is important.

Impact on the Barbican

- 107. As discussed, the Barbican tower and podium composition was designed with an approach from the north in mind. When approached from Golden Lane (via Old Street), the towers provide a dramatic silhouette when appreciated against clear sky with their deep modelling and serrated profile. When contrasted with the manner of the Golden Lane Estate, there is a strong appreciation for the development of Modernism post-war.
- 108. An important approach, identified in the Golden Lane Estate Listed Building Management Guidelines, is the approach to the Barbican from Goswell Road with the view of Crescent House, its gracious curve of experimental bush-hammered concrete culminating in the dramatic verticality of the Barbican's Lauderdale Tower in confident bush-hammered concrete. The view, as it emerges from Clerkenwell Road, has been tested as part of the submission and the proposed tower would have limited visibility and would not exert significant influence over this view. It is considered that the impact would be neutral.

- 109. Otherwise, given the scale, strength and robustness of the Barbican, which would still predominate in many views of it from its setting, it is not considered that in wider views the proposed tower would detract from its significance, or an appreciation or understanding of it.
- 110. Overall, it is considered that the proposal, because of the diminished view in the approach from Golden Lane, would cause slight, less than substantial harm to the significance of the Barbican as a listed building and registered landscape.

Impact on the Special Architectural and Historic Interest and Significance of Cripplegate House

The Significance of Cripplegate House and the Contribution its Setting makes to that Significance

- 111. Built in 1893-96, and by architects Sidney R.J. Smith, it was built as a grand late-Victorian civic philanthropic venture for the betterment of the working poor of the Cripplegate Ward. It is an isolated remainder of Victorian Cripplegate that was altered following conversion to offices in 1987-92.
- 112. Though much altered, extended and stretched behind a part retained facade, it displays a handsome front facade of red brick with Portland stone dressings in an eclectic free-Jacobean manner with some good detail. The rear red brick 1980s part is of no architectural or historic interest.
- 113. Cripplegate House's historic setting, as part of a cohesive Victorian townscape of warehouses, workshops, terraces, alleys and courts has been lost. In terms of height, architectural form, style and materials it has little relationship or dialogue with its neighbours. However, its prominent townscape position on Golden Lane assists in allowing an appreciation and understanding of its architectural and historic interest.

Impact on Cripplegate House

114. The proposed tower would be visible on approach to Cripplegate House from Beech Street/Golden Lane. Given the substantial distance between the two, and the scale of Cripplegate House within its immediate townscape, it is not considered that the proposal would harm the significance of Cripplegate House, or an appreciation or understanding of it.

Impact on the Heritage Significance of the Jewin Chapel as a Non-Designated Heritage Asset

The Significance of the Jewin Chapel and the Contribution its Setting makes to that Significance

115. The Jewin Welsh Chapel is not listed but is considered a non-designated heritage asset because of its strong architectural and historic interest.

- 116. Built in 1956-61, contemporaneous with the adjacent Golden Lane Estate, by noted ecclesiastical architects Caroe and Partners, it replaced a former Gothic Revival church of 1879 bombed in the Blitz. It is an interesting example of Scandinavian-influenced Modernism termed "New Humanism", popularised during the Festival of Britain. Of pink/plum brick (with matching neat flush pointing) with Portland stone dressings and a copper-clad roof.
- 117. The brick (colour and finish) is a clear reference to the Golden Lane Estate brick, whilst the imposing west tower forms the southern termination to the principal north-south axis view from the bastion garden through the central 'piazza', which was conceived as the social focus of the Estate: a townscape ploy which would seem deliberate, rather than fortuitous. It is known that Gordon Cullen, who was developing his concept of 'townscape' at the time, had advised on the Golden Lane Estate. The tower is a local landmark with a belfry stage gallery of deeply splayed slit windows crowned by a socketed copper roof with stylised urn finial, terminating one of the only 'closed' vistas in the Golden Lane Estate.
- 118. The Jewin Church is considered to be of local architectural, historic and communal heritage interest, inherently as a building and in in its positive contribution to the setting of Golden Lane, especially in terminating the principal north-south axis view.

Impact on the Jewin Chapel

- 119. The chapel would be viewed in the context of the proposed tower in views from Fann Street and, to an extent, Viscount Street. In Viscount Street, given the scale of the church and tower relative to the enclosing built environment, it is considered that the proposed tower would not diminish the church. From Fann Street, it is considered that the impact would be neutral.
- 120. Overall, the significance of the Jewin Chapel as a non-designated heritage assert would not be harmed by the proposed development.

Summary of Impacts

121. The proposal has been assessed in relation to the relevant heritage polices of the London Plan and Local Plan. The proposals would result in some harm to the setting of Golden Lane Estate and the Barbican. As such Policy CS12 is not fully complied with. However it is considered that the harm is less than substantial and is outweighed by the significant public benefits of development.

Amenity of neighbouring residents

Daylight and Sunlight

Policy Background

- 122. Local Plan Policy DM10.7 Daylight and Sunlight resists development which would reduce noticeably the daylight and sunlight available to nearby dwellings and open spaces to unacceptable levels, taking account of the Building Research Establishment's (BRE) guidelines. The policy requires new development to provide acceptable levels of daylight and sunlight for occupiers. Paragraph 3.10.41 of the Local Plan indicates that BRE guidelines will be applied consistent with BRE advice that ideal daylight and sunlight conditions may not be practicable in densely developed city centre locations. Unusual existing circumstances, such as the presence of balconies or other external features which limit the daylight and sunlight that a building can receive, will be taken into account. Policy DM21.3 of the Local Plan requires development proposals to be designed to avoid overlooking and seek to protect the privacy, daylighting and sunlighting levels to adjacent residential accommodation.
- 123. BRE guidelines consider a number of factors in determining the impact of development on daylight and sunlight on existing dwellings:
 - Daylight to windows: Vertical Sky Component (VSC): a measure of the amount of sky visible from a centre point of a window. The VSC test is the main test used to assess the impact of a development on neighbouring properties. A window that achieves 27% or more is considered to provide good levels of light, but if with the proposed development in place the figure is both less than 27% and reduced by 20% or more from the existing level (0.8 times the existing value), the loss would be noticeable.
 - Daylight Distribution: No Sky Line (NSL): The distribution of daylight within a room is measured by the no sky line, which separates the areas of the room (usually measured in sq. ft) at a working height (usually 0.85m) that do and do not have a direct view of the sky. The BRE guidelines states that if with the proposed development in place the level of daylight distribution in a room is reduced by 20% or more from the existing level (0.8 times the existing value), the loss would be noticeable. The BRE advises that this measurement should be used to assess daylight within living rooms, dining rooms and kitchens; bedrooms should also be analysed although they are considered less important.
 - Sunlight: sunlight levels are calculated for all main living rooms in dwellings if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are considered less important although care should be taken not to block too much sun. The BRE explains that sunlight availability may be adversely affected if the centre of the window receives less than 25% of annual probable sunlight hours (APSH), or less than 5% APSH between 21 September and 21 March; and receives less than 0.8 times its former sunlight hours as result of a proposed development; and has a reduction in sunlight hours received over the whole year greater than 4% of annual probable sunlight hours.

124. Developers may also consider Average Daylight Factors (ADF). ADF is the ratio of internal light level to external light level. BRE advise that ADF is not generally recommended to assess the loss of light to existing buildings, but is appropriate to consider daylight and sunlight to new dwellings. Guidance on the levels of daylight to be provided are set out in the British Standard on daylight, which recommends minimum values for ADF of 1% for bedrooms, 1.5% for living rooms and 2% for kitchens. The British Standard recommends that where a living room includes a kitchen, the higher minimum average daylight factor of 2% should apply.

Daylight and sunlight assessment

125. The applicant's consultant has undertaken a study of the impact of the proposed development on the relevant rooms in the surrounding residential and educational buildings and on sunlight to neighbouring amenity spaces in the City of London and Islington. The study has been reviewed and its assessment of the extent of the impact is considered sound.

Daylight and Sunlight to Existing Neighbouring Buildings in the City of London

126. Any development of this site over one-storey in height (the existing situation) would result in a reduction in daylight received and some departures from the BRE guidelines. The BRE guidelines recognise the possibility of this scenario and state that they need to be interpreted flexibly.

Golden Lane Estate Allotment

127. The Daylight and Sunlight Report submitted as part of the application demonstrates that this space would be fully BRE compliant, with over half of the area receiving at least two of sunlight on 21st March.

Basterfield House and Hatfield House

- 128. Basterfield House, to the south, faces the proposed development across the service road. The affected elevation contains duplex flats with kitchens on the ground, second and fourth floors and bedrooms on the first, third and firth floors. The affected kitchen windows have projections/overhangs above them that limit the light received from the sky. In such circumstances, BRE guidelines recommend an additional assessment assuming the balconies are not present.
- 129. An assessment has been undertaken of the impact of the development on 79 windows in the affected façade. For 61 windows the VSC would be below the BRE guideline figure of 27% and below 0.8 times the existing value. Hatfield House, to the west, is adjacent to the development. An assessment has been undertaken of the impact of the development on 24 windows. For 6 windows the VSC would be below the BRE guideline figure of 27% and below 0.8 times the existing value.

- 130. The loss of daylight to these windows would be noticeable by the occupants. It is acknowledged that the daylight enjoyed by living rooms is not affected by the proposed development. The windows that face the proposed development serve kitchens and bedrooms, which are less sensitive to losses in daylight.
- 131. The proposals do not fully comply with policy DM10.7 of the City of London Local Plan as noticeable reductions in daylight arise. This is to bedrooms and kitchens, which are identified as being of lesser significance than living rooms in the BRE guidelines and also recognises that ideal daylight conditions may not be practicable in densely developed city centre locations. The presence of balconies or other external features should be taken into account. The public benefits of the scheme have to be weighed against this residential loss of amenity.

Overlooking

- 132. Policy DM21.3 of the Local Plan states that all development proposals should be designed to avoid overlooking.
- 133. On the podium part of the residential block there are windows on the southern elevation (looking towards Basterfield House) serving a bedroom at first floor level and a bedroom, the living room/kitchen and the balcony at third floor level. The separation distance between these buildings is approx. 8.5m. The windows on Basterfield House serve bedrooms. If this is felt to be a concern it could be dealt with by a condition that requires obscure glazing and its maintenance for the life of the building.
- 134. On the 4th-6th floors the windows on the southern elevation serve a bedroom and living room/kitchen. The separation distance here is approx.18.2m. Considering the separation distance between the two buildings this is considered to be an acceptable relationship.
- 135. The upper floors would look over the roof of Basterfield House. The southern elevation of the school is blank.
- 136. It is considered that subject to conditions the proposals comply with policy DM21.3 of the City of London Local Plan.

Noise

During the demolition and construction periods

137. In redevelopment schemes most noise and vibration issues occur during demolition and early construction phases. Noise and vibration during demolition and construction should be controlled through conditions to protect nearby residents and commercial occupiers from noise, dust and other environmental effects attributable to the development.

From the proposed flats and school

- 138. Local Plan policy DM15.7 states that 'developers will be required to consider the impact of their developments on the noise environment. The layout, orientation, design and use of buildings should ensure that operational noise does not adversely affect neighbours, particularly noise sensitive land uses such as housing, hospitals, schools and quiet open spaces'. It is considered that whilst the proposed increase in the number of residents could lead to an increase in noise it is not considered that this would result in a significant detrimental impact on the occupiers of neighbouring properties. It would not be reasonable to restrict the use of private balconies, which will to some degree be managed by the occupiers themselves. Environmental Health have raised no concerns.
- 139. Residents' access to the MUGA outside school hours and community use of the school hall should be secured through the S106 agreement, which would include the requirement for a management plan for both facilities. Opening hours should be controlled as part of the management plan.
- 140. The proposed play ground noise level predictions are noted. Further screening of these areas should be considered. This would need to be the subject of a condition.
- 141. It is considered that, subject to conditions and the S106 agreement, the proposals comply with policy DM15.7 of the City of London Local Plan.

Odour from the proposed school kitchen

142. Additional methods of odour control may be required. Ventilation systems for extracting and dispersing any emissions and cooking smells must be discharged at roof level and designed, installed, operated and maintained in accordance with the manufacturer's specification in order to prevent them adversely affecting neighbours. Planning permission may be required for any ducts, vents or plant and further details should be required by condition.

Light pollution

143. No Lighting Strategy has been provided. This should be the subject of a condition and should include the impact of lighting on the bedrooms of the proposed flats; the impact on lighting on neighbouring properties; and the impact of light visually on the townscape and comply with the Institute of Lighting Engineers Guidance.

Quality of the proposed residential accommodation

144. Policy DM3.1 states that "where feasible, proposals for mixed use developments must provide independent primary and secondary access points, ensuring that the proposed uses are separate and self contained". The residential block is entirely separate from the school and school hall, and the flats and workspace have separate entrances. The proposals comply with policy DM3.1. 145. Paragraphs 2.1.17-2.1.18 of the London Plan Housing Supplementary Planning Guidance explains that 'the standards set out the minimum level of quality and design that new homes should meet. The extent to which proposed developments depart from the standards should be taken into account in planning decisions. Application of standards through the planning system (as they are through this SPG) provides some flexibility. Consideration should be given to these standards alongside achievement of other policies of the London Plan. In particular, regard should be had on the one hand to overall viability and the need to ensure an appropriate level of housing supply in changing economic circumstances. On the other hand, consideration should be given to the fact that the homes and living environments we build today will frame the lives of those who live in new homes or use the neighbourhoods now and into the future. Failure to meet one standard would not necessarily lead to an issue of compliance with the London Plan, but a combination of failures would cause concern'.

Space standards

146. The DCLG Technical Housing Standards sets out the requirements for the Gross Internal Area (GIA) of new dwellings at a defined level of occupancy. Standard 26 of the London Plan Housing Supplementary Planning Guidance states that a minimum of 5 sqm of private outdoor space should be provided for 1-2 person dwellings and an extra 1 sqm should be provided for each additional occupant. All of the proposed dwellings meet these technical space standards for internal space and private amenity space.

Communal open space - the MUGA

147. Standard 4 of the London Plan Housing Supplementary Planning Guidance states that where communal open space is provided, development proposals should demonstrate that the space is overlooked by surrounding development; is accessible to disabled people including people who require level access and wheelchair users; is designed to take advantage of direct sunlight; and has suitable management arrangements in place. The MUGA would be overlooked by the flats within the development.

Entrances and Active Frontages

148. Standard 8 of the London Plan Housing Supplementary Planning Guidance states that all main entrances should be visible, clearly identifiable and directly accessible from the public realm. Standard 10 of the London Plan Housing Supplementary Planning Guidance states that active frontages should be maximised and inactive frontages minimised on the ground floor or buildings. The main entrances to the building are accessed from the street. The frontage on Golden Lane would be activated by the ground floor workspace and the pupil entrance to the school. Details of the treatment of the elevation to the workspace and the school entrance are required by condition to ensure that this frontage is adequately animated.

Privacy and Outlook

- 149. Standard 28 of the London Plan Housing Supplementary Planning Guidance states that proposals should demonstrate how habitable rooms within each dwelling are provided with an adequate level of privacy in relation to neighbouring properties, the street and other public spaces. The units have deck access. There are concerns over privacy to bedrooms immediately adjacent to the communal deck access. Details of defensible space on the decks is required by condition.
- 150. Standard 29 of the London Plan Housing Supplementary Planning Guidance states that development should minimise the number of single aspect dwellings. North facing single aspect dwellings and single aspect dwellings containing three or more bedrooms should be avoided. The design of single aspect ground floor dwellings will require particular consideration to maintain privacy and adequate levels of daylight. None of the proposed flats are single aspect.

<u>Wind</u>

- 151. The residential block should be tested in terms of its impact on the local wind microclimate (including the balconies), in accordance with policy 7.6B(d) of the London Plan and the City of London Planning Advice Note: Wind Effects and Tall Buildings. This should be the subject of a condition and any wind mitigation measures required as a consequence would need to be approved.
- 152. It is considered that, subject to conditions, the proposals comply with policy DM3.1 and DM21.5 of the City of London Local Plan.

Transport, Servicing, and Impact on Public Highways

During demolition and construction

153. Details of the management of freight vehicle movements should be required by condition.

Servicing

154. Policy DM16.5 states that "on site servicing areas should be provided to allow all goods and refuse collection vehicles likely to service the development at the same time to be conveniently loaded and unloaded". Both the residential block and the school would be serviced from the street, which means that the proposals do not comply with policy DM16.5. The school would be serviced from Baltic Street West and deliveries/collections would consist of a weekly bin collection, a biweekly recycling collection, a daily kitchen delivery, a daily post-delivery (made on foot); and a further daily delivery. If this is accepted, as Baltic Street has no turning head, deliveries and collections would need to be carefully managed to avoid

conflict with school drop-off and pick up times. Delivery and Servicing Plans should be required by condition.

Disabled parking

155. Policy DM16.5 states that "designated parking must be provided for Blue Badge holders within developments in conformity with London Plan requirements". The applicant has stated that disabled parking spaces would be provided on street and not on site, and would be provided on a case by case basis. Provision on street would be subject to orders being made after consultation. The proposal is not compliant with Policy DM16.5, but considering that Islington operates a Blue Badge scheme and the public benefits of the proposals, the non-compliance is considered to be justified.

Cycle parking and facilities

- 156. Policy DM 16.3 of the Local Plan requires cycle parking provision for residential development to meet London Plan standards. Policy DM 16.3 states that the City Corporation encourages these standards to be exceeded and encourage on-street cycle parking in suitable locations.
- 157. It is proposed that 114 cycle parking spaces are provided for the residential block. The number of cycle parking spaces provided for the residential block exceeds the London Plan requirements (of 89 spaces) and is acceptable.
- 158. The provision for the school is considerably lower than the number required by the London Plan (57 spaces). The justification given by the applicant for this is that there is limited space available to provide cycle parking and any increase would most likely result in a loss of play space. It is considered that the policy compliant number of cycle parking spaces could be provided if the provision was split across the site and double-stackers were used. This could be dealt with by a condition.

Waste Management

- 159. Policy DM17.1 states that "waste facilities must be integrated into the design of buildings, wherever feasible, and allow for the separate storage and collection of recyclable materials, including compostable material".
- 160. Wheelie bins cannot be trundled more than 10m from a collection point to the refuse vehicle. Therefore, a collection area must be allocated near to the entrance, which should be the subject of a condition.

Open space, biodiversity and loss of trees

161. Policy DM19.1 states that "major commercial and residential developments should provide new and enhanced open space where

possible. Where on-site provision is not feasible, new or enhanced open space should be provided near the site or elsewhere in the City."

- 162. Policy DM19.4 states that "the City Corporation will protect existing play provision and seek additional or enhanced play facilities or space, particularly in areas identified as deficient by...requiring external play space and facilities as part of new residential developments which include 20 or more family units (those with 3 or more bedrooms) or more affordable units of 2 or more bedrooms." Policy 3.9 of the London Plan requires 440 sqm of play space to be provided for a scheme of this scale. The scheme does not include any on-site children's play space except for the use of the MUGA by residents outside school hours.
- 163. The application includes (as part of the Planning Statement Addendum) a justification for the lack of on-site formal children's play space. The justification given is the proximity of play provision close to the site (Golden Lane Estate playground, Fortune Street Park, Quaker Gardens), facilities available in the Golden Lane Children's Centre, the Early Bird Breakfast Club and the after-school Enrichment Club; and community use of the school hall. The Early Bird Breakfast Club and the after-school Enrichment Club and the after of the school hall cannot be used as justification as these are not free of charge. The MUGA would provide 440sqm of play space, which meets the London Plan requirement, but would only be available outside school hours. This is not in complete compliance with policy. Access to this space would need to be ensured through the S106 agreement.
- 164. Each flat would have private amenity space in the form of a balcony. Policy DM10.3 states that roof gardens and terraces will be encouraged where they do not immediately overlook residential premises. The balconies would not directly overlook neighbouring residential premises.
- 165. Policy DM10.2 states that the installation of green roofs should be encouraged. "On each building the maximum practicable coverage of green roof should be achieved. Extensive green roofs are preferred and their design should aim to maximise the roof's environmental benefits". It is proposed that the school hall and the podium level of the residential block have sedum roofs, and that the southern elevation of the school hall (facing Basterfield House) is a green wall. The roof of the main school building cannot be green as outdoor playspace would be situated here. A condition requiring the sedum roofs to be provided and maintained should be included.
- 166. Policy DM19.2 states that "developments should promote biodiversity and contribute to urban greening by incorportating: green roofs and walls, soft landscaping and trees; features for wildlife, such as nesting boxes and beehives; a planting mix which encourages biodiversity; planting which will be resilient to a range of climate conditions; maintenance of habitats within Sites of Importance for Nature Conservation."

- 167. A Preliminary Ecology Appraisal Report has been submitted as part of the application, which provides details of a desktop study and site survey. The site is not subject to any statutory or non-statutory ecological designations.
- 168. The report concludes that the trees and vegetation in the unmanaged planted beds along the western boundary provide suitable habitat for nesting birds, however this is limited and it is unlikely that nesting birds would utilise the site in great numbers. A precautionary approach to vegetation removal is considered adequate to safeguard the species.
- 169. Following the initial assessment, the site was not considered to provide a suitable habitat for roosting bats, dormice, water voles, great crested newts, reptiles or badgers and further surveys in respect of these species are not considered to be necessary.
- 170. In order to avoid any potential impacts on breeding birds any vegetation clearance, particularly within the planted beds along the western site boundary should be carried out outside of the main bird nesting season which runs from March to August inclusive. If any nests are found during the works, all activities in the vicinity of the nest must cease and the nests should be protected until such time as the young have fledged and left the nest. If any nesting birds are found at any time during clearance works, work should stop immediately and an ecologist consulted. This should be secured by condition.
- 171. It is recommended that an update habitat survey is undertaken if more than 12 months have elapsed between the survey and the point at which any development decisions have been made at the site. This should be secured by condition.
- 172. Bird boxes, log piles and a bug hotel are a feature of the school playground, which would support the site's ecology, and should be approved as part of the landscape plans.

Loss of trees

173. An Arboricultural Impact Assessment has been submitted as part of the application. To facilitate the development, four category C trees (low quality and value with at least 10 years remaining life expectancy or young trees with a stem diameter of less than 150mm) (two silver birches, a cherry tree and a butterfly bush), one area of scrub, and one group of C category trees would require removal. One area of climbing plants would need to cut back to the common boundary. The landscaping proposals show that 20 new trees would be planted across the site and on the site frontage on Golden Lane. The proposed development would result in a net gain in tree numbers. A condition is recommended to ensure that if these trees do not survive they are replaced. It is recommended that all retained trees are protected throughout the demolition and construction phase and that the method of protection is controlled by condition.

Energy and Sustainability

- 174. London Plan Policy 5.2 requires residential development to be zero carbon, with a 35% reduction in carbon emissions being achieved on site. The Energy and Sustainability Statement submitted as part of the application demonstrates that the residential block has been designed to achieve an improvement of 38.59% over the 2013 Building Regulations requirements. This would be achieved through energy efficiency measures and on-site CHP. A carbon offsetting payment would be required to meet the zero carbon target.
- 175. For non-residential development London Plan Policy 5.2 requires an overall 35% improvement in carbon emissions. The school has been designed to achieve a 40.6% improvement over the 2013 Building Regulations through energy efficiency measures and on-site CHP. No renewables sources are proposed at this stage as the building achieves the 35% target without renewables.
- 176. Policy CS15 requires the highest feasible and viable sustainability standards to be applied to all development and, therefore, renewable energy measures such as solar Photovoltaic panels should be included in the development regardless of whether the London Plan targets have been met with other measures.
- 177. The London Heat Map shows that this site is close to two District Heating networks: Citigen and Bunhill Row. London Plan and City Local Plan policies require that a connection to an existing District Heating network should be prioritised ahead of on-site CHP. Such a connection is likely to improve the carbon performance of this development with additional benefits for air quality in the vicinity.
- 178. The development should include connection to a local District Heat Network. If there are exceptional circumstances which make this impossible then this should be fully justified and mitigation for carbon emissions and air quality impacts should be put into place. This would need to be required by either a condition or through the S106 agreement.
- 179. The BREEAM 2014 New Construction Design Stage Tracker submitted as part of the application demonstrates that the development has been designed to achieve a BREEAM rating of Excellent in line with Policy CS16.

Flooding and drainage

180. A Flood Risk Assessment has been submitted as part of the application. The site is within Flood Zone 1 and has a low risk of flooding from groundwater, pluvial or sewers and has a low to negligible risk of flooding from all other sources. The report concludes that the development proposals should not increase flood risk on or off site.

- 181. The Flood Risk Assessment includes a Surface Water Drainage Strategy, which sets out appropriate measures for the site. The existing site is currently drained to the existing Thames Water combined sewers. There are no separate adoptable foul and surface water sewers in the vicinity of the site. In addition, the existing ground conditions are not suitable for infiltration techniques.
- 182. The proposed drainage network for the residential development and the school have been designed to be independent entities. As such the proposed runoff rate for each network will be 5l/s, and will therefore discharge to the existing combined sewer at 10l/s. To achieve the proposed discharge rates for storm events up to the 1:100 year + CC (40%), it is proposed to use a geo-cellular system to provide 166m3 of storage for the school and 30m3 of storage for the residential development. Details of landscaping, SuDs components and measures to prevent flooding are required by condition.
- 183. It is considered that, subject to conditions, the proposals would comply with policies CS18, DM18.2 and DM18.3 of the Local Plan.

Air quality

- 184. Section 7.14 of the London Plan requires that major developments are at least air quality neutral in terms of their overall impact on air quality. An Air Quality Report has been submitted as part of the application.
- 185. The future air quality predictions in the report are stated to be worse case and that air quality would be significantly below the annual mean objective; however, these predictions seem overly optimistic. As such, given the nature of the school environment, possible exceedances of the air quality objectives, traffic impacts at drop off and pick up time, for example idling engines, further details are required by condition.
- 186. The report should consider: ventilation/filtration requirements for the development occupiers, information for staff/pupils to reduce exposure; reference to the travel plan which promotes walking/cycling, public transport and discourages private car use; measures to stop idling engines; specification of ultra-low NOx boilers and CHP; any greening measures to reduce exposure; and any other relevant measures
- 187. As details relating to site combustion plant is not known, the air quality report does not include an impact assessment of the proposed CHP and the report states this will be done when more information is available. The applicant should note that the CHP assessment should include the roof-top play area as a receptor location. In addition, the air quality neutral assessment does not include an assessment of building emissions, therefore it is recommended that both of these elements are conditioned.
- 188. During construction dust emissions would increase and would require control through the implementation of good practice mitigation measures,

which should be required by conditions as part of the Demolition and Construction Method Statements.

189. It is considered that, subject to conditions, the proposals would comply with policy DM15.6 of the Local Plan.

Archaeology

- 190. The site is in an area of archaeological potential where remains from all periods may be expected to survive, and particularly from the medieval and post-medieval periods. There is low to medium potential for Roman remains, including Roman burials, to survive.
- 191. The existing building structures within the City are single storey, do not have a basement and part of the site is not built on. There is evidence that the previous pre-war buildings on the site had basements and part of the site is over a former road. The archaeological survival will be affected by the existence of previous basements and building foundations and bomb damage. The proposed development on the site within the City would not have a basement and any archaeological impact would be from the proposed ground floor slab, new foundations and drainage.
- 192. An Archaeological Desk Based Assessment has been submitted with the application. Archaeological evaluation is required to provide further information on the nature, character and date of archaeological survival and to design an appropriate mitigation scheme to record any remains affected.
- 193. Conditions are recommended to cover archaeological evaluation, a programme of archaeological work and details of the proposed ground floor slab and below ground works including drainage and foundation design.
- 194. It is considered that, subject to conditions, the proposals would comply with policies DM12.4 of the Local Plan.

Conclusion

- 195. The proposed development is a significant development on the northern boundary of the City, largely located within the London Borough of Islington with a small part of the school site within the City boundary.
- 196. The scheme provides 66 new residential units all of which will be social housing in a high-quality purpose built block. The units meet space standards and provides a balance of different sized units. The scheme provides less amenity space than a policy compliant scheme would though this is made up for, to a degree, by the availability of the school playground for out of school hours use by the residents and access to existing facilities in the neighbouring park.

- 197. New work space to enliven the ground floor elevation of the residential block will create new employment uses and will enliven the frontage.
- 198. The scheme provides a much needed purpose built primary school, with play areas and with a school hall which will also be available for community use. Its operation and hours of use will be managed through a S106 agreement covenants through a Management plan.
- 199. Many aspects of the proposal are supported by policy whilst a number of matters are not. These are:
- 200. The less than substantial harm to the setting of the listed Golden Lane Estate. This less than substantial harm cannot be mitigated without a substantial reduction in the height of the tower and thereby impacts on the deliverability of a significant number of residential units. It is considered that this less than substantial harm can be balanced against the benefits of the scheme.
- 201. The loss of daylight to a number of flats on the Golden Lane Estate. The losses in Basterfield House whilst significant are to bedrooms and kitchens, to rooms in part impacted by balconies and which the BRE standards state are of less significance than living rooms. Whilst the impact this loss has is noticeable and significant in some cases it is considered that it can be weighed against the provision of new social housing.
- 202. The lack of off street servicing arrangements for the school and residential. Due to the sensitive nature of the school use and site this will need to be very carefully managed to ensure that this is an acceptable arrangement and will need to be part of a management plan in the S106.
- 203. The lack of sufficient open space for the residents. This will require management of the play areas to ensure that they are made available and that the balconies are well designed.
- 204. Other matters which have been identified as requiring further information or detailing are capable of being dealt with by the imposition of appropriate conditions either by the LBI or by the City in respect of the relevant parts of the scheme and by agreements to ensure that the benefits of the proposals are realised.
- 205. On balance it is considered that the scheme results in positive benefits to the community as a whole through the provision of social housing, school and community facilities, work space and is in substantial compliance with the City of London plan and that when taken as a whole, planning permission should be granted subject to the imposition of conditions and planning covenants under S106.

Conditions

To the extent that Conditions and Planning Covenant relate to land in Islington

it is anticipated that appropriate Conditions and covenants to secure the matters identified below will be imposed by the London Borough of Islington subject to any further necessary amendments

- 1 The development hereby permitted shall be begun before the expiration of three years from the date of this permission. REASON: To ensure compliance with the terms of Section 91 of the Town and Country Planning Act 1990.
- 2 Details of facilities and methods to accommodate and manage all freight vehicle movements to and from the site during the demolition and construction of the building(s) hereby approved shall be submitted to and approved by the Local Planning Authority in writing prior to the commencement of work. The details shall include relevant measures from Section 4 of the Mayor of London's Construction Logistics Plan Guidance for Developers issued in April 2013, and specifically address the safety of vulnerable road users through compliance with the Construction Logistics and Cyclist Safety (CLOCS) Standard for Construction Logistics, Managing Work Related Road Risk. No demolition or construction shall be carried out other than in accordance with the approved details and methods.

REASON: To ensure that demolition and construction works do not have an adverse impact on public safety and the transport network in accordance with London Plan Policy 6.14 and the following policies of the Local Plan: DM15.6, DM16.1. These details are required prior to demolition and construction work commencing in order that the impact on the transport network is minimised from the time that demolition and construction starts.

3 There shall be no demolition on the site until a scheme for protecting nearby residents and commercial occupiers from noise, dust and other environmental effects has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be based on the Department of Markets and Consumer Protection's Code of Practice for Deconstruction and Construction Sites and arrangements for liaison and monitoring (including any agreed monitoring contribution) set out therein. A staged scheme of protective works may be submitted in respect of individual stages of the demolition process but no works in any individual stage shall be commenced until the related scheme of protective works has been submitted to and approved in writing by the Local Planning Authority. The demolition shall not be carried out other than in accordance with the approved scheme (including payment of any agreed monitoring contribution)

REASON: In the interests of public safety and to ensure a minimal effect on the amenities of neighbouring premises and the transport network in accordance with the following policies of the Local Plan: DM15.6, DM15.7, DM21.3. These details are required prior to demolition in order that the impact on amenities is minimised from the time that development starts.

4 There shall be no demolition on the site until a scheme for protecting nearby residents and commercial occupiers from noise, dust and other environmental effects during construction has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be based on the Department

of Markets and Consumer Protection's Code of Practice for Deconstruction and Construction Sites and arrangements for liaison and monitoring (including any agreed monitoring contribution) set out therein. A staged scheme of protective works may be submitted in respect of individual stages of the construction process but no works in any individual stage shall be commenced until the related scheme of protective works has been submitted to and approved in writing by the Local Planning Authority. The development shall not be carried out other than in accordance with the approved scheme (including payment of any agreed monitoring contribution) REASON: In the interests of public safety and to ensure a minimal effect on the amenities of neighbouring premises and the transport network in accordance with the following policies of the Local Plan: DM15.6, DM15.7, DM21.3. These details are required prior to demolition in order that the impact on amenities is minimised from the time that the construction starts.

- 5 Demolition works shall not begin until a Deconstruction Logistics Plan to manage all freight vehicle movements to and from the site during deconstruction of the existing building(s) has been submitted to and approved in writing by the Local Planning Authority. The Deconstruction Logistics Plan shall include relevant measures from Section 3 of the Mayor of London's Construction Logistics Plan Guidance for Developers issued in April 2013, and specifically address the safety of vulnerable road users through compliance with the Construction Logistics and Cyclist Safety (CLOCS) Standard for Construction Logistics, Managing Work Related Road Risk. The demolition shall not be carried out otherwise than in accordance with the approved Deconstruction Logistics Plan or any approved amendments thereto as may be agreed in writing by the Local Planning Authority. REASON: To ensure that demolition works do not have an adverse impact on public safety and the transport network in accordance with London Plan Policy 6.14 and the following policies of the Local Plan: DM15.6, DM16.1. These details are required prior to demolition work commencing in order that the impact on the transport network is minimised from the time that demolition starts.
- 6 Construction works shall not begin until a Construction Logistics Plan to manage all freight vehicle movements to and from the site during construction of the development has been submitted to and approved in writing by the Local Planning Authority. The Construction Logistics Plan shall include relevant measures from Section 3 of the Mayor of London's Construction Logistics Plan Guidance for Developers issued in April 2013, and specifically address [driver training for] the safety of vulnerable road users through compliance with the Construction Logistics and Cyclist Safety (CLOCS) Standard for Construction Logistics, Managing Work Related Road Risk. The development shall not be carried out otherwise than in accordance with the approved Construction Logistics Plan or any approved amendments thereto as may be agreed in writing by the Local Planning Authority. REASON: To ensure that construction works do not have an adverse impact on public safety and the transport network in accordance with London Plan Policy 6.14 and the following policies of the Local Plan: DM15.6, DM16.1. These details are required prior to construction work commencing in order

that the impact on the transport network is minimised from the time that construction starts.

7 No development other than demolition shall take place until the detailed design of all wind mitigation measures has been submitted to and approved in writing by the Local Planning Authority. These details shall include the size and appearance of any features, the size and appearance of any planting containers, trees species, planting medium and irrigation systems. No part of the building shall be occupied until the approved wind mitigation measures have been implemented unless the Local Planning Authority agrees otherwise in writing. The said wind mitigation measures shall be retained in place for the life of the building unless otherwise agreed by the Local Planning Authority.

REASON: In order to ensure that the proposed development does not have a detrimental impact on the amenities of the area in accordance with the following policies of the Local Plan: DM10.1, DM16.1, DM16.2. These details are required prior to construction in order that any changes to satisfy this condition are incorporated into the development before the design is too advanced to make changes.

- 8 No development including demolition shall take place until the developer has secured the completion of a Base-Line Terrestrial Television and Radio Interference Study ("the Base-Line Study") to assess terrestrial television and radio reception to residential properties in the vicinity of the site. The Base-Line Study shall be carried out in accordance with a Base-Line Study Scheme first submitted to and approved in writing by the Local Planning Authority, and which shall include details of the residential properties to be surveyed. REASON: To ensure that the existing television reception at other premises is not significantly affected by the proposed development. These details are required prior to commencement in order to create a record of the conditions prior to changes caused by the development.
- Except as may otherwise be approved in writing by the Local Planning Authority, no development shall be carried out in advance of the building lines as shown on the deposited plans.
 REASON: To ensure compliance with the proposed building lines and site boundaries in accordance with the following policies of the Local Plan: DM16.1, DM16.2.
- 10 Prior to the occupation of any part of the building, the land between the existing building lines and the face of the proposed new building shall be brought up to street level, paved and drained in accordance with details to be submitted to and approved in writing by the Local Planning Authority and shall not be fenced or otherwise enclosed or obstructed. REASON: To ensure compliance with building lines and to ensure a satisfactory treatment at ground level in accordance with the following policies of the Local Plan: DM10.1, DM10.8, DM16.2.
- 11 No doors, gates or windows at ground floor level shall open over the public highway.

REASON: In the interests of public safety

12 Unless otherwise approved by the LPA no plant or telecommunications equipment shall be installed on the exterior of the building, including any plant or telecommunications equipment permitted by the Town & Country Planning (General Permitted Development) Order 2015 or in any provisions in any statutory instrument revoking and re-enacting that Order with or without modification.

REASON: To ensure a satisfactory external appearance in accordance with the following policy of the Local Plan: DM10.1.

- 13 The development shall incorporate such measures as are necessary within the site to resist structural damage arising from an attack with a road vehicle or road vehicle borne explosive device, details of which must be submitted to and approved in writing by the Local Planning Authority before any construction works hereby permitted are begun. REASON: To ensure that the premises are protected from road vehicle borne damage within the site in accordance with the following policy of the Local Plan: DM3.2. These details are required prior to construction work commencing in order that any changes to satisfy this condition are incorporated into the development before the design is too advanced to make changes.
- 14 No development other than demolition shall take place until the detailed design of all wind mitigation measures has been submitted to and approved in writing by the Local Planning Authority. These details shall include the size and appearance of any features, the size and appearance of any planting containers, trees species, planting medium and irrigation systems. No part of the building shall be occupied until the approved wind mitigation measures have been implemented unless the Local Planning Authority agrees otherwise in writing. The said wind mitigation measures shall be retained in place for the life of the building unless otherwise agreed by the Local Planning Authority.

REASON: In order to ensure that the proposed development does not have a detrimental impact on the amenities of the area in accordance with the following policies of the Local Plan: DM10.1, DM16.1, DM16.2. These details are required prior to construction in order that any changes to satisfy this condition are incorporated into the development before the design is too advanced to make changes.

No development including demolition shall take place until the developer has secured the completion of a Base-Line Terrestrial Television and Radio Interference Study ("the Base-Line Study") to assess terrestrial television and radio reception to residential properties in the vicinity of the site. The Base-Line Study shall be carried out in accordance with a Base-Line Study Scheme first submitted to and approved in writing by the Local Planning Authority, and which shall include details of the residential properties to be surveyed. REASON: To ensure that the existing television reception at other premises is not significantly affected by the proposed development. These details are

required prior to commencement in order to create a record of the conditions prior to changes caused by the development.

16 Before any works thereby affected are begun a scheme for the avoidance of expansion joints in the elevation shall be submitted to and approved in writing by the local planning authority. The development shall be implemented in accordance with the approved details. REASON: To ensure that the Local Planning Authority may be satisfied with the detail of the proposed development and to ensure a satisfactory external

appearance in accordance with the following policy of the Local Plan: DM10.1.

17 Before any works thereby affected are begun the following details shall be submitted to and approved in writing by the Local Planning Authority and all development pursuant to this permission shall be carried out in accordance with the approved details:

(a) particulars and samples of the materials to be used on all external faces of the building including external ground and upper level surfaces;

- (b) details of the ground floor office entrance(s);
- (c) details of windows and external joinery;
- (d) details of soffits, hand rails and balustrades;
- (e) details of balconies and decks;

(f)details of junctions;

(g) details of any mansafe system;

(h) details of the school entrance on Golden Lane, including surface, wall and soffit treatment and seating; and

(i) details of the top storey of the podium to the residential tower.

REASON: To ensure that the Local Planning Authority may be satisfied with the detail of the proposed development and to ensure a satisfactory external appearance in accordance with the following policies of the Local Plan: CS10 and DM10.1.

18 Prior to commencement of construction a lighting strategy shall be submitted to and approved by the local planning authority. The lighting strategy shall include consideration of all ambient and decorative lighting, including the lighting of spaces and buildings, accounting for siting, intensity, visual brightness, uniformity and colour.

REASON: To ensure that the Local Planning Authority may be satisfied with the detail of the proposed development and to ensure a satisfactory external appearance in accordance with the following policies of the Local Plan: CS10 and DM10.1.

19 (a) The level of noise emitted from any new plant shall be lower than the existing background level by at least 10 dBA. Noise levels shall be determined at one metre from the window of the nearest noise sensitive premises. The background noise level shall be expressed as the lowest LA90 (10 minutes) during which plant is or may be in operation.

(b) Following installation but before the new plant comes into operation measurements of noise from the new plant must be taken and a report demonstrating that the plant as installed meets the design requirements shall be submitted to and approved in writing by the Local Planning Authority. (c) All constituent parts of the new plant shall be maintained and replaced in whole or in part as often is required to ensure compliance with the noise levels approved by the Local Planning Authority.

REASON: To protect the amenities of neighbouring residential/commercial occupiers in accordance with the following policies of the Local Plan: DM15.7, DM21.3.

- 20 Before any mechanical plant is used on the premises it shall be mounted in a way which will minimise transmission of structure borne sound or vibration to any other part of the building in accordance with a scheme to be submitted to and approved in writing by the Local Planning Authority. REASON: In order to protect the amenities of commercial occupiers in the building in accordance following policy of the Local Plan: DM15.7.
- 21 Prior to first occupation of the school hereby permitted details of an acoustic barrier to the rooftop play area shall be submitted to and approved in writing by the Local Planning Authority, and installed in accordance with the approved details. REASON: To protect the amenities of neighbouring residential/commercial occupiers in accordance with the following policies of the Local Plan: DM15.7, DM21.3.
- 22 No cooking shall take place within the kitchen in the school hall until fume extract arrangements and ventilation have been installed to serve that kitchen in accordance with a scheme approved by the Local Planning Authority. Flues must terminate at roof level or an agreed high level location which will not give rise to nuisance to other occupiers of adjacent buildings. Any works that would materially affect the external appearance of the building will require a separate planning permission.

REASON: In order to protect the amenity of the area in accordance with the following policies of the Local Plan: DM15.6, DM21.3.

23 Details of a Servicing Management Plan demonstrating the arrangements for control of the arrival and departure of vehicles servicing the premises shall be submitted to and approved in writing by the Local Planning Authority prior to the first occupation of the development hereby permitted. The building facilities shall thereafter be operated in accordance with the approved Servicing Management Plan (or any amended Servicing Management Plan that may be approved from time to time by the Local Planning Authority) for the life of the building.

REASON: To ensure that the development does not have an adverse impact on the free flow of traffic in surrounding streets in accordance with the following policy of the Local Plan: DM16.1.

24 Prior to first occupation details of a collection point for refuse shall be submitted to and approved by the Local Planning Authority. The refuse storage facilities shown on the drawings hereby approved shall be provided and maintained throughout the life of the development for the use of all occupiers. REASON: To provide adequate facilities for the storage and collection of waste in accordance with the following policy of the Local Plan: DM17.1.

25 A post construction BREEAM assessment demonstrating that a target rating of 'Excellent' has been achieved for the school and commercial development (or such other target rating as the local planning authority may agree provided that it is satisfied all reasonable endeavours have been used to achieve an 'Excellent' rating) shall be submitted as soon as practicable after practical completion.

REASON: To demonstrate that carbon emissions have been minimised and that the development is sustainable in accordance with the following policy of the Local Plan: CS15, DM15.1, DM15.2.

- 26 The development shall be designed to allow for the retro-fit of heat exchanger rooms to connect into a district heating network if this becomes available during the lifetime of the development. REASON: To minimise carbon emissions by enabling the building to be connected to a district heating and cooling network if one becomes available during the life of the building in accordance with the following policies of the Local Plan: DM15.1, DM15.2, DM15.3, DM15.3, DM15.4.
- 27 Details of the construction, planting irrigation and maintenance regime for the proposed green wall(s)/roof(s) shall be submitted to and approved in writing by the local planning authority before any works thereby affected are begun. The development shall be carried out in accordance with those approved details and maintained as approved for the life of the development unless otherwise approved by the local planning authority. REASON: To assist the environmental sustainability of the development and provide a habitat that will encourage biodiversity in accordance with the following policies of the Local Plan: DM18.2, DM19.2.
- 28 Before any construction works hereby permitted are begun the following details shall be submitted to and approved in writing by the Local Planning Authority in conjunction with the Lead Local Flood Authority and all development pursuant to this permission shall be carried out in accordance with the approved details:

(a) Fully detailed design and layout drawings for the proposed SuDS components including but not limited to: attenuation systems, rainwater pipework, flow control devices, design for system exceedance, design for ongoing maintenance; surface water flow rates shall be restricted to no greater than 5 l/s from each outfall and from no more than two distinct outfalls, provision should be made for an attenuation volume capacity capable of achieving this, which should be no less than 196m3;

(b) Full details of measures to be taken to prevent flooding (of the site or caused by the site) during the course of the construction works.

(c) Evidence that Thames Water have been consulted and consider the proposed discharged rate to be satisfactory.

REASON: To improve sustainability, reduce flood risk and reduce water runoff rates in accordance with the following policy of the Local Plan: DM18.1, DM18.2 and DM18.3

Before the shell and core is complete the following details shall be submitted to and approved in writing by the Local Planning Authority in conjunction with the Lead Local Flood Authority and all development pursuant to this permission shall be carried out in accordance with the approved details:
(a) A Lifetime Maintenance Plan for the SuDS system to include:
A full description of how the system would work, it's aims and objectives and the flow control arrangements;

- A Maintenance Inspection Checklist/Log;

- A Maintenance Schedule of Work itemising the tasks to be undertaken, such as the frequency required and the costs incurred to maintain the system. REASON: To improve sustainability, reduce flood risk and reduce water runoff rates in accordance with the following policy of the Local Plan: DM18.1, DM18.2 and DM18.3.

30 Prior to the commencement of works on the development hereby permitted, a site report detailing steps to minimise future occupiers' exposure to air pollution shall be submitted to and approved by the Local Planning Authority. The approved scheme is to be completed prior to occupation of the development and shall be permanently maintained thereafter. REASON: To protect the building occupants against poor air quality in accordance with the following policies of the City of London Local Plan D15.6 and London Plan 7.14.

31 A No CHP plant shall at any time be installed in the building unless the air quality impact of the CHP has been assessed and a report detailing the assessment has been submitted to and approved in writing by the Local Planning Authority. Notwithstanding plant size, the NOx emissions of the CHP shall not exceed part B of this condition.

B No CHP plant in the thermal input range 50kWth to 20MWth with NOx emissions exceeding that specified in Band B of Appendix 7 to the GLA Sustainable Design and Construction Supplementary Planning Guidance published April 2014 (or any updates thereof applicable at time of installation) shall at any time be installed in the building.

C Prior to any CHP plant coming into operation the following details must be submitted to and approved in writing by the Local Planning Authority: The results of an emissions test demonstrating compliance with Part A and B of this condition and stack discharge velocity carried out by an accredited laboratory/competent person; and

An equipment maintenance schedule demonstrating that the emission standard would always be met.

D The CHP plant shall at all times be maintained in accordance with the approved schedule.

REASON: To comply with policy DM15.6 of the Local Plan and policies 7.14B a and c of the London Plan

32 Any generator on the site shall be used solely on intermittent and exceptional occasions when required in response to a life threatening emergency or an exceptional event requiring business continuity and for the testing necessary to meet that purpose and shall not be used at any other time. At all times the

generator shall be operated to minimise noise impacts and emissions of air pollutants and a log of its use shall be maintained and be available for inspection by the Local Planning Authority.

REASON: To minimise adverse air quality in accordance with policies DM15.6 and DM 21.3 of the Local Plan and policies 7.14 B a and c of the London Plan.

- 33 Unless otherwise agreed in writing by the local planning authority all combustion flues must terminate at least 1m above the highest roof in the development in order to ensure maximum dispersion of pollutants REASON: In order to ensure that the proposed development does not have a detrimental impact on occupiers of residential premises in the area and in accordance with the following policy of the Local Plan: DM15.6 and to maintain local air quality and ensure that exhaust does not contribute to local air pollution, particularly nitrogen dioxide and particulates PM10, in accordance with the City of London Air Quality Strategy 2015 and the Local Plan DM15.6.
- 34 No boilers that have a dry NOx emission level exceeding 40 mg/kWh (measured at 0% excess O2) shall at any time be installed in the building REASON: To comply with policy DM15.6 of the Local Plan and policies 7.14B a and c of the London Plan.
- A: Within five working days of any site contamination being found when carrying out the development hereby approved the contamination must be reported in writing to the Local Planning Authority and an investigation and risk assessment must be undertaken in accordance with the requirements of DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11'. The risk assessment must be submitted to and approved in writing by the Local Planning Authority.
 B: Where remediation is necessary a detailed remediation scheme to bring the site to a condition suitable for the intended use must be submitted to and approved in writing Authority. Unless otherwise agreed in writing by the Local Planning Authority the remediation scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

C: Following completion of measures identified in the approved remediation scheme a verification report must be submitted to and approved in writing of the Local Planning Authority.

REASON: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with the Local Plan DM15.8. These details are required prior to commencement in order that any changes to satisfy this condition are incorporated into the development before the design is too advanced to make changes. 36 A: No work except demolition to basement slab level shall take place until an investigation and risk assessment has been undertaken to establish if the site is contaminated and to determine the potential for pollution in accordance with the requirements of DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11'. The risk assessment must be submitted to and approved in writing by the Local Planning Authority.

B: Where remediation is necessary a detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and to the natural and historical environment must be submitted to and approved in writing by the Local Planning Authority. Unless otherwise agreed in writing by the Local Planning Authority the remediation scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation. C: Following completion of measures identified in the approved remediation scheme a verification report must be submitted to and approved in writing of the Local Planning Authority.

REASON: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors in accordance with the Local Plan DM15.8. These details are required prior to commencement in order that any changes to satisfy this condition are incorporated into the development before the design is too advanced to make changes.

37 Archaeological evaluation shall be carried out in order to compile archaeological records in accordance with a timetable and scheme of such archaeological work submitted to and approved in writing by the Local Planning Authority before any commencement of archaeological evaluation work.

REASON: To ensure that an opportunity is provided for the archaeology of the site to be considered and recorded in accordance with the following policy of the Local Plan: DM12.4.

38 No works except demolition to basement slab level shall take place until the developer has secured the implementation of a programme of archaeological work to be carried out in accordance with a written scheme of investigation which has been submitted to and approved in writing by the Local Planning Authority. This shall include all on site work, including details of any temporary works which may have an impact on the archaeology of the site and all off site work such as the analysis, publication and archiving of the results. All works shall be carried out and completed as approved, unless otherwise agreed in writing by the Local Planning Authority.

REASON: In order to allow an opportunity for investigations to be made in an area where remains of archaeological interest are understood to exist in accordance with the following policy of the Local Plan: DM12.4.

- 39 No works except demolition to ground slab level shall take place before details of the new ground floor slab and all below groundworks including drainage and foundation design, to include a detailed design and method statement, have been submitted to and approved in writing by the Local Planning Authority, such details to show the preservation of surviving archaeological remains which are to remain in situ. REASON: To ensure the preservation of archaeological remains following archaeological investigation in accordance with the following policy of the Local Plan: DM12.4.
- 40 All unbuilt surfaces shall be treated in accordance with a landscaping scheme to be submitted to and approved in writing by the Local Planning Authority before any landscaping works are commenced. All hard and soft landscaping works shall be carried out in accordance with the approved details not later than the end of the first planting season following completion of the development. Trees and shrubs which die or are removed, uprooted or destroyed or become in the opinion of the Local Planning Authority seriously damaged or defective within 5 years of completion of the development shall be replaced with trees and shrubs of similar size and species to those originally approved, or such alternatives as may be agreed in writing by the Local Planning Authority.

REASON: In the interests of visual amenity in accordance with the following policies of the Local Plan: DM10.1, DM19.2.

41 Unless otherwise approved in writing by the Local Planning Authority, before any works thereby affected are begun, details of the provision to be made in the building's design to enable the discreet installation of street lighting on the development, including details of the location of light fittings, cable runs and other necessary apparatus, shall be submitted to and approved in writing by the Local Planning Authority, and the development shall be carried out in accordance with the approved details.

REASON: To ensure provision for street lighting is discreetly integrated into the design of the building in accordance with the following policy of the City of London Local Plan: DM10.1.

42 Unless otherwise approved in writing by the Local Planning Authority, no fewer than 10% of the total number of residential units within the development shall be designed and constructed in accordance with the Building Regulations 2010, Part M4(3): Category 3 - Wheelchair user dwellings and the remainder of the residential units shall be designed and constructed in accordance with the Building Regulations 2010, Part M4(2): Category 2 -Accessible and Adaptable dwellings.

REASON: In the interest of inclusive design and to ensure that adaptable housing is provided in accordance with the following policy of the Local Plan: CS21/4.

43 Provision shall be made for disabled people to obtain access to the building via all entrances without the need to negotiate steps and shall be maintained for the life of the building.

REASON: To ensure that disabled people are able to use the building in accordance with the following policy of the Local Plan: DM10.8.

Appendix A

London Plan Policies

The London Plan policies which are most relevant to this application are set our below:

Policy 2.18 Protect, promote, expand and manage the extent and quality of and access to London's network of green infrastructure.

Policy 3.1 Protect and enhance facilities and services that meet the needs of particular groups and communities.

Policy 3.2 New developments should be designed, constructed and managed in ways that improve health and promote healthy lifestyles to help to reduce health inequalities.

Policy 3.3 Ensure the housing need identified in the London Plan is met, particularly through provision consistent with at least an annual average of 32,210 net additional homes across London which would enhance the environment, improve housing choice and affordability and provide better quality accommodation for Londoners.

Policy 3.11 Maximise affordable housing provision and seek an average of at least 13,200 more affordable homes per year in London over the term of the London Plan.

Policy 3.16 Protection and enhancement of social infrastructure - additional and enhanced social infrastructure provision to meet the needs of a growing and diverse population.

Policy 5.2 Development proposals should make the fullest contribution to minimising carbon dioxide emissions.

Policy 5.3 Development proposals should demonstrate that sustainable design standards are integral to the proposal, including its construction and operation. Major development proposals should meet the minimum standards outlined in supplementary planning guidance.

Policy 5.6 Development proposals should evaluate the feasibility of Combined Heat and Power (CHP) systems, and where a new CHP system is appropriate also examine opportunities to extend the system beyond the site boundary to adjacent sites.

Policy 5.7 Major development proposals should provide a reduction in carbon dioxide emissions through the use of on-site renewable energy generation, where feasible.

Policy 5.9 Reduce the impact of the urban heat island effect in London and encourage the design of places and spaces to avoid overheating and excessive heat generation, and to reduce overheating due to the impacts of climate change and the urban heat island effect on an area wide basis.

Policy 5.10 Promote and support urban greening, such as new planting in the public realm (including streets, squares and plazas) and multifunctional green infrastructure, to contribute to the adaptation to, and reduction of, the effects of climate change.

Policy 5.11 Major development proposals should be designed to include roof, wall and site planting, especially green roofs and walls where feasible.

Policy 5.12 Development proposals must comply with the flood risk assessment and management requirements set out in PPS25 and address flood resilient design and emergency planning; development adjacent to flood defences would be required to protect the integrity of existing flood defences and wherever possible be set back from those defences to allow their management, maintenance and upgrading to be undertaken in a sustainable and cost effective way.

Policy 5.13 Development should utilise sustainable urban drainage systems (SUDS) unless there are practical reasons for not doing so.

Policy 5.18 Encourage development waste management facilities and removal by water or rail transport.

Policy 6.1 The Mayor would work with all relevant partners to encourage the closer integration of transport and development.

Policy 6.3 Development proposals should ensure that impacts on transport capaCity and the transport network are fully assessed.

Policy 6.5 Contributions would be sought from developments likely to add to, or create, congestion on London's rail network that Crossrail is intended to mitigate.

Policy 6.9 Developments should provide secure, integrated and accessible

cycle parking facilities and provide on-site changing facilities and showers for cyclists, facilitate the Cycle Super Highways and facilitate the central London cycle hire scheme.

Policy 6.13 The maximum standards set out in Table 6.2 should be applied to planning applications. Developments must:

ensure that 1 in 5 spaces (both active and passive) provide an electrical charging point to encourage the uptake of electric vehicles

provide parking for disabled people in line with Table 6.2

meet the minimum cycle parking standards set out in Table 6.3

provide for the needs of businesses for delivery and servicing.

Policy 7.2 All new development in London to achieve the highest standards of accessible and inclusive design.

Policy 7.3 Creation of safe, secure and appropriately accessible environments.

Policy 7.4 Development should have regard to the form, function, and structure of an area, place or street and the scale, mass and orientation of surrounding buildings. It should improve an area's visual or physical connection with natural features. In areas of poor or ill-defined character, development should build on the positive elements that can contribute to establishing an enhanced character for the future function of the area. Policy 7.5 London's public spaces should be secure, accessible, inclusive, connected, easy to understand and maintain, relate to local context, and incorporate the highest quality design, landscaping, planting, street furniture and surfaces.

Policy 7.6 Buildings and structures should:

a be of the highest architectural quality

b be of a proportion, composition, scale and orientation that enhances, activates and appropriately defines the public realm

c comprise details and materials that complement, not necessarily replicate, the local architectural character

d not cause unacceptable harm to the amenity of surrounding land and buildings, particularly residential buildings, in relation to privacy, overshadowing, wind and microclimate. This is particularly important for tall buildings

e incorporate best practice in resource management and climate change mitigation and adaptation

f provide high quality indoor and outdoor spaces and integrate well with the surrounding streets and open spaces

g be adaptable to different activities and land uses, particularly at ground level

h meet the principles of inclusive design

i optimise the potential of sites.

Policy 7.8 Development should identify, value, conserve, restore, re-use and incorporate heritage assets, conserve the significance of heritage assets and their settings and make provision for the protection of archaeological resources, landscapes and significant memorials.

Policy 7.13 Development proposals should contribute to the minimisation of potential physical risks, including those arising as a result of fire, flood and related hazards.

Policy 7.14 Implement Air Quality and Transport strategies to achieve reductions in pollutant emissions and minimise public exposure to pollution.

Policy 7.15 Minimise existing and potential adverse impacts of noise on, from, within, or in the vicinity of, development proposals and separate new noise sensitive development from major noise sources.

Policy 7.18 Resist the loss of local protected open spaces unless equivalent or better quality provision is made within the local catchment area.

Policy 7.19 Development proposals should, wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity.

Policy 7.21 Trees should be protected, maintained, and enhanced. Existing trees of value should be retained and any loss as the result of development should be replaced.

Relevant Local Plan Policies

DM3.1 Self-containment in mixed uses

Where feasible, proposals for mixed use developments must provide independent primary and secondary access points, ensuring that the proposed uses are separate and self-contained.

DM3.2 Security measures

To ensure that security measures are included in new developments, applied to existing buildings and their curtilage, by requiring:

- a) building-related security measures, including those related to the servicing of the building, to be located within the development's boundaries;
- b) measures to be integrated with those of adjacent buildings and the public realm;
- c) that security is considered at the concept design or early developed design phases of all development proposals to avoid the need to retro-fit measures that impact on the public realm;
- d) developers to seek recommendations from the City of London Police Architectural Liaison Officer at the design stage. New development should meet Secured by Design principles;
- e) the provision of service management plans for all large development, demonstrating that vehicles seeking access to the building can do so without waiting on the public highway;
- f) an assessment of the environmental impact of security measures, particularly addressing visual impact and impact on pedestrian flows.

CS4 Planning Contributions

To manage the impact of development, seeking appropriate contributions having regard to the impact of the contributions on the viability of development.

CS5 The North of the City

To ensure that the City benefits from the substantial public transport improvements planned in the north of the City, realising the potential for rejuvenation and "eco design" to complement the sustainable transport infrastructure.

CS10 Promote high quality environment

To promote a high standard and sustainable design of buildings, streets and spaces, having regard to their surroundings and the character of the City and creating an inclusive and attractive environment.

DM10.1 New development

- To require all developments, including alterations and extensions to existing buildings, to be of a high standard of design and to avoid harm to the townscape and public realm, by ensuring that:
- a) the bulk and massing of schemes are appropriate in relation to their surroundings and have due regard to the general scale, height, building lines, character, historic interest and significance, urban grain and materials of the locality and relate well to the character of streets, squares, lanes, alleys and passageways;
- b) all development is of a high standard of design and architectural detail with elevations that have an appropriate depth and quality of modelling;
- c) appropriate, high quality and durable materials are used;

- d) the design and materials avoid unacceptable wind impacts at street level or intrusive solar glare impacts on the surrounding townscape and public realm;
- e) development has attractive and visually interesting street level elevations, providing active frontages wherever possible to maintain or enhance the vitality of the City's streets;
- the design of the roof is visually integrated into the overall design of the building when seen from both street level views and higher level viewpoints;
- g) plant and building services equipment are fully screened from view and integrated in to the design of the building. Installations that would adversely affect the character, appearance or amenities of the buildings or area will be resisted;
- h) servicing entrances are designed to minimise their effects on the appearance of the building and street scene and are fully integrated into the building's design;
- i) there is provision of appropriate hard and soft landscaping, including appropriate boundary treatments;
- the external illumination of buildings is carefully designed to ensure visual sensitivity, minimal energy use and light pollution, and the discreet integration of light fittings into the building design;
- k) there is provision of amenity space, where appropriate;
- I) there is the highest standard of accessible and inclusive design.

DM10.2 Design of green roofs and walls

- To encourage the installation of green roofs on all appropriate developments. On each building the maximum practicable coverage of green roof should be achieved. Extensive green roofs are preferred and their design should aim to maximise the roof's environmental benefits, including biodiversity, run-off attenuation and building insulation.
- 2) To encourage the installation of green walls in appropriate locations, and to ensure that they are satisfactorily maintained.

DM10.3 Roof gardens and terraces

- 1) To encourage high quality roof gardens and terraces where they do not:
 - a) immediately overlook residential premises;
 - b) adversely affect rooflines or roof profiles;
 - c) result in the loss of historic or locally distinctive roof forms, features or coverings;
 - d) impact on identified views.
- 2) Public access will be sought where feasible in new development.

DM10.4 Environmental enhancement

- The City Corporation will work in partnership with developers, Transport for London and other organisations to design and implement schemes for the enhancement of highways, the public realm and other spaces. Enhancement schemes should be of a high standard of design, sustainability, surface treatment and landscaping, having regard to:
- a) the predominant use of the space, surrounding buildings and adjacent spaces;
- b) connections between spaces and the provision of pleasant walking routes;

- c) the use of natural materials, avoiding an excessive range and harmonising with the surroundings of the scheme and materials used throughout the City;
- d) the inclusion of trees and soft landscaping and the promotion of biodiversity, where feasible linking up existing green spaces and routes to provide green corridors;
- e) the City's heritage, retaining and identifying features that contribute positively to the character and appearance of the City;
- f) sustainable drainage, where feasible, co-ordinating the design with adjacent buildings in order to implement rainwater recycling;
- g) the need to provide accessible and inclusive design, ensuring that streets and walkways remain uncluttered;
- h) the need for pedestrian priority and enhanced permeability, minimising the conflict between pedestrians and cyclists;
- i) the need to resist the loss of routes and spaces that enhance the City's function, character and historic interest;
- j) the use of high quality street furniture to enhance and delineate the public realm;
- k) lighting which should be sensitively co-ordinated with the design of the scheme.

DM10.7 Daylight and sunlight

- 1) To resist development which would reduce noticeably the daylight and sunlight available to nearby dwellings and open spaces to unacceptable levels, taking account of the Building Research Establishment's guidelines.
- 2) The design of new developments should allow for the lighting needs of intended occupiers and provide acceptable levels of daylight and sunlight.

DM10.8 Access and inclusive design

- To achieve an environment that meets the highest standards of accessibility and inclusive design in all developments (both new and refurbished), open spaces and streets, ensuring that the City of London is:
- a) inclusive and safe for of all who wish to use it, regardless of disability, age, gender, ethnicity, faith or economic circumstance;
- b) convenient and welcoming with no disabling barriers, ensuring that everyone can experience independence without undue effort, separation or special treatment;
- c) responsive to the needs of all users who visit, work or live in the City, whilst recognising that one solution might not work for all.

CS12 Historic Environment

To preserve and enhance those buildings and areas which make an important contribution to the City's historic and archaeological heritage and provide an attractive environment for the City's communities and visitors.

DM12.1 Managing Change affecting all heritage assets and spaces

- 1. To sustain and enhance heritage assets, their settings and significance.
- 2. Development proposals, including proposals for telecommunications infrastructure, that have an effect upon heritage assets, including their settings, should be accompanied by supporting information to assess and

evaluate the significance of heritage assets and the degree of impact caused by the development.

- 3. The loss of routes and spaces that contribute to the character and historic interest of the City will be resisted.
- 4. Development will be required to respect the significance, character, scale and amenities of surrounding heritage assets and spaces and their settings.
- 5. Proposals for sustainable development, including the incorporation of climate change adaptation measures, must be sensitive to heritage assets.

DM12.4 Archaeology

- 1. To require planning applications which involve excavation or ground works on sites of archaeological potential to be accompanied by an archaeological assessment and evaluation of the site, including the impact of the proposed development.
- 2. To preserve, protect, safeguard and enhance archaeological monuments, remains and their settings in development, and to seek a public display and interpretation, where appropriate.
- 3. To require proper investigation and recording of archaeological remains as an integral part of a development programme, and publication and archiving of results to advance understanding.

CS14 Tall buildings

To allow tall buildings of world class, sustainable design in suitable locations and to ensure that they take full account of the character of their surroundings, enhance the skyline and provide a high quality public realm at ground level.

CS15 Creation of sustainable development

To enable City businesses and residents to make sustainable choices in their daily activities creating a more sustainable City, adapted to the changing climate.

DM15.1 Sustainability requirements

- 1. Sustainability Statements must be submitted with all planning applications in order to ensure that sustainability is integrated into designs for all development.
- 2. For major development (including new development and refurbishment) the Sustainability Statement should include as a minimum:
- a) BREEAM or Code for Sustainable Homes pre-assessment;
- b) an energy statement in line with London Plan requirements;
- c) demonstration of climate change resilience measures.
- 3. BREEAM or Code for Sustainable Homes assessments should demonstrate sustainability in aspects which are of particular significance in the City's high density urban environment. Developers should aim to achieve the maximum possible credits to address the City's priorities.
- 4. Innovative sustainability solutions will be encouraged to ensure that the City's buildings remain at the forefront of sustainable building design. Details should be included in the Sustainability Statement.

5. Planning conditions will be used to ensure that Local Plan assessment targets are met.

DM15.2 Energy and CO2 emissions

- 1. Development design must take account of location, building orientation, internal layouts and landscaping to reduce likely energy consumption.
- 2. For all major development energy assessments must be submitted with the application demonstrating:

a) energy efficiency - showing the maximum improvement over current Building Regulations to achieve the required Fabric Energy Efficiency Standards;

b) carbon compliance levels required to meet national targets for zero carbon development using low and zero carbon technologies, where feasible;

c) where on-site carbon emission reduction is unviable, offsetting of residual CO2 emissions through "allowable solutions" for the lifetime of the building to achieve national targets for zero-carbon homes and non-domestic buildings. Achievement of zero carbon buildings in advance of national target dates will be encouraged;

d) anticipated residual power loads and routes for supply.

DM15.3 Low and zero carbon technologies

- 1. For development with a peak heat demand of 100 kilowatts or more developers should investigate the feasibility and viability of connecting to existing decentralised energy networks. This should include investigation of the potential for extensions of existing heating and cooling networks to serve the development and development of new networks where existing networks are not available. Connection routes should be designed into the development where feasible and connection infrastructure should be incorporated wherever it is viable.
- 2. Where connection to offsite decentralised energy networks is not feasible, installation of on-site CCHP and the potential to create new localised decentralised energy infrastructure through the export of excess heat must be considered
- 3. Where connection is not feasible or viable, all development with a peak heat demand of 100 kilowatts or more should be designed to enable connection to potential future decentralised energy networks.
- 4. Other low and zero carbon technologies must be evaluated. Non combustion based technologies should be prioritised in order to avoid adverse impacts on air quality.

DM15.4 Offsetting carbon emissions

- 1. All feasible and viable on-site or near-site options for carbon emission reduction must be applied before consideration of offsetting. Any remaining carbon emissions calculated for the lifetime of the building that cannot be mitigated on-site will need to be offset using "allowable solutions".
- 2. Where carbon targets cannot be met on-site the City Corporation will require carbon abatement elsewhere or a financial contribution, negotiated through a S106 planning obligation to be made to an approved carbon offsetting scheme.

3. Offsetting may also be applied to other resources including water resources and rainwater run-off to meet sustainability targets off-site where on-site compliance is not feasible.

DM15.5 Climate change resilience

- 1. Developers will be required to demonstrate through Sustainability Statements that all major developments are resilient to the predicted climate conditions during the building's lifetime.
- 2. Building designs should minimise any contribution to the urban heat island effect caused by heat retention and waste heat expulsion in the built environment.

DM15.6 Air quality

 Developers will be required to consider the impact of their proposals on air quality and, where appropriate, provide an Air Quality Impact Assessment.
 Development that would result in deterioration of the City's nitrogen dioxide or PM10 pollution levels will be resisted.

3. Major developments will be required to maximise credits for the pollution section of the BREEAM or Code for Sustainable Homes assessment relating to on-site emissions of oxides of nitrogen (NOx).

4. Developers will be encouraged to install non-combustion low and zero carbon energy technology. A detailed air quality impact assessment will be required for combustion based low and zero carbon technologies, such as CHP plant and biomass or biofuel boilers, and necessary mitigation must be approved by the City Corporation.

5. Construction and deconstruction and the transport of construction materials and waste must be carried out in such a way as to minimise air quality impacts.

6. Air intake points should be located away from existing and potential pollution sources (e.g. busy roads and combustion flues). All combustion flues should terminate above the roof height of the tallest building in the development in order to ensure maximum dispersion of pollutants.

DM15.7 Noise and light pollution

1. Developers will be required to consider the impact of their developments on the noise environment and where appropriate provide a noise assessment. The layout, orientation, design and use of buildings should ensure that operational noise does not adversely affect neighbours, particularly noisesensitive land uses such as housing, hospitals, schools and quiet open spaces.

2. Any potential noise conflict between existing activities and new development should be minimised. Where the avoidance of noise conflicts is impractical, mitigation measures such as noise attenuation and restrictions on operating hours will be implemented through appropriate planning conditions.

3. Noise and vibration from deconstruction and construction activities must be minimised and mitigation measures put in place to limit noise disturbance in the vicinity of the development.

4. Developers will be required to demonstrate that there will be no increase in background noise levels associated with new plant and equipment.

5. Internal and external lighting should be designed to reduce energy consumption, avoid spillage of light beyond where it is needed and protect the amenity of light-sensitive uses such as housing, hospitals and areas of importance for nature conservation.

DM15.8 Contaminated land

Where development involves ground works or the creation of open spaces, developers will be expected to carry out a detailed site investigation to establish whether the site is contaminated and to determine the potential for pollution of the water environment or harm to human health and non-human receptors. Suitable mitigation must be identified to remediate any contaminated land and prevent potential adverse impacts of the development on human and non-human receptors, land or water quality.

DM16.1 Transport impacts of development

- 1. Development proposals that are likely to have effects on transport must be accompanied by an assessment of the transport implications during both construction and operation, in particular addressing impacts on:
 - a) road dangers;
 - b) pedestrian environment and movement;
 - c) cycling infrastructure provision;
 - d) public transport;
 - e) the street network.
- 2. Transport Assessments and Travel Plans should be used to demonstrate adherence to the City Corporation's transportation standards.

DM16.3 Cycle parking

- 1. On-site cycle parking must be provided in accordance with the local standards set out in Table 16.2 or, for other land uses, with the standards of the London Plan. Applicants will be encouraged to exceed the standards set out in Table 16.2.
- 2. On-street cycle parking in suitable locations will be encouraged to meet the needs of cyclists.

DM16.5 Parking and servicing standards

- 1. Developments in the City should be car-free except for designated Blue Badge spaces. Where other car parking is exceptionally provided it must not exceed London Plan's standards.
- 2. Designated parking must be provided for Blue Badge holders within developments in conformity with London Plan requirements and must be marked out and reserved at all times for their use. Disabled parking spaces must be at least 2.4m wide and at least 4.8m long and with reserved areas at least 1.2m wide, marked out between the parking spaces and at the rear of the parking spaces.
- 3. Except for dwelling houses (use class C3), whenever any car parking spaces (other than designated Blue Badge parking) are provided, motor cycle parking must be provided at a ratio of 10 motor cycle parking spaces per 1 car parking space. At least 50% of motor cycle parking spaces must be at least 2.3m long and at least 0.9m wide and all motor cycle parking spaces must be at least 2.0m long and at least 0.8m wide.

- 4. On site servicing areas should be provided to allow all goods and refuse collection vehicles likely to service the development at the same time to be conveniently loaded and unloaded. Such servicing areas should provide sufficient space or facilities for all vehicles to enter and exit the site in a forward gear. Headroom of at least 5m where skips are to be lifted and 4.75m for all other vehicle circulation areas should be provided.
- 5. Coach parking facilities for hotels (use class C1) will not be permitted.
- 6. All off-street car parking spaces and servicing areas must be equipped with the facility to conveniently recharge electric vehicles.
- 7. Taxi ranks are encouraged at key locations, such as stations, hotels and shopping centres. The provision of taxi ranks should be designed to occupy the minimum practicable space, using a combined entry and exit point to avoid obstruction to other transport modes.

DM17.1 Provision for waste

- 1. Waste facilities must be integrated into the design of buildings, wherever feasible, and allow for the separate storage and collection of recyclable materials, including compostable material.
- 2. On-site waste management, through techniques such as recyclate sorting or energy recovery, which minimises the need for waste transfer, should be incorporated wherever possible.

DM18.2 Sustainable drainage systems

- 1. The design of the surface water drainage system should be integrated into the design of proposed buildings or landscaping, where feasible and practical, and should follow the SuDS management train (Fig T) and London Plan drainage hierarchy.
- 2. SuDS designs must take account of the City's archaeological heritage, complex underground utilities, transport infrastructure and other underground structures, incorporating suitable SuDS elements for the City's high density urban situation.
- 3. SuDS should be designed, where possible, to maximise contributions to water resource efficiency, biodiversity enhancement and the provision of multifunctional open spaces.

DM18.3 Flood protection and climate

- 1. Development must protect the integrity and effectiveness of structures intended to minimise flood risk and, where appropriate, enhance their effectiveness.
- 2. Wherever practicable, development should contribute to an overall reduction in flood risk within and beyond the site boundaries, incorporating flood alleviation measures for the public realm, where feasible.

CS19 Improve open space and biodiversity

To encourage healthy lifestyles for all the City's communities through improved access to open space and facilities, increasing the amount and quality of open spaces and green infrastructure, while enhancing biodiversity.

DM19.2 Biodiversity and urban greening

Developments should promote biodiversity and contribute to urban greening by incorporating:

- a) green roofs and walls, soft landscaping and trees;
- b) features for wildlife, such as nesting boxes and beehives;
- c) a planting mix which encourages biodiversity;
- d) planting which will be resilient to a range of climate conditions;
- e) maintenance of habitats within Sites of Importance for Nature Conservation.

DM19.1 Additional open space

- 1. Major commercial and residential developments should provide new and enhanced open space where possible. Where on-site provision is not feasible, new or enhanced open space should be provided near the site, or elsewhere in the City.
- 2. New open space should:

a) be publicly accessible where feasible; this may be achieved through a legal agreement;

b) provide a high quality environment;

c) incorporate soft landscaping and Sustainable Drainage Systems, where practicable;

d) have regard to biodiversity and the creation of green corridors;

e) have regard to acoustic design to minimise noise and create tranquil spaces.

3. The use of vacant development sites to provide open space for a temporary period will be encouraged where feasible and appropriate.

DM19.4 Play areas and facilities

1. The City Corporation will protect existing play provision and seek additional or enhanced play facilities or space, particularly in areas identified as deficient, by:

a) protecting existing play areas and facilities and, on redevelopment, requiring the replacement of facilities either on-site or nearby to an equivalent or better standard;

b) where the creation of new play facilities is not feasible, requiring developers to work with the City Corporation to deliver enhanced provision nearby;

c) requiring external play space and facilities as part of new residential developments which include 20 or more family units (those with 3 or more bedrooms) or 10 or more affordable units of 2 or more bedrooms;

d) promoting opportunities for informal play and play within open spaces where it is not possible to secure formal play areas.

2. Play areas and facilities should not be located where they would cause undue disturbance to neighbouring occupiers.

CS21 Protect and provide housing

To protect existing housing and amenity and provide additional housing in the City, concentrated in or near identified residential areas, as shown in Figure X, to meet the City's needs, securing suitable, accessible and affordable housing and supported housing.

DM21.1 Location of new housing

- 1. New housing should be located on suitable sites in or near identified residential areas. Within these areas a mix of appropriate residential and commercial uses will be permitted.
- 2. New housing will only be permitted where development would not:
 - a) prejudice the primary business function of the City;
 - b) be contrary to policy DM 1.1;

c) inhibit the development potential or business activity in neighbouring commercial buildings and sites; and

d) result in poor residential amenity within existing and proposed development, including excessive noise or disturbance.

DM21.3 Residential environment

1. The amenity of existing residents within identified residential areas will be protected by:

a) resisting other uses which would cause undue noise disturbance, fumes and smells and vehicle or pedestrian movements likely to cause disturbance;

b) requiring new development near existing dwellings to demonstrate adequate mitigation measures to address detrimental impact.

- 2. Noise-generating uses should be sited away from residential uses, where possible. Where residential and other uses are located within the same development or area, adequate noise mitigation measures must be provided and, where required, planning conditions will be imposed to protect residential amenity.
- 3. All development proposals should be designed to avoid overlooking and seek to protect the privacy, day lighting and sun lighting levels to adjacent residential accommodation.
- 4. All new residential development proposals must demonstrate how potential adverse noise impacts on and between dwellings will be mitigated by housing layout, design and materials.
- 5. The cumulative impact of individual developments on the amenity of existing residents will be considered.

DM21.5 Housing quality standards

All new housing must be designed to a standard that facilitates the health and wellbeing of occupants, and:

a) takes account of the London Plan's space standards and complies with the London Plan's Density Matrix standards;

b) provides acceptable daylight to dwellings commensurate with a city centre location;

c) meets standards for Secured by Design certification;

d) maximises opportunities for providing open and leisure space for residents.

CS22 Social infrastructure and opportunities

To maximise opportunities for the City's residential and working communities to access suitable health, social and educational facilities and opportunities, while fostering cohesive communities and healthy lifestyles.

DM22.1 Location and protection of social and community facilities

- Developers will be required to demonstrate, in conjunction with utility providers, that there will be adequate utility infrastructure capacity, both on and off the site, to serve the development during construction and operation. Development should not lead to capacity or reliability problems in the surrounding area. Capacity projections must take account of climate change impacts which may influence future infrastructure demand.
- 2) Utility infrastructure and connections must be designed into and integrated with the development wherever possible. As a minimum, developers should identify and plan for:

a) electricity supply to serve the construction phase and the intended use for the site, and identify, in conjunction with electricity providers, Temporary Building Supply(TBS) for the construction phase and the estimated load capacity of the building and the substations and routes for supply;

b) reasonable gas and water supply considering the need to conserve natural resources;

c) heating and cooling demand and the viability of its provision via decentralised energy (DE) networks. Designs must incorporate access to existing DE networks where feasible and viable;

d) telecommunications network demand, including wired and wireless infrastructure, planning for dual entry provision, where possible, through communal entry chambers and flexibility to address future technological improvements;

e) separate surface water and foul drainage requirements within the proposed building or site, including provision of Sustainable Drainage Systems (SuDS), rainwater harvesting and grey-water recycling, minimising discharge to the combined sewer network.

- 3) In planning for utility infrastructure developers and utility providers must provide entry and connection points within the development which relate to the City's established utility infrastructure networks, utilising pipe subway routes wherever feasible. Sharing of routes with other nearby developments and the provision of new pipe subway facilities adjacent to buildings will be encouraged.
- 4) Infrastructure provision must be completed prior to occupation of the development. Where potential capacity problems are identified and no improvements are programmed by the utility company, the City Corporation will require the developer to facilitate appropriate improvements, which may require the provision of space within new developments for on-site infrastructure or offsite infrastructure upgrades.