Public Document Pack

PLANNING COMMITTEE

Tuesday, 18th November, 2014 at 7.30 pm
Venue: Conference Room,
The Civic Centre, Silver Street,
Enfield, Middlesex, EN1 3XA

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MEMBERS
Councillors : Abdul Abdullahi, Lee Chamberlain, Dogan Delman, Christiana During, Christine Hamilton, Ahmet Hasan, Suna Hurman, Derek Levy, Andy Milne, Anne-Marie Pearce, George Savva MBE and Toby Simon (Chair)

N.B. Any member of the public interested in attending the meeting should ensure that they arrive promptly at 7:15pm
Please note that if the capacity of the room is reached, entry may not be permitted. Public seating will be available on a first come first served basis.

Involved parties may request to make a deputation to the Committee by contacting the committee administrator before 12:00 noon on 17/11/14

AGENDA – PART 1

1. WELCOME AND APOLOGIES FOR ABSENCE

2. DECLARATION OF INTERESTS

Members of the Planning Committee are invited to identify any disclosable pecuniary, other pecuniary or non pecuniary interests relevant to items on the agenda.

3. REPORT OF THE ASSISTANT DIRECTOR, PLANNING, HIGHWAYS AND TRANSPORTATION (REPORT NO. 120) (Pages 3 - 4)

To receive the covering report of the Assistant Director, Planning, Highways & Transportation.

4. 14/02612/FUL - DEEPHAMS SEWAGE WORKS, PICKETTS LOCK LANE, LONDON, N9 0BA (Pages 5 - 60)

RECOMMENDATION: Approval subject to referral to GLA, S106 Agreement and conditions
WARD: Lower Edmonton

5. 14/02996/FUL - MIDDLESEX UNIVERSITY, QUEENSWAY, ENFIELD, EN3 4SA (Pages 61 - 102)

RECOMMENDATION: Approval subject to S106 Agreement and conditions
WARD: Ponders End

6. 14/02997/LBC - MIDDLESEX UNIVERSITY, QUEENSWAY, ENFIELD, EN3 4SA

RECOMMENDATION: Approval subject to S106 Agreement and conditions
WARD: Ponders End

7. EXCLUSION OF THE PRESS AND PUBLIC

If necessary, to consider passing a resolution under Section 100A(4) of the Local Government Act 1972 excluding the press and public from the meeting for any items of business moved to part 2 of the agenda on the grounds that they involve the likely disclosure of exempt information as defined in those paragraphs of Part 1 of Schedule 12A to the Act (as amended by the Local Government (Access to Information) (Variation) Order 2006).
(There is no part 2 agenda)

Agenda Item 3

MUNICIPAL YEAR 2014/2015 - REPORT NO 120

AGENDA - PART 1	**ITEM** 3
SUBJECT - MISCELLANEOUS MATTERS	

COMMITTEE:
PLANNING COMMITTEE
18.11.2014

REPORT OF:
Assistant Director, Planning,
Highways and Transportation

Contact Officer:
Planning Decisions Manager
Sharon Davidson Tel: 020 8379 3841

3.1 PLANNING APPLICATIONS AND APPLICATIONS TO DISPLAY ADVERTISEMENTS DEC

On the Schedules attached to this report I set out my recommendations in respect of planning applications and applications to display advertisements. I also set out in respect of each application a summary of any representations received and any later observations will be reported verbally at your meeting.

Background Papers

(1) Section 70 of the Town and Country Planning Act 1990 states that the Local Planning Authority shall have regard to the provisions of the development plan, so far as material to the application, and to any other material considerations. Section 54A of that Act, as inserted by the Planning and Compensation Act 1991, states that where in making any determination under the Planning Acts, regard is to be had to the development, the determination shall be made in accordance with the plan unless the material considerations indicate otherwise. The development plan for the London Borough of Enfield is the Unitary Development Plan (UDP).

(2) Other background papers are those contained within the file, the reference number of which is given in the heading to each application.

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Agenda Item 4

LONDON BOROUGH OF ENFIELD

PLANNING COMMITTEE	**Date :** 18th November 2014

Report of Assistant Director, Planning, Highways & Transportation	**Contact Officer:** Andy Higham 020 8379 3848 Sharon Davidson 020 8379 3841 Mr Richard Laws 020 8379 3605	**Ward:** Lower Edmonton

Ref: 14/02612/FUL	**Category**: Full Application

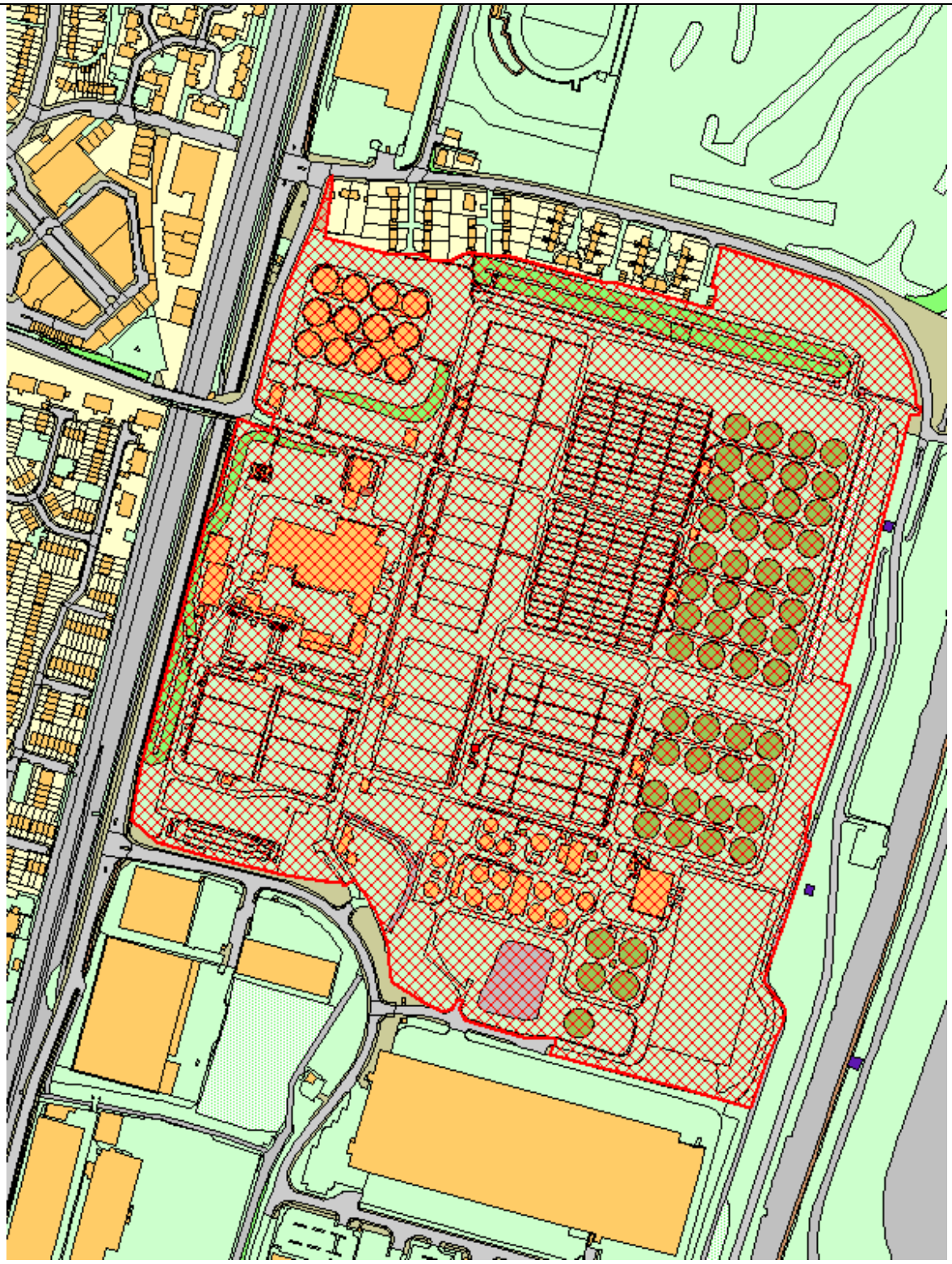
LOCATION: Deephams Sewage Works, Picketts Lock Lane, London, N9 0BA

PROPOSAL: Upgrade of sewage treatment infrastructure including the phased development of primary settlement tanks, aeration lanes with integrated fixed film activated sludge (IFAS) media, final settlement tanks, pumping stations, blower house and control room buildings, odour control covers to primary settlement tanks, inlet works, anoxic zones and secondary digesters, 3 odour control units, combined heat and power units, additional storm storage, ancillary plant, kiosks, buildings, car parking, hard and soft landscaping and above and below ground works including temporary 2-storey site offices and site compounds during construction and the demolition of redundant plant and buildings. (An Environmental Statement, including non- technical Summary also accompanies the planning application in accordance with the Town and Country Planning (Environmental Impact Assessment) (England &Wales) Regulations 2011)..

Applicant Name & Address: THAMES WATER UTILITIES LIMITED Deephams Sewage Works Picketts Lock Lane London N9 0BA	**Agent Name & Address**: ADAMS HENDRY CONSULTING LIMITED Deephams Sewage Works Picketts Lock Lane London N9 0BA

RECOMMENDATION:
Having taken into account the Environmental Information contained in the Environmental Statement accompanying this application, and following referral to the Greater London Authority (GLA) and no objections being raised together with the signing of the Section 106 agreement regarding the issues set out in section 6.11 of the report, the Head of Development Management planning decisions manager be authorised to **GRANT** planning permission subject conditions.

Ref: 14/02612/FUL **LOCATION: Deephams Sewage Works, Picketts Lock Lane, London, N9 0**



ENFIELD Council

Scale 1:500

North

Site and Surroundings

1.1 Deephams Sewage Works (Deephams STW) is Thames Water's fourth largest sewage works and comprises a 34 hectare site within the Upper Lee Valley Opportunity Area, approximately 0.7 miles east of Edmonton Town Centre. The catchment area which Deephams STW serves extends over large parts on North East London and northwards beyond the M25 and serves a population equivalent of 891,000 people (as of 2011). Whilst the inlet works and storm tanks to the west of the site have recently been upgraded, the majority of the treatment works infrastructure dates from around 1950s and 1960s.The sewage works collects and treats sewage from a large surrounding sewer network before passing through a series of treatment stages and releasing treated sewage (effluent) to Salmons Brook via an outfall channel.

1.2 The site is bounded by residential development at Pickett's Lock Lane, and the Lee Valley Regional Park to the north, the Lee Navigational Canal and William Girling Reservoir to the east; Ardra Road Industrial estate at Central Leeside to the south, and suburban residential hinterland to the west beyond the railway line.

1.3 Along the northern boundary lie a number of residential properties arranged in cul de sacs comprising approximately 50 properties. Also located to the north of Pickett's Lock Lane is a warehouse. Further north beyond Pickett's Lock is the boundary of the Lee Valley Regional Park, located immediately inside this part of the LRVP boundary lies the Lee Valley Leisure Complex.

1.4 Immediately along the north eastern and central eastern boundary of the site is the designated Lee Valley Site of Metropolitan Importance for Nature Conservation. This sits adjacent to and in places, over, the Enfield Ditch as it makes its way south to join the lower reaches of Salmons Brook. Beyond this is Lee Park Way which runs southwards from Pickett's Lock Lane. Between the Lee Park Way and the River Lee Navigation are a number of depots in commercial use, although currently lying vacant. There is also a residential dwelling, Picketts Lock Cottage.

1.5 Chingford Reservoirs are situated to the east of the site. They are designated as a site of Special Scientific Interest (SSSI). Chingford is located beyond the reservoir, some 700m in distance from Deephams Sewage Works eastern boundary.

1.6 To the south of the site lies the Ardra Road Industrial Estate, which comprises a number of distribution, warehousing and waste processing units and itself lies immediately north of the Edmonton Eco- Park Facility. To the west of the site separated from the site by Meridian Way and main railway line is a substantial area of housing which at its closest lies less than 100m from the western edge of the sewage works site.

1.7 The site has two accesses, one from Pickett's Lock Lane (the main access) and one from Adra Road both of which are unclassified

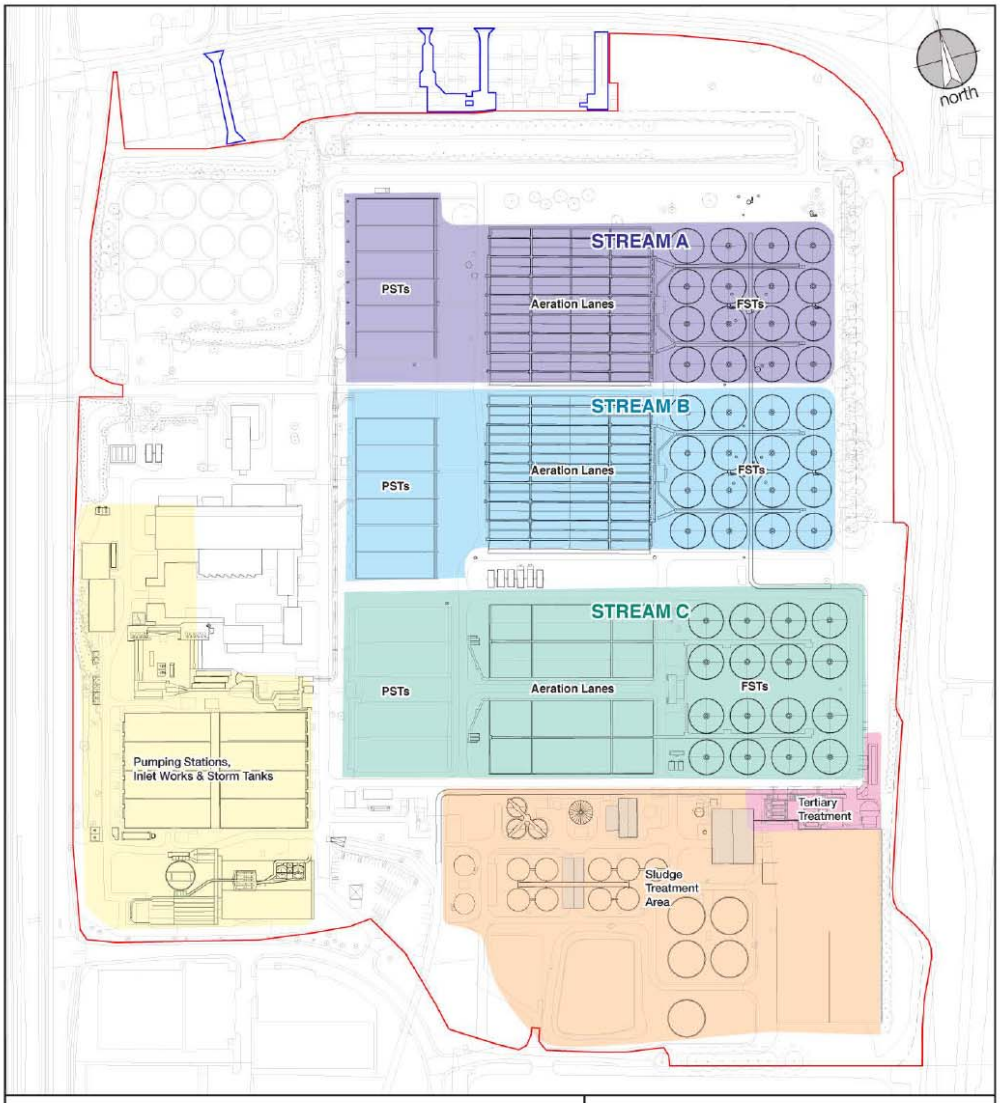
highways. The site has a public transport accessibility rating (PTAL) of 1b which is low. There are existing bus stops within walking distance of the development on Pickett's Lock Lane to the south of Meridian Way and Bounces Road.

Proposal

2.1 The Upgrade of the sewage treatment infrastructure at Deephams comprises the following elements:

- Demolition of redundant plant and buildings
- The phased development of primary settlement tanks, aeration lanes with integrated fixed film activated sludge (IFAS) media. and final settlement tanks,
- Development of pumping stations, blower house and control room buildings, odour control covers to primary settlement tanks, inlet works, anoxic zones and secondary digesters, 3 odour control units.
- Combined heat and power units. As part of the Upgrade, Thames Water will replace the existing CHP engines on site with two new CHP engines. These will produce more renewable energy from the Upgrade than the current sewage works.
- Additional storm storage
- Education centre (for schools or other visitors) will be provided through converting an existing building at the entrance to the site, and a safe visitor route around the Upgraded works will be provided for guided tours.
- Ancillary plant, kiosks, buildings, car parking, hard and soft landscaping
- Temporary 2 storey site offices and site compounds during construction.

2.2 The Upgrade will replace the three existing wastewater treatment " streams" on the site known as Stream A, Stream B and Stream C (each stream is made up of primary settlement tanks, aeration lanes and final settlement tanks) with two new treatment streams. Although a reduction in streams, the aeration lanes in the two new streams will be fitted with a series of cages to provide a large surface area for the bacteria that treat the sewage to grow on, in films suspended in the cages (known as IFAS cages). This means that a higher level of treatment can be provided in smaller tanks. The new streams will be built on the site of the existing streams (A & B), reusing some of the existing structures. There are also 10 new final settlement tanks. Existing stream C will be partially demolished and the primary settlement tanks converted for use as new storm tanks. The space created by the demolition of the remainder of existing Stream C will be retained so that it can be used by Thames Water for any future Upgrades or improvements to the sewage works. A new pumping station and blower house will be built to pump sewage from the inlet works to the primary settlement tanks, and blow air in to the aeration lanes to speed up the biological process .In addition to odour controls on the inlet works, the new primary settlement tanks part of the aeration lanes called the (anoxic zones) and the secondary sludge



KEY

Planning application area

Other land in the ownership of the applicant

Plan based upon AMK Drawing: A630-AMK-103 REV C

Figure 2.3 :

EXISTING WORKS

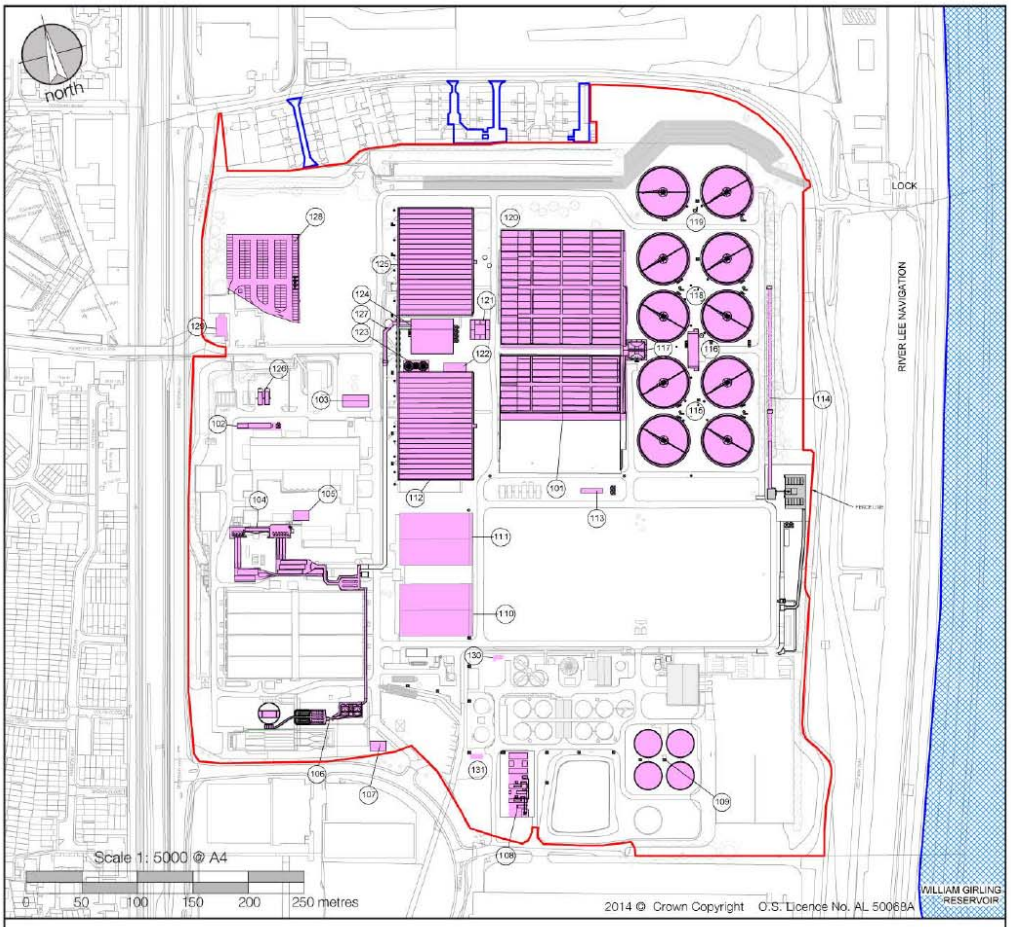
Drawing No. : TW/1023/200614/PS3	Revision: **A**
Drawn by: MS	Date: 200614

Not to Scale

0 50 100 metres

2

Deephams Sewage Works Upgrade
Thames Water Utilities Limited



KEY TO PROPOSED STRUCTURES:

101. AERATION LANES WITH IFAS SYSTEM
102. HIGH VOLTAGE SWITCH ROOM
103. CONTROL ROOM
104. ODOUR CONTROL COVERS TO INLET WORKS
105. ODOUR CONTROL UNIT
106. ODOUR CONTROL COVERS TO TOTTENHAM LOW LEVEL INLET WORKS
107. ODOUR CONTROL UNIT
108. CHP
109. NEW ODOUR CONTROL COVERS TO 4No EXISTING SECONDARY DIGESTORS
110. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
111. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
12. PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
113. FINAL SETTLEMENT TANKS MCC KIOSK
114. FINAL EFFLUENT CHANNEL
115. FINAL SETTLEMENT TANKS 7 TO 10
116. RAS SAS PUMPING STATION
117. FLOW SPLITTER CHAMBER FS2
118. FINAL SETTLEMENT TANKS 5 & 6
119. FINAL SETTLEMENT TANKS 1 TO 4
120. AERATION LANES WITH IFAS SYSTEM
121. FLOW SPLITTER CHAMBER FS1
122. ODOUR CONTROL UNIT
123. SLUDGE STORAGE TANKS
124. FTFT PUMPING STATION, MCC ROOM & BLOWER HOUSE
125. PRIMARY SETTLEMENT TANKS WITH ODOUR COTROL COVERS
126. POWER GENERATORS WITH SET UP TRANSFORMERS
127. FTFT INLET CHANNEL
128. CONSTRUCTION COMPOUND TO BE RETAINED AS PARKING/STORAGE AREA
129. EDUCATION CENTRE (REFURBISHED EXISTING BUILDING)
130. SLUDGE SCREENS
131. WASTE GAS BURNER

PLANNING APPLICATION AREA
OTHER LAND IN OWNERSHIP OF APPLICANT
WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

Figure 3.2 :

PROPOSED SITE LAYOUT

Drawing No. : TW/1023/240614/PS3.2	Revision: **A**
Drawn by: NM	Date: 240614

digester tanks will all be covered and odour controlled as part of the Upgrade. Figure 1 shows the existing Sewage works layout and Figure 2 the proposed Upgrade works.

2.5 The construction of the Upgrade is due to commence in July 2015. The construction programme has been designed to allow the sewage works to continue to operate while the new treatment streams are being built. Construction of the Upgrade will happen in 5 phases outlined below:

Summary of construction phases

Phase	**Activities**	**Duration**
1 – Advance Works	Establishment of site enabling, welfare and site compounds	3 months
2 – Stream A	Switch off stream, clean and demolish tanks and plant Build new stream, pumping stations and final effluent culvert Install combined heat and power engines Install odour covers on inlet works	14 months
3 – Stream B	Switch off stream, clean and demolish tanks and plant Build new stream and pumping stations	12 months
4 – Stream C	Switch off steam, clean and demolish tanks and plant Convert primary settlement tanks to storm tanks	6 months
5 - Completion	Commissioning, demobilisation, reinstatement of roads, landscaping Provision of Education Centre and education trail	4 months

2.6 The phased design will maintain compliance with the existing environmental permit conditions throughout the proposed Upgrade. The Upgrade will enable the new effluent quality permit conditions to be met by March 2017, with the completion of construction works in 2018. The existing entrance to the sewage works, off Picketts Lock Lane, will continue to be the main entrance for the Upgraded works.

2.6 When complete the upgraded sewage works will operate, like the existing sewage works operate 24 hours a day, 7 days a week. The sewage treatment works has an operational staff of 24 working in shifts and staff numbers will return to the status quo when the upgrade is complete. During the construction phase the staff numbers will vary during the phases, with a minimum of 54 and a maximum of 252.

2.7 The Upgrade will also provide a permanent, beneficial effect of major significance on odour emissions from the site. This will help to provide

a more attractive environment and substantially improve local amenity for residents and businesses located around the sewage works.

2.8 The Upgrade is considered to constitute an Environmental Impact Assessment (EIA) development, within the terms of paragraph 13 (a) Schedule 2 of The Town and Country Planning (Environmental Impact Assessment) (England & Wales) Regulations 2011. The planning application is therefore accompanied by an Environmental Statement (ES) as well as a non-technical summary. The non-technical summary of the Environmental Statement summarises the process through which the potentially significant environmental effects of the Upgrade have been identified, assessed and mitigated. The various chapters of the Environmental Statement cover, introduction, approach to assessment, need and alternatives, description of development, legislation and planning policy, air quality, contaminated land, ecology, flood risk, health and well-being, historic environment, landscape and visual implications, noise and vibration, odour, transport, waste, water resources and summary of residual Impacts.

3.0 Relevant Planning Decisions

3.1 P14-00525SOR -Request for a Scoping Opinion in respect of proposals for Deephams Sewage Works Upgrade. Scoping Opinion request given by the LPA on the 25/4/14.

3.2 P14-00100SOR- Request for a Screening Opinion- Regulation 5 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 for the demolition of redundant Digesters & Associated Plant and partial culverting, re-profiling and diversion of Enfield Ditch Tributary- Screening Opinion issued confirming not EIA development 10/ 2/14.

3.3 P14-00097 PRI- Demolition of redundant pumping station building and redundant single storey switch gear building- Prior Approval not required 10/2/14.

3.4. Various notification works regarding the intention to undertake works under permitted development on the site.

4.0 Consultations

4.1 Statutory and non-statutory consultees

4.1 <u>Tree Officer</u>

4.1.1 Whilst several large poplar trees on the eastern boundary are to be removed to allow construction they are generally in a poor condition with a limited useful lifespan and would probably need to be replaced in the foreseeable future. There are substantial landscape enhancements occurring as part of the development including replacement screening on the eastern boundary. This landscaping is more than adequate and

mitigates any green infrastructure losses to facilitate it. No objections are raised.

4.2 Environmental Health

4.2.1 No objection raised. The upgrade of the sewage treatment works will have substantial noise implications during the redevelopment. It is envisaged that delivery of materials, operations and general building will impact on the residents of Picketts Lock Lane. In order to control the noise generated during the redevelopment the following conditions are requested:

(i) Prior to any development taking place the applicant shall enter into a Section 61 agreement under the Control of Pollution Act 1974 with the London Borough of Enfield.

(ii) No deliveries of construction & demolition materials shall be taken at or despatched from the site outside of the following times 08:00 to 18:00 Monday to Friday, 08:00-13:00 Saturdays and at no other time except with the written approval of the Local Planning Authority.

(iii) At least 28 days prior to the commencement of any site works; all occupiers surrounding the site shall be notified in writing of the nature and duration of works to be undertaken at each phase of works. The name and contact details of a person responsible for the site works should be made available for enquiries and complaints for the entire duration of the works & updates or work should be provided regularly. Any complaints should be addressed as quickly as possible.

4.2.2 In respect of the information provided regarding noise, air quality & contaminated land this is acceptable. In regard to odour it is expected that the site will achieve the level of odour reduction set out in the Environmental Impact Assessment.

4.3 Traffic and Transportation

4.3.1 The provision of 163 spaces for the construction phase of the development is acceptable and is appropriate in terms of meeting the demand for expected staff involved thought the construction phases. In terms of access and servicing no changes are proposed during the construction period. However the construction Traffic Management Plan will need to be adhered to and secured by condition.

4.3.2 Traffic will be generated throughout the construction period which is expected to be completed at the end of 2018. Given that the site will still be operating there will be a net increase in traffic on the network. The Transport Assessment contains figures on the expected trip profile for the worst case scenario which suggests there would be 616 trips to and from the site over a 24 hour period. During the local highway AM network peak (08.00- 09.00) there would be 64 trips and PM network peak (17.00-18.00) there would be 74. These would be in addition to existing operation trips. These figures have been compared to traffic flows from 2012 taken from the DfT which generally show that traffic

has been falling since 2007. On this basis the Transport Assessment makes the assumption that it will keep falling and therefore zero growth factors has been applied to the background traffic levels as agreed with Transport for London. Due to the location of the site the construction traffic will mainly be kept to classified highways, with access from the M25 and the North Circular both being from Meridian Way which is part of the Transport for London Strategic Road Network. Given the volume of traffic using these roads the construction traffic will represent a small increase of approximately 1.70% max based on DfT figures and is unlikely to have an unacceptable impact on any junctions. The proposed development subject to a traffic management plan is unlikely to increase traffic levels that would be prejudicial to the free flow of safety and traffic on the surrounding highway, both through the construction period of the development, and operation of the site post construction.

4.4 Biodiversity Officer

4.4.1 The Environmental Statement submitted has covered all the potential ecological implications which may arise as a result of the proposed development. As long as the various mitigation and enhancement measures detailed in the report are followed there will be no net loss of biodiversity on site and the development will be in accordance with wildlife legislation and planning policy. To ensure that the biodiversity value of the site is protected, maintained and enhanced appropriately worded conditions regarding the following are required: Protection of Ecologically Important features, Nesting Birds, Invasive Species, Landscape & Biodiversity Enhancements, Brown Roof, Lighting(Bats), Further Tree Inspections.

4.5 Business & Economic Development

4.5.1 It is considered that the Local Employment Strategy is a robust and compliant document that fully meets the needs of Enfield's residents in terms of training and employment opportunities.

4.6 Canal & River Trust

4.6.1 The Trust has some concerns regarding silt, soil and site waste entering the waterway during the construction period. In order to alleviate these concerns, it requests the installation of a floating silt curtain and/ or silt boom to prevent the transfer of silt into nearby waterways. The booms and curtains during the construction period should be regularly maintained and any built up soil or waste disposed of appropriately. With regard to pollution of waterways from the sewage treatment plant suggest absorbent curtains and booms should be installed to ensure a staged control of any pollution coming from the Sewage Treatment Plant. The following condition is requested.

"All the mitigation measures and pollution prevention controls contained within the Water Management Plan (WMP) Appendix 18.3 (AMK Water Management Plan) Environmental Statement Volume 3 shall be implemented and adhered to during the construction phase of the Deephams Sewage Treatment Works Upgrade, unless agreed

otherwise in writing by the LPA. This shall include silt booms/ and or silt curtains to prevent the transfer of silt and other material during demolition and construction period. The silt booms and/ or silt curtains shall be regularly maintained and any built up soil or waste deposited appropriately. In addition the measures contained in the WMP to ensure that surface water run- off and ground water is captured and controlled within the site during the construction period, to avoid it polluting the watercourse shall also be implemented."

Reason: In order to prevent pollution during the construction of the Upgrade as well as the transfer of waste, silt, soil and other material into the nearby waterways and to ensure that water quality is not adversely affected.

4.6.2 In addition 3 informatives are requested regarding (i) Current code for working practices affecting the Canal & River Trust, (ii) Written consent is required regarding any oversail, encroachment or access and (iii) Any surface water discharge in to the water space belonging to the CRT requires written consent.

4.7 Natural England

4.7.1 The application is in close proximity to Chingford Reservoirs Site of Special Scientific Interest (SSSI). They are satisfied that the proposed development carried out in strict accordance with the details submitted will not damage the interest features for which the site has been notified. They advise that the SSSI does not represent a constraint in determining the application. No objection is raised.

4.7.2 They would also expect the LPA to consider & assess other possible impacts resulting from the proposal when determining the application on the following:

- Local sites (biodiversity & geodiversity)
- Local landscape Character
- Local or National biodiversity priority habitats & species

With regards any potential impact on protected species Natural England's Standing Advice on protected species should be applied. With regards biodiversity enhancements the application has identified opportunities to incorporate features into the design which are beneficial to wildlife, such as the incorporation of roosting opportunities for bats or the installation of bird nest boxes and brown roofs. This is in accordance with Paragraph 118 of the NPPF.

4.8 Environment Agency

4.8.1 They have reviewed the submitted Environmental Statement and additional information submitted in support of the application from the following perspectives: Flood Risk, Ground Contamination, Ecology and Biodiversity, Waste Management. Overall they support the

proposed Upgrade work subject to the imposition of various conditions regarding Flood Risk and Contamination.

4.9 English Heritage (Archaeological)

4.9.1 The application envisages significant groundwork's within the existing sewage works which is known to lie upon a deep sequence of deposits of archaeological interest. However, much of the site has been heavily disturbed in modern times and the surviving deposits of archaeological interest are buried beneath several meters of 19th/ 20th Century made ground. Consequently surface and shallow groundwork's are unlikely to cause significant harm. In contrast deep excavation for new tanks in previously undisturbed areas (Final Settlement Tanks 1 & 2) could cause moderate-major harm depending on what is actually revealed whilst deep piling could cause some minor loss of significance.

4.9.2 A review of the application using the Greater London Historic Environment Record & information indicates that the development would not cause sufficient harm to justify refusal of planning permission provided that a condition is applied to require an investigation to be undertaken to advance understanding. "No development shall take place until the applicant has secured the implementation of a programme of archaeological investigation in accordance with a Written Scheme of Investigation which has been submitted to & approved in writing by the LPA. No development shall take place other than that in accordance with the Written Scheme of investigation". An informative note will also be required advising that the written scheme of investigation will need to be prepared & implemented by a suitably qualified archaeological practice in accordance with English Heritage Greater London Guidelines.

4.10 Lee Valley Regional Park Authority

4.10.1 The Authority supports the application given the improvements made to water quality and the reductions in odours.

4.11 National Grid

4.11.2 No objections raised to the development which is in close proximity to a High Voltage Transmission Overhead Line.

4.12 London Borough of Waltham Forest

4.12.1 In relation to the air quality assessment, the application reviews the impacts of both the construction works and CHP emissions. They conclude that the impact of the construction works will be negligible. The new CHP will replace the current unit on site and will have a reduction in emissions as compared to the previous plant. Therefore they have no significant issue with this assessment but would recommend that a condition is attached to ensure that vehicles used for the upgrade works are limited to main roads.

4.12.2 With respect to odour assessment, Thames Water intends to mitigate odour by covering the primary settlement tanks, inlet works, anoxic zones of the aeration tanks and the secondary sludge digesters. The upgraded facility along with the suggested mitigation measures is predicted to decrease odour emissions from the work. Waltham Forest residents are predicted to benefit from these improvements and are not expected to detect odours from the site. Based on the information reviewed, there are no objections on air quality/ environmental health grounds. No comments were made regarding highway implications. Overall no objections to the proposal.

4.13 Transport for London (TfL)

4.13.1 With regard the road network the development will not adversely affect the capacity and safety of the local and strategic highway network. A Travel Plan should be provided for the construction phase of development and also the ongoing operation of the sewage treatment plant. The Travel Plan should be secured, enforced, monitored and reviewed as part of the section 106 agreement.

4.13.2 It is noted in the Transport Statement that staff will be encouraged to access the site through alternative means of transport other that the car. This will be addressed in the Travel Plan. There is also potential to increase cycle parking which is welcomed by TfL and will be addressed in the Travel Plan. More cycle parking may need to be provided if demand necessitates. Electric charging points are proposed for a minimum of 20% of the car parking proposed which is welcomed. It is noted that only 3 disabled parking bays are proposed. Tfl requires that disabled parking is provided in accordance with the London Plan (2011) for staff and visitors alike. The level of parking proposed is considered appropriate given the scale of development.

4.14 Greater London Authority (GLA)

4.14.1 Consultation with the Mayor's Office is a two stage process. The following comments have been received in response to the stage one consultation.

4.14.2 London Plan Policies on waste water infrastructure, energy, air quality, blue ribbon network and transport are relevant to this application. The proposals are supported by the London Plan Policy water quality and waste water infrastructure and are considered an important improvement in London's Strategic Infrastructure. The application complies with some of these policies but not with others for the following reasons.

Principle of development:

- The proposals are supported by London Plan Policy 5.14, and are considered an important improvement in London's Strategic Infrastructure. The proposals have been well thought out and maintain a reserve of land giving capacity for longer term enhancement of sewage treatment capacity & quality.

Temporary uses of the currently spare land are likely to be acceptable but no permanent development other than in connection with the sewage treatment should be permitted.

The applicant should clarify what increase in additional storm capacity is, and if any further capacity were to be required, especially given the predictions that our climate is likely to have more intense storms, that such capacity could be located within the unused portion of the site.

Sustainable energy

- The proposals are broadly acceptable but further information is required before the carbon savings can be verified. The applicant has stated the intention to build redundancy in the plant room safeguarding space for an extra CHP engine and the THP plant, the applicant should provide a plan of the plant room to illustrate the space allocation for the proposed units, communications with Lee Valley district heating network should continue as the design progresses to ensure design compatibility. Further information should also be provided on the potential for integration of photovoltaic on the site including the quantification of the potential carbon savings.

Transport

- A travel plan is required for the construction phase and ongoing operation and secured in the section 106 agreement. Cycle parking should be monitored for potential increase in cycle parking and options should be identified for further provision. A Construction Logistics Plan (CLP) is required. This should be secured by condition and address the potential of utilising the River Lee Navigation during phased development of the site, disabled parking should be provided in accordance with London Plan (2011) for staff and visitors.

The Applicant has responded to the GLA's Stage One comments, providing information and clarification as appropriate.

4.2 Public

4.2.1 In total 3,798 surrounding properties were consulted on the application. In addition 18 site notices were also displayed in and around the surrounding vicinity and site. The application was also advertised in the Local Press. Besides the statutory consultation process, Thames Water has also carried out their own very extensive separate Community Engagement with residents and stakeholders on the scheme. In respect of the Local Authorities consultation 4 letters of objection/ concern were submitted raised raising the following points:

- Affect Local ecology
- Close to adjoining properties
- Increase of pollution
- Noise nuisance
- General dislike of proposal

- Development will increase odour & pollution affect lifestyle of residents
- Effect property prices in Edmonton
- Plant should be closed and located outside London
- Possibility of contamination from building works
- Works should include the upgrade of the perimeter fence in need of repair
- Pungent smell of the raw sewage/ odour

4.2.2 1 letter of support raising the following points:

- Support the upgrade because of Thames Water's promise to reduce smell, live next door to the boundary of the site on Picketts Lock Lane. Thames Water making the effort to reduce smell since they completed Phase 1 of the upgrade noticed significant reduction in smell.
- Make sense to keep upgrade of Deephams on one site.

5.0 Relevant Policy

5.1 The National Planning Policy Framework (NPPF) published in March 2012 allowed local planning authorities a 12 month transition period to prepare for the full implementation of the NPPF. Within this 12 month period local planning authorities could give full weight to the saved UDP policies and the Core Strategy, which was adopted prior to the NPPF. The 12 month period has now elapsed and as from 28th March 2013 the Council's saved UDP and Core Strategy policies will be given due weight in accordance to their degree of consistency with the NPPF.

5.2 The Development Management Document (DMD) policies have been prepared under the NPPF compliant. The Submission version DMD document was approved by the Council on 27th March 2013 and has now successfully been through examination. It is expected that the document will be adopted at full Council in November 2014. The DMD provides detailed criteria and standard based policies by which planning applications will be determined and is considered to carry significant weight.

5.3 The policies listed below are considered to be consistent with the NPPF and therefore it is considered that due weight should be given to them in assessing the development the subject of this application.

5.4 The London Plan (including revised early Minor Alterations Oct 2013)

Policy 1.1	Delivering the Strategic Vision & Objectives of London
Policy 2.2	London & the wider Metropolitan area
Policy 2.6	Outer London: Vision & Strategy
Policy 2.13	Outer London: economy
Policy 2.18	Green Infrastructure
Policy 3.2	Improving Health & Addressing Equality
Policy 5.1	Climate change mitigation
Policy 5.2	Minimising carbon dioxide emissions

Policy 5.3	Sustainable design and construction
Policy 5.5	Decentralised energy Networks
Policy 5.6	Decentralised energy in development proposals
Policy 5.7	Renewable energy
Policy 5.9	Overheating and cooling
Policy 5.10	Urban greening
Policy 5.11	Green roofs and development site environs
Policy 5.12	Flood Risk Management
Policy 5.13	Sustainable drainage
Policy 5.14	Water quality and wastewater infrastructure
Policy 5.16	Waste Self sufficiency
Policy 5.17	Waste Capacity
Policy 5.18	Construction, excavation & demolition waste
Policy 5.20	Aggregates
Policy 5.21	Contaminated Land
Policy 6.1	Transport- Strategic Approach
Policy 6.3	Assessing the effects of development on transport capacity
Policy 6.9	Cycling
Policy 6.12	Road network capacity
Policy 6.13	Parking
Policy 6.14	Freight
Policy 7.1	Building London's neighbourhoods and communities
Policy 7.2	An inclusive environment
Policy 7.3	Designing out crime
Policy 7.4	Local character
Policy 7.5	Public Realm
Policy 7.6	Architecture
Policy 7.8	Heritage Assests and Archaeology
Policy 7.13	Safety, Security & Resilience to Emergency
Policy 7.14	Improving air quality
Policy 7.15	Reducing noise and enhancing soundscapes
Policy 7.16	Green Belt
Policy 7.19	Biodiversity and access to nature
Policy 7.21	Trees & woodlands
Policy 7.24	Blue Ribbon Network
Policy 7.26	Increasing the use of the Blue Ribbon Network for Freight Transport
Policy7.27	Blue Ribbon Network Infrastructure & recreational use
Policy 7.28	Restoration of the Blue Ribbon Network
Policy 7.30	London's canals and other rivers and water spaces
Policy 8.2	Planning Obligations
Policy 8.3	London's canals and other rivers and water spaces

5.5 <u>Local Plan – Core Strategy</u>

CP 1	Strategic Growth Areas
CP20	Sustainable energy use and energy infrastructure
CP21	Delivering sustainable water supply, drainage and sewerage infrastructure
CP22	Delivering sustainable waste management
CP24	The Road Network
CP25	Pedestrians and cyclists
CP28	Managing Flood Risk through development

CP29 Flood Management Infrastructure
CP30: Maintaining and improving the quality of the built and open environment
CP31 Built and Landscape Heritage
CP32: Pollution
CP33 Green Belt and Country Side
CP36: Biodiversity
CP37 Central Leeside
CP38 Meridian water
CP39 Edmonton
CP40 North East Enfield
CP46 Infrastructure contributions

5.5 Saved UDP Policies

(II)G20 New development in Proximity to Green Belt
(II)G21 Reduce visual Intrusion of built up area
(II)GD3 Aesthetics and functional design
(II)GD6 Traffic
(II)GD8 Site access and servicing
(II) C36 Replacement Planting
(II) C38 Resist Developments loss of trees of amenity value
(II)E14 Environmental Standards
(II E15 Environmental Standards
(II)T13 Road, Highway Improvements
(II)T32 Car parking Provision for Disabled people

Submission Version Development Management Document

DMD37 Achieving High Quality and Design-Led Development
DMD38 Design Process
DMD44 Preserving and Enhancing Heritage assets
DMD45 Parking Standards and Layout
DMD47 New Road, Access and Servicing
DMD48 Transport Assessments
DMD49 Sustainable Design and Construction Statements
DMD50 Environmental Assessments Method
DMD51 Energy Efficiency Standards
DMD52 Decentralised Energy Networks
DMD53 Low and Zero Carbon Technology
DMD54 Allowable solutions
DMD55 Use of Roof space/ Vertical Surfaces
DMD56 Heating & Cooling
DMD57 Responsible Sourcing of Materials, Waste Minimisation
DMD58 Water Efficiency
DMD59 Avoiding and Reducing Flood Risk
DMD60 Assessing Flood Risk
DMD61 Managing surface water
DMD62 Flood Control Mitigation
DMD63 Protection & Improvements of Watercourses & Flood defences
DMD64 Pollution Control and Assessment
DMD65 Air Quality
DMD66 Land Contamination & Instability

DMD68	Noise
DMD69	Light Pollution
DMD 70	Water quality
DMD 75	Waterways
DMD 76	Wildlife Corridors
DMD 77	Green Chains
DMD 78	Nature Conservation
DMD79	Ecological Enhancements
DMD80	Trees on development sites
DMD81	Landscaping
DMD 83	Developments Adjacent Green Belt

5.8 Other Relevant Considerations

National Planning Policy Framework (NPPF) March 2012
National Policy Statement for Waste Water March 2012
Future Water- The Government Strategy for England
National Planning Policy for Waste (October 2014)
Water for Life- Government's White Paper on Water
Water Act (May 2014)
Defra's Strategic Policy Statement to Ofwat- Incorporating Social & Environmental Guidance (May 2013)
The Town & Country Planning (Environmental Impact Assessment) Regulations 2011
The Mayor's Water Strategy: Securing London's Water Future (2011)
Circular 17/91- Water Industry Investment: Planning Considerations
Circular06/05- Biodiversity & Geological Conservation
Upper Lee Valley Opportunity Area Planning Framework (July 2013)
Central Leeside Area Action Plan (Proposed Submission)
Meridian Water Master Plan, Planning & Urban Design Guidance
Section 106 Supplementary Planning Document (November 2011)

European Policy & Guidance

Urban Waste Water Treatment Directive (1991/271/EEC)
Freshwater Fish Directive (2006/44/EC)
Water Framework Directive (2006/60/EC)
Waste Framework Directive (2008/98/EC)
Habitats Directive (92/43/ECC)
Environmental Impact Assessment (EIA) Directive (2011/92/EC)

6.0 Analysis

6.1 Principle of development

6.1.1 The need for the Upgrade of Deephams Sewage Treatment Works is driven by the requirements of European Directives (Water Framework, Urban Wastewater Treatment & Fresh Water Fish Directives'), subsequently reflected in the details of a new environmental permit set for Deephams Sewage Works by the Environment Agency through the National Environment Programme (NEP). The new permit regulations for Deephams come in to force in 2017. The strategic need for the project was confirmed by the inclusion of the Deephams Sewage

Works Upgrade as a named project within the National Policy Statement for Waste Water (2012). Together, the National Environment Programme (NEP) and National Policy Statement for Waste Water provide requirements to:

- Improve water quality within Salmons Brook and River Lee
- Enable compliance with Directives, regulation and policy governing the discharge of treated waste water effluent, and
- Provide sufficient storm capacity to meet growth within the Deephams catchment

6.1.2 The Governments National Policy Statement for Waste Water is a material consideration to the Upgrade and confirms in paragraph 2.6.3 that "The need for the improvement of waste water treatment at Deephams STW is driven by European and national statutory water quality requirements. The improvements are essential to ensure that Salmon's Brook and the River Lee (to which it flows) meet environmental quality standards to comply with the Freshwater Fish Directive, and Water Framework Directive and to ensure that there is no deterioration in the current classification as a result of increased volumes of discharge".

In meeting the European Directive requirements, The Upgrade also provides the opportunity to provide a Sewage Treatment works that:

- Provides a sewage treatment works "fit for purpose" as much of the existing infrastructure is over 50 years old
- Meets the Policy need to improve water quality
- Meets the growth requirements within the Deephams Catchment area: the Upgrade will increase the treatment capacity of the sewage works from a population equivalent (PE) of 891,000 (2011 base year to a population equivalent of 989,000
- Delivering significant reductions in odour emissions. A key benefit of the Upgrade is that a combination of new plant and equipment together with odour control will significantly reduce Odour emissions from Deephams Sewage works.

6.1.3 London Plan Policy 5.14 (Water Quality & Waste Water Infrastructure) also strongly supports the Upgrade of the sewage treatment capacity to improve water quality and to ensure that adequate wastewater infrastructure capacity is available to support new development. The Upper Lee Valley Opportunity Area Planning Framework also supports the strategic aspiration to deliver 15,000 new jobs and 5,000 new homes within the Upper Lee Valley, and reflects the desire to upgrade existing infrastructure within the Opportunity Area in accordance with the principles of London Plan Policy 5.14. Adequate sewage treatment provision is a key component to achieving sustainable communities with London Plan Policy 5.14 supporting the provision of necessary infrastructure whether to accommodate growth or to improve quality. This policy also states that development proposals to upgrade London's sewage (including Sludge) treatment capacity should be supported provided they utilise best available techniques and energy capture.

6.1.4 Core Strategy Policy 21 also supports the principle which states “the council will work with water supply and sewerage companies to ensure that Enfield’s future water resource need, waste water treatment and drainage infrastructure are managed effectively in a coordinated manner ensuring that water supply, sewerage and drainage infrastructure is in place in tandem with development, to accommodate the levels of growth anticipated within the Borough”. This policy also goes on to specifically recognise that “in order to improve water quality in the Borough during the life time of this plan, Thames Water plan to improve/ redevelop Deephams Sewage Treatment Water works. Core Policy 32 is also relevant which in part seeks to ensure that water quality will not be compromised and to secure where appropriate, improvements to water quality. Water quality can be improved through a number of measures including the effective design, construction and operation of sewerage systems and sewage treatment plants.

6.1.5 Both the London Plan and Enfield’s Core Strategy identify the essential need for the water quality within the Blue Ribbon Network, including the River Lee and River Lee Navigation, to be improved consistent with European and national objectives. The provision of a modern effective wastewater treatment capacity at Deephams Sewage works would help achieve this need.

6.2 Odour

6.2.1 The existing operation at Deephams Sewage Works generates odour emissions and this has been identified by the Local Planning Authority and Local Community through the extensive pre-application consultation process as one of the key issues to be addressed in the Upgrade application. The existing improvements that have been undertaken already have reduced emissions by approximately 15% since 2010. The National Policy Statement (NPS) for Waste Water 2012 recognises that odours from wastewater infrastructure can have a significant adverse impact on the quality of life. The National Policy Statement for Waste Water explains that “The potential for adverse odour impact from wastewater infrastructure will be dependent on a number of factors including the layout and distance of the most odorous sources to receptors, the selection of process technologies with high or low “odour potential” the selection and ongoing maintenance and control of appropriate and effective odour abatement equipment and, above all, continuing effective management.

6.2.2 London Plan Policy 7.14 (Improving Air Quality) also requires development proposals to “minimise increased exposure to existing poor air quality and make provisions to address the local problems of air quality such as by design solutions”. This policy requires development proposals to be at least air quality neutral. Core Strategy Policy CP 32 (Pollution) is also relevant which explains that the Council will work with partners to minimise air pollution. DMD Policies 64 (Pollution Control and Assessment) states that “Developments will only be permitted if pollution and the risk of pollution is prevented, or reduced and mitigated during all phases of development. DMD Policy 65 (Air Quality) states that planning permission will be refused for developments which would have an adverse impact on air quality

unless it is able to demonstrate that measures can be implemented that will mitigate these effects.

6.2.3 The nearest sensitive residential receptors to the site are the houses on Picketts Lock Lane adjacent the northern boundary, Picketts Lock Cottage near the eastern boundary, and those off Hudson Way which run parallel to the western boundary. The odour mitigation proposals submitted include measures to cover the four smelliest parts of the sewage works, and to install new odour control units to extract, clean, and vent air through 5m and 10m high stacks. Odour control covers will be installed on :

- The existing inlet works
- The new Stream A and Stream B primary settlement tanks
- The new anoxic zones of the Stream A and Stream B aeration lanes
- The existing secondary digesters

An Odour Management Plan (OMP) for the site (Appendix 15.2 in the Environmental Statement) has also been prepared. An Odour Management Plan is a documented, operational plan detailing the measures to be employed by a site operator to anticipate the formation of odours and to control their release from site. The Odour Management Plan meets the Department for Environment Food & Rural Affairs (Defra) guidelines for Odour Management Plans.

6.2.4 During the construction of the Upgrade, the main sources of odour will be from draining and cleaning of the primary settlement tanks and aeration lanes before they are partly demolished. Once the new effluent treatment streams are built, they will be covered and connected to odour control units which will reduce the smell from the tanks when they are operated. An Odour Management Plan will be in place to ensure that odour is kept to a minimum during the Upgrade. The Odour Management Plan includes measures such as:

- Each individual effluent stream will be taken out of service and cleaned before the new replacement stream is constructed and brought into use. As each replacement stream incorporates tank covers and odour control measures, and new aeration lanes are smaller than existing ones, odour emission will progressively decrease as each stream is replaced.
- As much sludge within existing primary settlement tanks will be removed as possible prior to emptying the tanks, to minimise exposure of odorous sludge at the bottom of the tank.
- Removal and cleaning out of any residual material left in the tanks and associated channels will be conducted immediately after the tank is emptied, and covers applied to any skips used if any residual material is to be dug out from the tanks or associated channels.
- New plant associated with the Upgrade will be tested with covers in place and associated odour control units working.
- The adequacy of the covers and air extraction systems to effectively contain and control odours will be confirmed prior to the commissioning of new plant.

- The cleaning system on the new storm tanks will be tested and made operational before receipt of storm water

6.2.5 Covering of the inlet works where sewage first enters the sewage works is scheduled within the first two phases of construction to provide an early reduction of Odour. With the mitigation set out above, there would be a negligible odour effect during construction.

6.2.6 Odour emissions from the Upgraded sewage works, with the most odorous parts of the works covered and controlled will reduce. The decrease in odour emissions will be due to the following main elements:

A.The application of covers and gas extraction to the secondary digesters.

B. The application of covers and odour control to the existing inlet works.

C. Decommissioning of the existing open primary settlement tanks and replacement with new tanks that will be fully covered and odour controlled.

D. Decommissioning of the existing open secondary treatment plant and replacement with a smaller footprint and fully covered odour controlled anoxic zones.

As a result, the proposed upgrade would leave 1,011 properties within the 1.5 ouE/m3 contour (a 96% reduction), 70 properties within the 3 ouE/m3 contour (a 99% reduction) and 33 properties within the 5 ouE/m3 contour (a 99% reduction). This means that 99% of properties will be removed from the areas most affected by odour from the sewage works, and all properties will experience reduced odour exposure levels. Having regard to the costs and viability of delivering such a scheme, this represents a substantial improvement in the amenity of residents within the vicinity.

6.3 <u>Impact on Residential Amenity</u>

6.3.1 The main impacts on residential amenity will be during the construction period, however various mitigation strategies are proposed to mitigate against any significant adverse impacts. The contractor will implement mitigation measures to control dust; through a Construction Environmental Management Plan which will be in place throughout the construction of the Upgrade. These will include some of the following:

- Locating activities that cause dust and stockpiles of material as away from sensitive receptors.
- Checking wind speed and direction before starting any activities that will cause dust.
- Regularly inspecting local roads and the site perimeter for dust and taking appropriate steps to resolve any problems.
- Erecting solid barriers around the site.
- Stockpiles kept for the shortest time period and use of sprinklers to dampen down exposed soil.
- Use of sprinklers and hoses for dust suppression.

Dust monitoring will be carried out during the construction phase to ensure mitigation is effective. The Construction Environment Management Plan will be conditioned.

6.3.2. The Upgrade will also generate temporary noise as a result of associated demolition and construction activities. A series of mitigation measures are included within the Construction Environment Management Plan to minimise noise during construction, including some of the following:

- Agreement of noise limits with the Council under The Control of Pollution Act 1974.
- Adopting restricted working hours for noisy plant and activities.
- Site supervision arrangements to reduce noise levels and vibration levels to a minimum in accordance with best practicable means.
- Plant will be procured with specified noise limits and be properly maintained and operated.
- Where feasible, all stationary plant will be located so that the noise effect is minimised and, if practicable, static plant will be sound attenuated.
- Residents living in close locations will be kept informed of progress of construction works and will be contacted by letter prior to any activities likely to cause noise disturbance.

6.3.3 It is considered that the measures to minimise and mitigate the noise from the construction and demolition in the Construction Environment Management Plan would effectively manage the noise issue so that it would not adversely impact on the residential amenities of residents.

6.3.4 In addition there will also be a comprehensive Construction Traffic Management Plan regarding all traffic management activities during the Upgrade construction. This will ensure that the impact and risk to surrounding residents, local community, businesses and road users is kept to a minimum. This will include construction vehicle routing via Meridian Way and Picketts Lock Lane, with traffic routed away from residential areas.

6.4 Traffic Generation /Parking and Highway Safety

6.4.1 Policy 6.3 of the London Plan is relevant in “assessing the effects of development on transport capacity“. This policy seeks to ensure that the impacts of transport capacity and the transport network are fully assessed and that the development proposals would not adversely affect safety on the transport network. In addition saved UDP policies (II) GD6, (II) GD8 and (II) T13, Core Policies CP24 and 25 and DMD policies 45, 46 and 47 are also relevant. Paragraph 32 of the National Planning Policy Framework is also applicable and advises that all developments that generate significant amounts of movement should be supported by a Transport Statement/ Assessment.

6.4.2 The application for the Upgrade is supported by a detailed assessment of transport issues including a Transport Statement, a Construction Travel Plan and a Construction Traffic Management Plan. Access to the site during construction and operation will be from Picketts Lock

Lane and Ardra Road, with Picketts Lock Lane being the main access. The site has a PTAL rating of between 1a and 1b.

6.5.3 Traffic will be generated throughout the construction period which is expected to be completed by the end of 2018. Given the site will still be operating then there will be a net increase in traffic on the network. The Transport Statement contains figures on the expected trip profile for the worst case scenario for Construction Traffic Volumes which suggests that there would be 616 trips over a 24 hour period. During the local highway AM network peak (08.00- 09.00) there would be 64 trips and PM network (17.00-18.00) there would be 74. This worst case would in reality be for only two or three days within a peak month of the construction period, with all other days' through the construction period having significantly lower daily peak profiles.

6.4.4 Due to the location of the site the construction traffic will mainly be kept to classified highways, with access from the M25 and the North Circular both being from Meridian Way which is part of TfL Strategic Road Network. Given the volume of traffic using these roads then the construction traffic will only represent a small increase of approximately 1.7% maximum based on DfT figures and is unlikely to have an unacceptable impact on any junctions. Transport for London is satisfied that the development will not adversely affect the capacity and safety of the local and strategic highway network.

Parking

6.4.6 During the construction phase of the Upgrade there would be 163 car parking spaces, including 3 disabled spaces and 20 cycle spaces located in the construction compound in the north west part of the site. The upgrade will take place over a 3 year period July 2015 to August 2018. The provision of 163 spaces for the construction phase of the development is acceptable and is appropriate in terms of meeting the demand for expected number of staff involved throughout the phases having regard to London Plan Policy 6.13, and DMD 45. Based on the expected number of staff during construction 20% of the spaces will be provided for electric vehicles, in accordance with London Plan Policy 6.13.

6.4.7 Following completion of the Upgrade there would be a total of 245 spaces an increase of 80 spaces. This compares to 165 spaces prior to the Upgrade. Existing areas of car parking are lost through the Upgrade proposals, and Thames Water proposes to retain the construction compound parking area following the completion of the Upgrade for parking and storage use. A total of 41 cycle spaces would be available following completion of the Upgrade, with use of existing shower facilities. Staff numbers will not be increased after the Upgrade and, it is anticipated that not all the 80 additional spaces would in fact be retained and used for car parking as parts of the retained parking area will need to be segregated off and dedicated for use associated with the new educational facility. This will require mini bus, coach and car parking for staff and visitors, together with safe circulation space for visitors to the educational facility. The detailed layout and management of the educational facility parking and circulation space, together with the future management of the retained car parking can be secured by

condition. A Travel Plan for the construction phase of the development and also on going operation of the treatment plant will be secured, enforced, monitored and reviewed as part of the Section 106 agreement.

Access & Servicing

6.4.8 All construction vehicles will access the site via the main sewage works entrance gates off Picketts Lock Lane. This is the existing main site access, and provides access to the main areas of construction activity. A further access point would be available from Adra Road which may be occasionally used for deliveries from large vehicles. Once operational, the main access to the Upgrade works will continue via the existing Pickett's Lock Lane access. The access and servicing arrangement during the Upgrade works is considered acceptable in principle, however the Construction Traffic Management Plan will need to be adhered to and secured through an appropriate condition.

6.5 Design

6.5.1 Core Policy CP 30 requires all new developments to be high quality and design led having regard to their context. The scheme will be seen in the context of the existing sewage treatment infrastructure and operations at the site. The design of the built structures has sought to limit landscape and visual impacts by minimising the land take and height using neutral colours where possible. The existing sewage works is an enclosed site, with only limited views into it from near or long distance locations. The existing landscaped bund to the north is retained as part of the Upgrade and will be extended further to the east as part of previous permitted development works. Whilst the heights of the primary settlement tanks, aeration lanes and final settlement tanks will be greater than those they replace they are considered to be appropriate and in keeping with the existing setting of the sewage works site.

6.5.2 With regard to the proposed FTFT Pumping station and Blower house as well as other buildings proposed these will be viewed in the context of the existing buildings and infrastructure on site and are considered acceptable in terms of their location and appearance. In addition new landscaping is also proposed on the eastern, northern and western boundaries of the site. Overall the scale of the proposed buildings and structures are considered to be a similar scale and character to the existing built infrastructure already in place at the site and surrounding area.

6.6 Sustainable Design & Construction

6.6.1 The London Plan Climate change policies require developments to make the fullest contributions to tackling climate change by minimising carbon dioxide emissions, adopting sustainable design and construction, prioritising decentralised energy and incorporating renewable energy. The following policies of the London Plan are of particular relevance 5.1, 5.2, 5.3, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14 and 5.15. In addition Core Polices 20 (Sustainable Energy & Energy Infrastructure), CP21 (Delivering Sustainable Water

Supply, Drainage and Sewage Infrastructure are also applicable). In addition Sustainability and Energy Development Management Document Policies DMD 49, 51, 52, 53, 55, 56, 57 & 58 are also relevant. The applicants have submitted both a Sustainability Statement and Energy Statement with the application.

6.6.2 As part of the effluent upgrade works a number of efficiency improvements are proposed. These include low head flow to full treatment pump station, improved gravity flow, high efficiency motors and various improvements to the process which are expected to reduce electricity consumption. A reduction of 7% of electricity consumption and 11% in heat demand has been estimated, equivalent to approximately 2,200 tonnes carbon dioxide (CO2)/ year. The applicant is predicting a 49% reduction in carbon emissions from efficiency and CHP system upgrade, equivalent to a 54% reduction in carbon emissions per population equivalent.

6.6.3 In relation to the Lee Valley Heat Network the applicant has committed to delivering a system compatible with the heat network for either heat import or export. In terms of import, it is envisaged that the heat network would top-up heat during the winter peak heat demand, replacing more carbon intensive solid fuel boilers. Potential export would be derived at a point where biogas and heat generation exceeds demand on the site. While this situation does not yet occur on site, with the integration of potential future Thermal Hydrolysis Plant (THP), biogas generation may increase to a level to warrant export to the Lee Valley Heat network. Given the strategic importance of the network and the identified synergy of the sewage works to the wider network this will be secured in the section 106 agreement to ensure design compatibility and liaison with the Lee Valley District Heat Network developer.

6.6.4 The renewable energy technology being proposed for the Upgrade is the replacement of the Combined Heat and Power (CHP) engines with new, more efficient equipment with increased capacity. Two new CHP engines will be installed on site allowing additional biogas generated from the anaerobic digestion plant to be used more effectively. This would meet London Plan Policy 5.6, which requires the feasibility of CHP to be considered and Policy 5.7 which seeks the increased proportion of energy generated from renewable resources. In respect of the GLA's comments regarding the applicant providing a plan of the plant room to illustrate space allocation for the units. Thames Water advise there is no plant room as such, as the CHP engines and potential future Thermal Hydrolysis Plant would be predominantly located outside of any building, so it is not possible to provide a plan of the plant room as requested. They however confirm that the Motor Control Centre (MCC) kiosks associated with the CHP engines will have sufficient space within them to accommodate the necessary control equipment for a third CHP engine should that be subsequently approved and installed.

6.6.5 With regards the GLA's request for further information on the potential for integration of photovoltaics' on site including a quantification of the potential carbon savings, the applicant advises that the installation of PV was considered in the Energy Statement paragraphs 5.3.14 to

5.3.16. At this stage Thames Water wish to retain flexibility in the ongoing design work to ensure that it can meet necessary operational and health and safety constraints relating to future operation and maintenance of the site. However, they are happy to accept a condition to provide a written assessment of the potential for integrating PV at the site once the construction is complete. An appropriate condition will secure this.

6.6.6 Approximately 1,150m2 of Brown Roofs are also proposed to be installed on the return activated sludge and surplus activated sludge pumping station and blower house, meeting the requirement of Policy 5.11 of the London Plan and DMD 55. Thames Water has also committed to submit the Deephams Upgrade for a Civil Engineering Environmental Quality Assessment and award scheme (CEEQUAL). CEEQUAL was originally developed to be a civil engineering equivalent of BREEAM. Where BREEAM sets the standards for the assessment of buildings, CEEQUAL is a wider assessment that covers all aspects of a civil engineering project. In the context of Deephams, any BREEAM assessment could only capture certain proposed buildings which themselves represent a small part of the overall project. In contrast the CEEQUAL assessment captures the whole project, including what was designed, what was built and how it was built. Thames Water have already successfully delivered CEEQUAL awards and have committed to achieve " Excellent" rating overall the highest tier achievable .This has been appropriately conditioned.

6.7 Biodiversity/ Visual Landscape /Trees

6.7.1 The majority of the site is previously developed land, containing sewage treatment infrastructure at the site and therefore has limited ecology and nature conservation. The main features of ecological interest are found along the periphery of the site. Part of the Lea Valley Site of Metropolitan Importance Nature Conservation (SMINC) is designated within the north eastern boundary of the site. With the exception of the enhanced planting and habitat creation, no works are proposed within the boundary of the SMINC. The Biodiversity Officer advises that the Environmental Statement (ES) covers all the ecological implications that may arise. As long as the various mitigation and enhancement measures are provided as set out in the ES there will be no net loss of biodiversity and the development will accord with Wildlife Legislation and Planning Policy.

6.7.2 Construction of the scheme will also involve the removal of approximately 0.35 hectares of plantation wood and scrub on the eastern boundary and approximately 40 additional scattered trees in the centre of the site. The landscaping proposals for the site include the provision of new trees, protection of trees to be retained on site, replanting of newly formed bunds and landscape areas with native species and replanting restored areas of the site on completion. The proposed habitat enhancements will provide replacement habitat that includes the provision of native scrub, and wet scrub, coppice trees, small tree plantation, mature hedgerows and a wildflower meadow, reducing any impacts to negligible significance. Habitat enhancements will also be delivered through the Landscape Strategy, including the provision of brown roofs and bird/bat boxes. The mitigation measures

set out in the Environmental Statement will be secured through the Construction Environment Management Plan including an Invasive Species Management Plan. The improvements in discharge from the site as a result of the Upgrade is also likely to have a positive effects on biodiversity, and the proposal would have appropriate regarding in respect of London Plan Policies 5.14 and 7.28.

6.7.3 The Tree Officer advises that there are substantial landscapes enhancements occurring as part of the development including replacement screening on the eastern boundary and that the landscaping will be more than adequate to mitigate any Green Infrastructure losses.

6.7.4 The Upgrade is considered to accord with London Plan Policy 7.19 and 7.28, Core Strategy Policy 36 and Development Management Document Policies DMD 76, DMD 78 and DMD 79 through the provision of mitigation for potential impacts to biodiversity through habitat enhancement. Overall the Upgrade is considered to make a positive contribution to improving green Infrastructure and integrating and Blue Ribbon network. The Upgrade is also considered to accord with Saved UDP Policy (II) G20 and DMD Policy 83 regarding development located adjacent to green belt only being permitted where there is no increase in visual dominance and intrusiveness of the built form and there is a clear distinction between Green Belt and the urban area. The Upgrade is considered to be similar in layout and scale, type and height and massing to the existing sewage works. Once landscape planting has matured it is not considered that the development would have any significant impact on the adjacent Green Belt or visual landscape of the surrounding area.

6.8 Noise/ Air Quality/ Flood Risk/ Surface Water/ Waste

Noise

6.8.1 With regards noise the Upgrade will generate temporary noise as a result of associated demolition and construction activities. A series of mitigation measures are included in the Construction and Environmental Management Plan (Environmental Statement Appendix 5.3) which will be conditioned. The Environmental Statement concludes that with mitigation measures the residual impact from construction noise will range from negligible to minor adverse significance. Once in operation the noise associated with the Upgrade is not considered to require mitigation .It is considered that with the measures to minimise and mitigate the noise from the construction and demolition set out in the Construction Environment Management Plan would satisfactorily safeguard surrounding amenity whilst the Upgrade works are undertaken as well as having appropriate regard to London Plan Policy 7.15, Core Strategy Policy 32 and DMD Policy 64.

Air Quality

6.8.2. In terms of Air Quality, the site is within a Borough Wide Air Quality Management Area (AQMA). The Environmental Statement concludes that the overall significance of the residual air quality impacts

associated with the proposed upgrade is negligible following appropriate mitigation measures secured through the Construction Management Plan which is to be a conditioned. Measures will also be employed during construction of the Upgrade to reduce dust emissions and minimise vehicle emissions to mitigate the risk of adverse impact on air quality and sensitive receptors. Once the Upgrade is in operation it will lead to an improvement in air quality with reduced pollutant concentrations from the new CHP Plant and reduced CO2 emissions. It is considered that the proposal would have appropriate regard to London Plan Policy 7.14 and DMD 65.

Flood Risk

6.8.3 As far as Flood Risk is concerned the Flood Risk assessment confirms that some small areas of the site are at a low risk of fluvial and surface water flooding. The site is predominantly in Flood Zone 1 with small sections located in Flood Zones 2 and 3. However as sewage treatment works are considered a water compatible use in the NPPF the level of flood risk is acceptable. The site is potentially at risk of flooding as a result of failure of the William Girling Reservoir. However, the risk is managed by regular inspections and associated maintenance of the reservoir. The risk of flooding is therefore very low. Various conditions regarding flood risk and contamination are requested by the Environment Agency which will be imposed.

6.8.4 With regards the proposed new storm tanks to be provided as part of the Upgrade these are additional to the existing storm tanks on the site, and not intended to replace them. The Upgrade will increase the storm tank capacity in accordance with the requirements of the Environment Agency. The existing storm tanks located in the south west part of the site are all to be retained. The proposed new additional storm tanks will be created through converting what will become redundant primary sedimentation tanks in Phase 4 of the development. In this way the existing storm capacity will increase from 49,518 cubic meters to 63,733 cubic meters following the Upgrade.

Surface Water

6.8.5 In terms of surface water run off the Flood Risk Assessment states the development will include brown roofs on various buildings, rainwater harvesting, and permeable paving on the car parking and attenuation tanks. This is stated as approximately enough storage capacity to capture rainfall from the impermeable portion (11.23 Ha) of the site for 1 in 100 year storm. The various surface water drainage measures will be conditioned and would have appropriate regard to London Plan Policies 5.12 & 5.13 and DMD Policies 61 and 63 to manage surface water and protect surrounding water courses.

Waste

6.8.6 The main waste generated from the Upgrade construction will be from demolition, excavation and construction materials. The contractor has produced a Construction Waste Management Plan to minimise waste which will be appropriately conditioned.

6.9 Employment / Training

6.9.1 Paragraphs 18 & 19 of the NPPF emphasise the importance of economic growth to create jobs as part of building a strong and competitive economy. London Plan Policy 4.12 also seeks to improve opportunities for all, noting that strategic development proposals should "support local employment, skills development and training opportunities". Core Strategy Policy 16 also states the Council's commitment to tackling worklessness, creating new jobs in the Borough and working to ensure that local residents are able to access new jobs.

6.9.2 Thames Water has prepared a Local Employment Strategy in conjunction with the appointed contractor AMK and has also co-operated closely with the Council and its partner organisation Jobcentre Plus regarding the Strategy. During the 3 year construction period for the Upgrade it is estimated that AMK will employ 70 management, design and ancillary staff, and up to approximately 180 skilled, semi-skilled and unskilled employees. The precise level of employment will fluctuate throughout the phased construction.

6.9.3 Thames Water and its contractor have also committed to:

- Employ at least 20% Local Labour during the Upgrade construction.
- Offer 6 Local apprenticeships during the Upgrade construction Programme, together with 200 weeks of training for other local employees.
- Employ at least 2 full time local workers through the offender rehabilitation package.
- Publicise access to their respective apprenticeship schemes through Enfield JOB net, Jobcentre plus and through LBEs Project monitoring Team.
- Publicise access to their respective entry schemes through Enfield JOB net, Jobcentre Plus and through local councils.
- Make best endeavours to redeploy construction workers to other projects to maximise opportunities to sustain employment.

6.9.4 Thames Water/ AMK also will seek to exceed the 20% local labour figure during the construction programme. They will also work closely with the Council and local schools and colleges to promote educational opportunities that arise during the construction process. Overall the Employment Strategy proposed is very comprehensive and the Council's Business and Economic Development Officer advises that the Strategy is robust and would fully meets the needs of Enfield's residents in terms of training and employment opportunities and will be secured within the Section 106 agreement.

6.10 Provision of Educational Facility

6.10.1 The Upgrade also includes the provision of a new education facility through the conversion of an existing building at the entrance to the site. The building will be refurbished to provide education room with space for 30 students, together with toilets and ancillary facilities. A safe guided walking route around the site for educational tours will also

be provided to learn about the sewage treatment process. This will be secured within the Section 106 agreement regarding the commitment to provide the educational facility as well as via an appropriate condition. The proposed education facility will make an important contribution to supporting community cohesion and providing skill development and training opportunities in accordance with London Plan Policies 4.12, 7.1 and Core Policy 9 and is strongly supported.

6.11 Section 106 Agreement Heads of terms

6.11.1 The following Section 106 heads of terms are proposed:

- Travel Plan (Construction Phase and Operational Phase) to also include cycle parking, disabled parking & electric parking provision to be secured in accordance with London Plan Standards, enforced, monitored and reviewed. With regards the Construction Travel Plan element this should also contain targets relating to increasing cycling, walking, public transport and staff car sharing.
- The provision of a connection pipe to proposed Lee Valley Heat Network & liaison with Lee Valley Heat Network to ensure design compatibility
- The provision and securement of a Local Employment Strategy
- The payment of a Business & Employment Initiative contribution, if the agreed training specified in the Local strategy is not provided
- The provision of an Education Facility
- Section 106 Monitoring Fee

6.12 Community Infrastructure Levy

6.12.1 As of April 2010, legislation in the form of CIL Regulation 2010 (as amended) came into force which would allow “charging authorities” in England and Wales to apportion a levy on the net additional floor space for certain types of qualifying development to enable the funding of a wide range of infrastructure that is need as a result of development. Since April 2012 the Mayor of London has been charging CIL in Enfield at a rate of £20 per sqm. The Council is progressing its own CIL but this is not expected to be introduced until spring/ summer 2015.

6.12.2 It is considered that a CIL payment will be liable for the additional floor space created through the construction of the proposed Control Room building (270m2) as part of the Upgrade. The other new buildings that will be constructed are exempt from CIL payment as they are classed as buildings into which people” do not normally go” e.g. buildings containing plant etc.

(£20/m2) X (270.25m2) x223/240= £5,022.14

6.12.3 Should permission be granted, a separate CIL liability notice would be issued.

7. Conclusion

7.1 The strategic need for the project was confirmed by the inclusion of the Deephams Sewage Works Upgrade as a named project within the National Policy Statement (NPS) for Waste Water 2012 which outlines a clear statutory driver for the scheme in meeting European and National water quality targets. The Upgrade will meet the new environmental permit requirements which come into force in 2017 for the quality of treated waste water discharged from Deephams Sewage Works into Salmons Brook, as well as increasing the treatment capacity and Storm capacity of the Deephams Sewage Works.

7.2 With an existing sewage treatment works much of which is 50 years old, the Upgrade will also deliver a Sewage Treatment works that is "fit for purpose", support population growth and re-generation proposals in the Upper Lee Valley and the wider catchment area. The Upgrade will also deliver a significant reduction in odour emissions from the sewage works the benefits of which have been maximised during discussions with the Council on this scheme. All properties in the vicinity of Deephams Sewage Works will experience a significant reduction in Odour as a result of the Upgrade. The Upgrade layout has also been designed so that the sewage works could be extended/ upgraded in the future to respond to any future requirements.

7.3 Through comprehensive mitigation set out in the Environmental Statement to be employed during the scheme, residual effects are limited. Any localised adverse effects, almost all of which will arise during the construction stage only, must be weighed against the need to meet the new environmental permit and wider benefits of the Upgrade will bring in terms of water quality within the Blue Ribbon Network, facilitating growth and regeneration.

7.4 The proposed Upgrade will meet a clear statutory need within an existing operational sewage work and accords with National Policy, London Plan Policies, Core Strategy, Unitary Development Plan Policies (saved) and Development Management Document Policies. In reaching a decision regard has also been had to all the information in the Environmental Statement submitted with the application.

8.0 **Recommendation:**

Having taken into account the Environmental Information contained in the Environmental Statement accompanying this application, and following referral to the Greater London Authority (GLA) and no objections being raised together with the signing of the Section 106 agreement regarding the issues set out in section 6.11 of the report, the Head of Development Management planning decisions manager be authorised to **GRANT** planning permission subject to the following conditions:

1. C60-Approved Drawings and conformity with Environmental Statement and Appendices.

Materials

2. The proposed colours and materials for the various buildings, structures or process items identified on Site Layout Plan drawing A630-AMK-105 Rev C shall accord with the schedule of colours and materials set out on pages 27 to 31 of the Planning Statement submitted with the application and prepared by Adams Hendry Consulting Ltd 2014 unless agreed otherwise in writing by the Local Planning Authority.

Reason: In the interest of visual amenity and to ensure a satisfactory appearance.

Details of Levels

3. Prior to the commencement of each of the 5 phases of construction details of the existing and proposed ground levels including levels of any proposed buildings, roads and / or hard surfacing areas shall be submitted to and approved in writing by the Local Planning Authority unless agreed otherwise. The development shall be constructed in accordance with the approved details.

Reason: To ensure that the levels have regard to the levels of surrounding development, gradients and surface water drainage.

Nesting Birds

4. All areas of hedges, scrub or similar vegetation where birds may nest which are to be removed as part of the development, are to be cleared outside the bird nesting season (March-August) or if clearance during the bird nesting season cannot be reasonably be avoided, a suitably qualified ecologist will check the area to be removed immediately prior to clearance and advise whether nesting birds are present. If active nests are recorded, no vegetation clearance or other works that may disturb active nests shall proceed until all young have fledged the nest.

Reason: To ensure that wildlife is not adversely impacted by the proposed development in accordance with National Wildlife Legislation & in line with CP36 of the Core Strategy. Nesting birds are protected under the Wildlife & Countryside Act 1981 (as amended).

Protection of Ecologically Important Features

5. The development hereby permitted shall be implemented in accordance with the best practice ecological protection measures contained in Section 3.8 of the Construction Environmental Management Plan provided in Appendix 5.3 of the Environmental Statement submitted by Adams Hendry Consulting Ltd, unless otherwise approved in writing by the Local Planning Authority.

Reason: To ensure that the development does not lead to deterioration in the ecological value of the site and the "Site of Metropolitan Importance for Nature" which abuts the site on eastern boundary, and that the development leads to an enhancement of the site's ecological value both in the short & long term in line with NPPF and CP36 of the Core Strategy.

Lighting

6. No new permanent external lighting shall be erected on site until details of an external lighting scheme, showing how it has been designed to minimise light spillage, in particular along the northern and eastern boundaries of the site, has been submitted to and approved in writing by the Local Planning Authority. The details submitted are to include the following:

- A brief report detailing the measures that have been taken to minimise the impact on wildlife and to avoid light spillage on the boundary vegetation and the adjacent Site of Metropolitan Importance for Nature (SMINC) and River Lee Navigation demonstrating how the lighting scheme proposed is the minimum required to be undertake the required task.
- A Layout Plan showing the location of lighting columns, and the type and details of lighting equipment used.
- Details of measures to avoid glare.
- An isolux contour map showing the light spillage to 1 lux both vertically and horizontally to include the adjacent New River Lee.

The approved lighting plan shall thereafter be implemented as agreed.

Reason: To ensure that the wildlife, particularly along the River Lee Navigation, is not adversely affected by the development in line with Core Policy 36 and the Conservation of Habitats and Species Regulations 2010.

Bats- Further Tree Inspection

7. Immediately prior to the carrying out of works to, or the removal of , trees on site previously identified as having bat roosting potential, a re-inspection of those trees for the presence of bats by a suitably qualified and licenced bat worker must be completed. If evidence of a bat roost is found, no works shall commence until a licence from the Statutory Nature Conservation Organisation for development works affecting bats has been obtained and a copy submitted to and approved in writing by the Local Planning Authority.

Reason: There is the potential for some trees proposed for removal to support roosting bats. This condition will ensure that protected species are not adversely affected by the removal of these trees in line with wildlife legislation and in line with Core Policy 36 and The Conservation and Species Regulations 2010.

Invasive Species

8. The development hereby permitted shall be implemented in accordance with the method statement for the management of invasive species identified on site (Japanese Knotweed, Giant Hogweed and Himalayan Balsam and Wall Contoneaster) as set out in Section 3.8.2 of the Construction Environmental Management Plan provided in Appendix 5.3 of the Environmental Statement submitted by Adams Hendry Consulting Ltd, unless otherwise approved in writing by the Local Planning Authority.

Reason: To ensure the biodiversity is not adversely affected by the proposed development in line with CP36 of the Core Strategy. It is an offence to allow Schedule 9 species which includes these species identified on site to spread as they have significant adverse effects the on biodiversity.

Brown Roof

9. No development shall commence on any of the proposed buildings identified to have brown roofs until details of the proposed brown roofs, including location, design, dimensions, materials (designed following the principles as detailed in Paragraph 9.6.22 of the submitted Environmental Statement) and a maintenance scheme for each relevant building or buildings, have been submitted to and approved in writing by the LPA. Unless otherwise agreed in writing, the brown roofs shall be provided in accordance with the approved details prior to the occupation of the building to which they relate and shall be maintained as such and shall not be used for any other purpose.

Reason: To ensure that the ecological value of the site is enhanced post development in line with the Biodiversity Action Plan, Core Policy 36, and Policy 7.19 of the London Plan.

Landscaping & Biodiversity Enhancements

10. Prior to the commencement of Phase 4 of the development, full details of hard and soft landscape proposals shall be submitted to and approved by the Local Planning Authority. Soft landscape details shall include mitigation and enhancement measures detailed in Chapter 9 (section 6) of the Environmental Statement submitted by Adams Hendry Consulting Ltd:

- Planting Plans
- Written specifications (Including cultivation and other operations associated with plant and grass establishment)
- Schedules of plants and trees, to include native, wildlife- friendly (Nectar-rich and berry bearing) species
- Retention of peripheral habitats of notable biodiversity value
- Replacement planting of lost eastern boundary trees and hedgerow to include a native mixed species hedgerow (including at least 3 species) along the eastern boundary, and large canopy trees elsewhere on site
- Implementation timetables

- Specifications for fencing demonstrating how hedgehogs and other wildlife will be able to continue to travel across the site (10cm gaps in appropriate places at the bottom of the fences)
- Biodiversity enhancements to include:
- 25 bird and 10 bat boxes are to be strategically installed on to trees in appropriate locations around the periphery of the site (with particular focus on providing roosting opportunities on trees which abut the site of Metropolitan Importance for Nature Conservation (SMINC).
- Retention of dead wood habitats

Reason: To ensure that the ecological value of the site is enhanced post development in line with Biodiversity Action Plan, CP36 of the Core Strategy.

Archaeological condition

11. No development shall take place until the applicant has secured the implementation of a programme of archaeological investigation in accordance with the Written Scheme of Investigation for Archaeological Mitigation Works (Oxford Archaeology, September 2014). No development shall take place other than in accordance with the Written Scheme of Investigation, unless otherwise agreed in writing by the Local Planning Authority.

Reason: Heritage assets of archaeological interest are expected to survive on the site. The LPA wishes to secure the provision of appropriate archaeological investigation, including the publication of results, in accordance with Section 12 of the NPPF.

Section 61 Agreement

12. Prior to any development taking place the applicant shall enter into a Section 61 agreement under the Control of Pollution Act 1974 with the London Borough of Enfield.

Reason: To protect the local amenity from noise and disturbance.

Deliveries during construction

13. No deliveries of construction and demolition of materials shall be taken at or despatched from the site outside the following times 08:00 to 18:00 Monday to Friday, 08:00- 13:00 Saturdays and at no other time except with the prior written approval of the LPA.

Reason: To protect the local amenity of surrounding residents from noise and disturbance.

Notification of surrounding occupiers of work during Various Construction Phases

14. At least 28 days prior to the commencement of any works of each phase on site occupiers in Picketts Lock Lane and Ardra Road shall be notified in writing of the nature and duration of the works to be undertaken. The notification shall include the name and contact details of the persons responsible for the site works for enquiries and complaints for the entire duration of the works, set out regular frequency for updates on progress of the work, and a process through which any complaints will be properly addressed as quickly as possible.

Reason: To protect the local amenity from noise and disturbance.

Implementation of Water Management Plan

15. All the mitigation measures and pollution prevention controls contained within the Water Management Plan (WMP) Appendix 18.3 (AMK Water Management Plan) Environmental Statement Volume 3 shall be implemented and adhered to during the construction Phase of the Deephams Sewage Treatment Works Upgrade, unless agreed otherwise in writing by the Local Planning Authority. This shall include silt booms/ and or silt curtains to prevent the transfer of silt and other materials into the nearby waterway during demolition & construction period. The silt booms / and or silt curtains shall be regularly maintained and any built up soil or waste deposited appropriately. In addition the measures contained in the WMP to ensure that surface water run- off and ground water is captured and controlled within the site during the construction period, to avoid it polluting the watercourse shall also be implemented.

Reason: In order to prevent pollution during the construction of the Upgrade as well as the transfer of waste, silt, soil and other material into nearby waterways and to ensure that water quality is not adversely affected.

Surface Water Drainage

16. Prior to the commencement of Construction Phase 2 works a detailed surface water drainage scheme for the site, based on the agreed flood risk assessment (FRA) (AECOM Job No 60311579, Ref 3523, Rev 5), shall be submitted to and approved in writing by the LPA. The drainage strategy shall include a restriction in run off and surface water storage on site as outlined in the FRA. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed. In order to discharge the surface water condition, the following information must be provided based on the agreed strategy.

. (a.)A clearly labelled drainage layout plan showing networks and any attenuation areas or storage locations. This plan should show any pipe “Node Numbers” that have been referred to in network calculations and it should also show invert and cover levels of manholes.
(b)Conformation of the critical storm duration.
(c) Where infiltration forms part of the proposed storm water system such as infiltration trenches and soak ways, soakage test results and test locations are to be submitted in accordance with BRE digest 365.

(d) Where on site attenuation is achieved through ponds, swales, geocellular storage or other similar methods, calculations showing the volume.

(e). Where an outfall discharge control device is to be used such as hydro brake or twin orifice, this should be shown on the plan with the rate of discharge stated.

(f) Calculations should demonstrate how the system operates during a 1 in 100 chance in any year critical duration storm event, including an allowance for climate change in line with the "Planning Practice Guidance: Flood Risk and Coastal Change": If overland flooding occurs in this event, a plan should also be submitted detailing the location of overland flow paths and the extent and depth of ponding.

Reason: To prevent the increased risk of flooding, to improve and protect water quality and improve habitat and amenity.

Scheme To Deal with Risks of Contamination

17. Prior to the commencement of Construction Phase 2 a scheme that includes the following components to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing by the Local Planning Authority:

(1) A preliminary risk assessment which has identified:

(2) A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site

- All previous uses,
- Potential contaminants associated with those uses
- A conceptual model site indicating sources, pathways and receptors
- Potentially unacceptable risks arising from contamination at the site.

(3) The results of the site investigation and detailed risk assessment referred to in (2) and based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

(4) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Reason: To protect groundwater and prevent contamination.

Verification Report of Remediation Strategy

18. Prior to the commencement of Phase 2 of the construction works a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved, in writing, by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that site remediation criteria have been met. It shall also

include a plan (“a long term monitoring and maintenance plan”) for longer term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan. The long term monitoring and maintenance plan shall be implemented as approved.

Reason: To protect ground water from further deterioration.

Long Term Monitoring & Maintenance Plan Contamination

19. Prior to the commencement of the construction Phase 2 a long term monitoring and maintenance plan in respect of contamination including a timetable of monitoring and submission of reports to the LPA, shall be submitted to and approved in writing by the LPA. Reports as specified in the approved plan, including details of any necessary contingency action arising from monitoring, shall be submitted to and approving writing by the LPA. Any necessary contingency measures shall be carried out in accordance with the details in the approved reports. On completion of the monitoring specified in the plan a final report demonstrating that all long term remediation works have been carried out and conforming that remedial targets have been achieved shall be submitted to and approved in writing by the LPA.

Reason: To protect ground water.

20. If during development, contamination not previously identified is found to be present at the site then unless otherwise agreed in writing by the LPA no further development shall be carried out in the vicinity of the contamination, or in areas that could be affected by it, until the developer has submitted a remediation strategy to the LPA detailing how this unsuspected contamination shall be dealt with and obtained written approval from the LPA. The Remediation Strategy shall be implemented as approved.

Reason: To protect ground water.

21. No infiltration of surface water drainage into the ground at the site shall be permitted other than with the express written consent of the LPA, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approved details.

Reason: To protect ground water.

22. Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the LPA, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to ground water. The development shall be carried out in accordance with the approved details.

Reason: In order to protect ground water.

Construction & Logistics Plan

23. Prior to the commencement of development details of a Construction and Logistics Plan (CLP) shall be submitted to and approved in writing by the LPA and thereafter adhered to during the Deephams Sewage Treatment Works Upgrade.

Reason: In order to minimise the impact of the development on the surrounding highway network, in addition to setting out how the construction site and its operation will be managed.

Parking Provision for Educational Facility & Management of Car parking

24. Prior to the commissioning of the completed development, a detailed layout and management plan of the educational facility parking and circulation space, together with the layout and future management of the retained construction compound car parking area shall be submitted to and approved in writing by the Local Planning Authority. The approved management strategy shall thereafter be implemented, unless otherwise agreed in writing by the LPA.

Reason: To ensure satisfactory parking and management strategy for the education facility and retained car parking is provided and implemented.

Construction Waste Management Plan & Site Waste Management Plan

25. All aspects of the Construction Waste Management Plan (Appendix A17.1) and the SMART Waste Site Management Plan (Appendix17.2) set out in the Environmental Statement Volume 3 shall be adhered to, implemented as well as regularly monitored and reviewed during the course of the Upgrade works.

Reason: To maximise the amount of waste diverted from landfill consistent with the waste hierarchy and strategic targets set by Policies 5.17, 5.18, 5.19, 5.20 of the London Plan, CP 22 of the Core Strategy as well as DMD 57 of the Development Management Document.

26. **Construction Environmental Management Plan CEMP)**

The Construction Management Plan (CEMP) set out in Appendix 5.3 Volume 3 of the Environmental Statement shall be adhered to and the mitigation measures outlined in the CEMP put in place during the Upgrade. The CEMP shall also be regularly monitored and reviewed, during the course of the Upgrade and amended if required.

Reason: To ensure the implementation of the Upgrade does not lead to damage to the existing highway and to minimise disruption to surrounding and neighbouring properties.

Future Feasibility of Photovoltaics

27. Once the Upgrade has been completed a written assessment regarding the potential and future feasibility for integrating photovoltaics' on the Deephams Sewage Works site shall be submitted to and approved in writing by the Local Planning Authority. If the assessment indicates that solar PV's are viable then appropriate provision shall be provided in accordance with further details to be submitted to and approved by the LPA.

Reason: In order to have appropriate regard to London Plan Policy 5.7 (Renewable energy), Policy CP20 of the Core Strategy and DMD 53 and DMD55.

Details of Education Facility

28. Prior to the completion of the Upgrade details regarding the new Educational Facility to be provided on site, as well as a Management Plan for its operation and use including a safe guided walk route around the upgraded sewage works, shall be submitted to and approved in writing by the Local Planning Authority. The Educational facility shall thereafter be provided and retained as an education facility.

Reason: To ensure that satisfactory details are submitted to ensure provision and implementation of the Educational Facility.

Arboricultural Impact Assessment

29. The Arboricultural Impact Assessment set out in Appendix 5.2 Volume 3 of the Environmental Statement shall be adhered to and implemented during the Sewage Works Upgrade including (Tree Constraints Plan, Aboricultural Implications Plans, Tree Retention and Removal Plan)

Reason: To ensure that the Upgrade has appropriate regard to existing trees on site.

Energy Efficiency

30. The development shall be implemented in accordance with the 'Energy Statement' and shall be designed so as to provide for not less than 54% reduction in carbon emissions per population equivalent when operating at full design capacity, unless otherwise agreed in writing by the LPA. Following practical completion of works an Energy Implementation Report shall be submitted to and approved in writing by the LPA to confirm the carbon reduction potential of the as built scheme when operating at full design capacity.

Reason: In the interest of sustainable development and to ensure that the Local Planning Authority may be satisfied that CO2 emission reduction targets are met in accordance with Policy CP20 of the Core Strategy, DMD51 of the Development Management Document, Policies 5.2, 5.3, 5.7 and 5.9 of the London Plan 2011 and the NPPF.

EAM Rating

31. Evidence and relevant certification confirming that the development hereby approved achieves the Civil Engineering Environmental Quality Assessment and Awards Scheme (CEEQUAL) (or relevant equivalent if this is replaced or superseded) rating of no less than “Excellent” (or relevant equivalent if this is replaced or superseded) shall be submitted to and approved in writing by the LPA no later than 3 months following completion of the development, unless otherwise agreed in writing by the LPA.

Reason: In the interests of addressing climate change and to secure sustainable development in accordance with the Strategic objectives of the Council and Policies 3.5, 5.2, 5.3, 5.7, 5.9, 5.12, 5.13, 5.15, 5.16, 5.18, 5.20 and 6.9 of the London Plan 2011 as well as the NPPF

Construction Traffic Management Plan & Construction Travel Traffic Plan

32. All aspects of the Construction Traffic Management Plan Appendix 16.2 and Construction Travel Plan Appendix 16.1 set out in the Environmental Statement shall be adhered to and implemented during the course of the Upgrade as well as regularly monitored and reviewed and amended if necessary.

Reason: In order to mitigate against any adverse impacts of the Upgrade on the surrounding highway network.

Rain Water Harvesting/ Permeable parking/ Attenuation tanks

33. Details regarding rainwater harvesting, permeable car parking and attenuation tanks as set out in the Flood Risk Assessment shall be submitted to and approved in writing by the Local Planning Authority and thereafter implemented and retained.

Reason: To ensure compliance with London Plan Policy 5.13, Core Policy CP28 and DMD 61.

34. **Odour Management Plan**

The Odour Management Plan (Version 7, June 2014) submitted as Appendix 15.2 of the Environmental Statement shall be implemented in full during the construction of the development hereby approved, unless otherwise agreed in writing by the LPA. Prior to the commencement of construction of Phase 5 of the development the Updated Odour Management Plan shall be submitted to and approved in writing by the LPA, and thereafter implemented on completion of the development, unless otherwise agreed in writing by the LPA. The Updated Odour Management Plan shall include measures to ensure the regular monitoring and review of odour emissions from the Odour Control Units, in consultation with LB Enfield Environmental Health Officers, to secure the predicted reduction in odour emissions from the completed development.

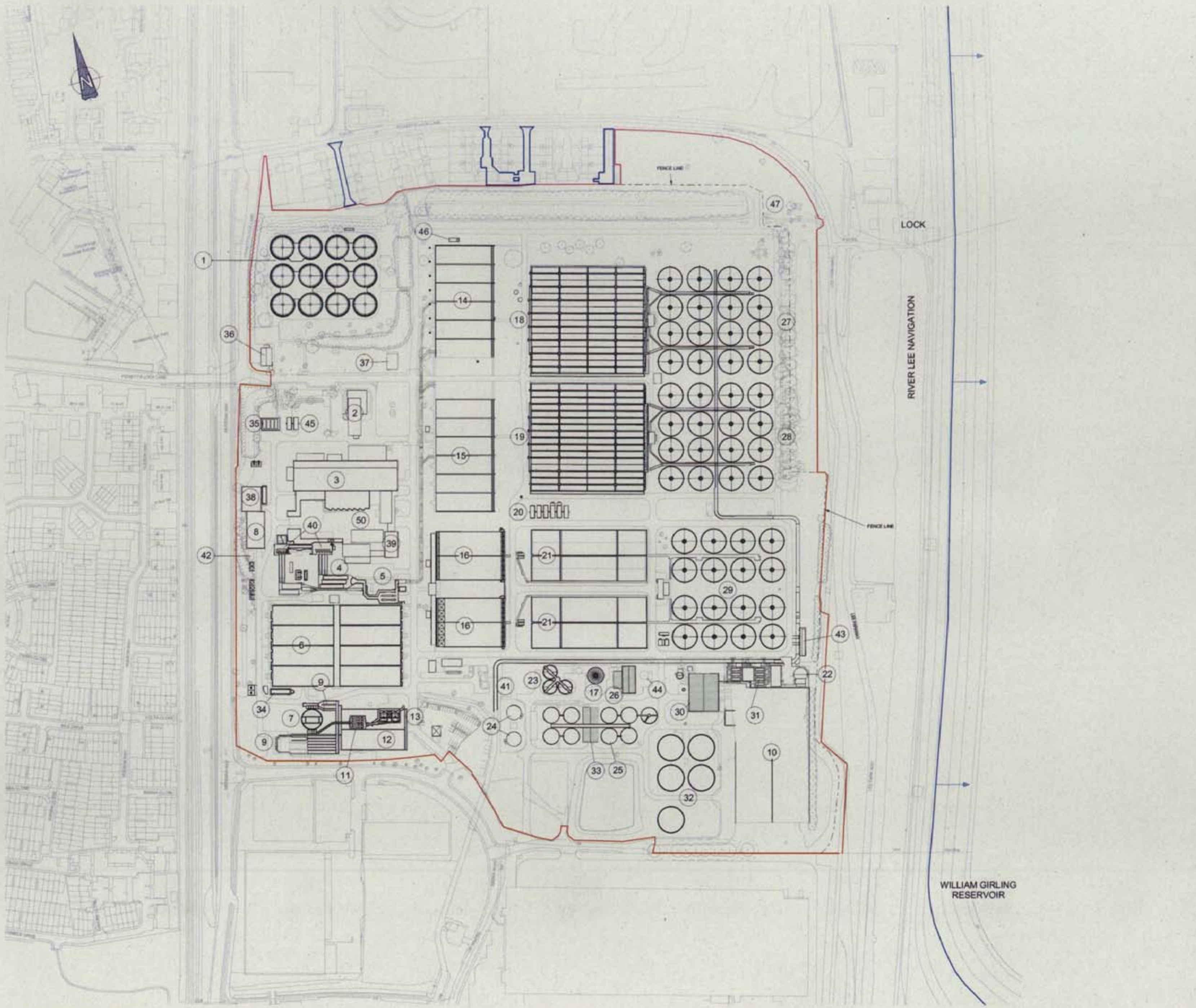
Reason: To ensure that the proposed Upgrade minimises and reduces odour having regard to Policy 7.14 of the London Plan ,Core Strategy Policy CP32 and Development Management Document Policies DMD64 and 65.

35. **Timing of Odour Mitigation Works**

The odour mitigation measures for (a) the existing inlet works (b) the new Stream A and B Primary Settlement tanks (c) the anoxic zones of the new Stream A and Stream B aeration lanes and (d) the existing secondary digesters shall be implemented in accordance with the phasing set out in Table 3.2 of the submitted Planning Statement (June 2014) unless agreed otherwise agreed in writing by the LPA. Written notification of the completion of each of the odour mitigation measures (a) to (d) shall be provided to the LPA within 7 days of its completion.

Reason: To ensure that the odour mitigation works proposed are carried out in a timely manner so as to reduce odour having regard to Policy 7.14 of the London Plan, Core Strategy Policy CP32 and Development Management Document DMD 64 and 65.

36. C51- Time Limit



1 | EXISTING SITE LAYOUT

SCALE 1:1250

AMK

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT AECOM DRAWINGS.
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KEY TO PROJECT STRUCTURES:

1. ABANDONED PRIMARY DIGESTER TANKS
2. ADMIN / TRAINING BUILDING
3. POWER HOUSE PUMPING STATION
4. GRIT CHANNELS
5. SECONDARY SCREEN
6. STORM TANKS
7. TOTTENHAM LOW LEVEL PUMPING STATION
8. HIGH LEVEL PUMPING STATION
9. STORM SCREENS
10. SLUDGE CAKE STORAGE SLAB
11. FINE SCREENS
12. STORM TANKS
13. DETRITORS
14. STREAM A PRIMARY SETTLEMENT TANKS
15. STREAM B PRIMARY SETTLEMENT TANKS
16. STREAM C PRIMARY SETTLEMENT TANKS
17. BLENDED SLUDGE TANK
18. STREAM A ACTIVATED SLUDGE PLANT
19. STREAM B ACTIVATED SLUDGE PLANT
20. DOSING TANKS
21. STREAM C ACTIVATED SLUDGE PLANT
22. DISC FILTER PUMPING STATION
23. SLUDGE BUFFER TANKS
24. GAS HOLDER
25. PRIMARY DIGESTERS
26. AQUABELT BUILDING
27. STREAM A FINAL SETTLEMENT TANKS
28. STREAM B FINAL SETTLEMENT TANKS
29. STREAM C FINAL SETTLEMENT TANKS
30. KLAMPRESS BUILDING
31. TERTIARY TREATMENT PLANT
32. SECONDARY DIGESTERS
33. DIGESTER BUILDING
34. TOTTENHAM LOW LEVEL MCC KIOSK
35. DIESEL STORAGE TANKS
36. FORMER ADMIN / TRAINING BUILDING
37. PUMPING STATION DISUSED
38. RBS BUILDING
39. WELFARE BLOCK
40. INLET SCREENS
41. ODOUR CONTROL UNIT
42. UK POWER SWITCHBOARD BUILDING
43. TTP MCC KIOSK
44. GAS BUFFER TANK
45. GENERATOR UNITS
46. WASTE GAS BURNER
47. DITCH AND BUND
48. TEMPORARY SITE CABINS

KEY TO LINETYPES:

PLANNING APPLICATION AREA

OTHER LAND IN OWNERSHIP OF THE APPLICANT

PLANNING APPLICATION DRAWING
NUMBER A630-AMK-103

SCALE 1:1250

DRAWINGS CAN BE SCALED FOR PLANNING PURPOSES

C	ISSUED FOR PLANNING APPLICATION			
B	PLANNING APPLICATION			
A	ISSUED FOR INFORMATION			

Thames Water

Thames Water Utilities
ENGINEERING

			RWARD
		A0	1 : 1250

LOCATION

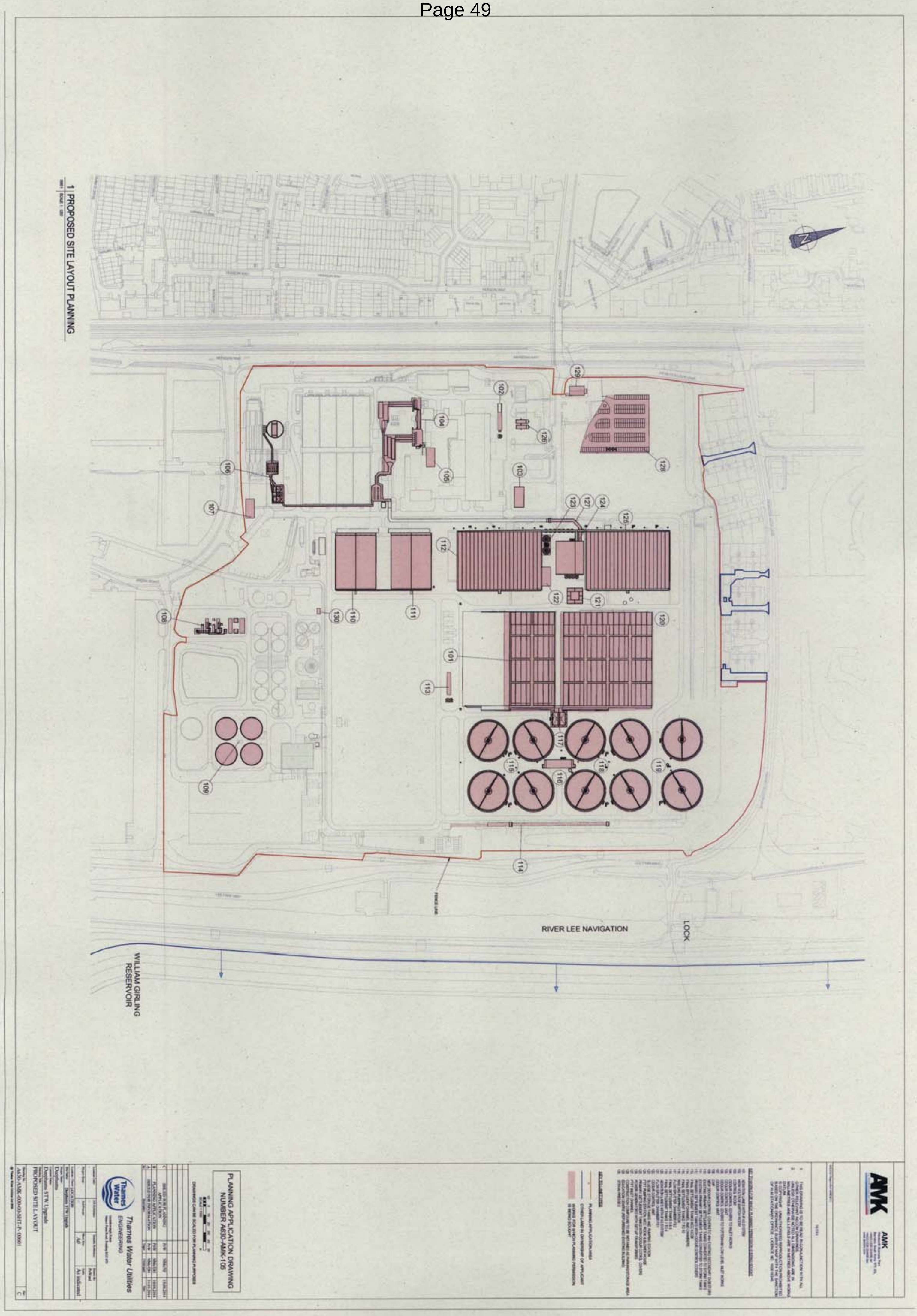
Deephams STW Upgrade

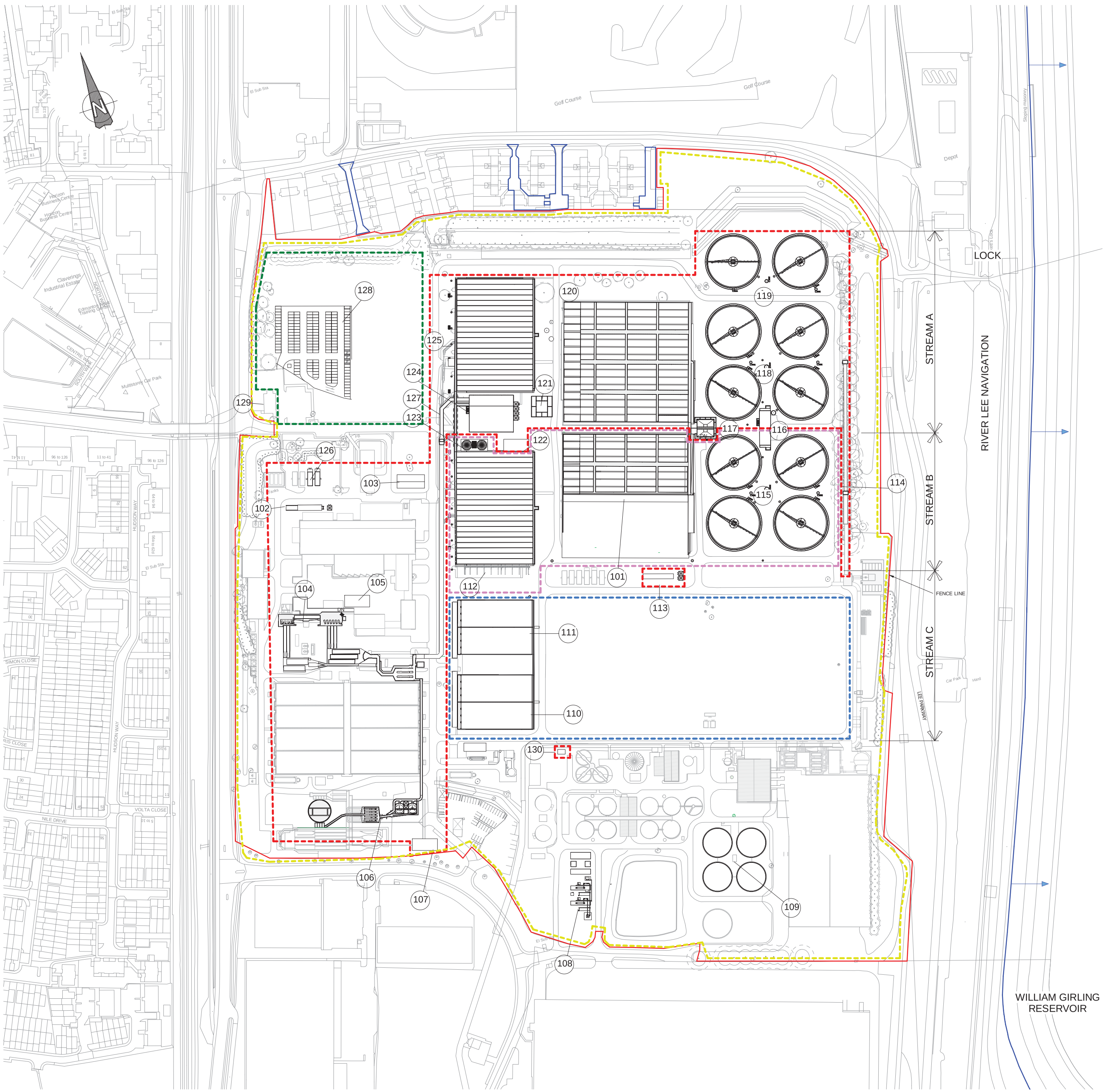
Deephams

Deephams STW Upgrade

EXISTING SITE LAYOUT

A630-AMK-000-00-SHT-P- 00600 | C


1 PROPOSED SITE LAYOUT PLANNING
RIVER LEE NAVIGATION
LOCK
WILLIAM GIRLING RESERVOIR
PLANNING APPLICATION DRAWING NUMBER A630-AMK-105
Thames Water Utilities
AMK



1 | PROPOSED SITE LAYOUT KEY PLAN

00602 | SCALE: 1 : 1250

AMK
Wentworth Business Park
Barnsley, South Yorks S75 3DL
+44(0)1226 224466 tel
+44(0)1226 224488 fax
www.aecom.com

AECOM Project Ref: 000P4321

NOTES

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3.

KEY TO WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

101. AERATION LANES WITH IFAS SYSTEM
102. HIGH VOLTAGE SWITCH ROOM
103. CONTROL ROOM
104. ODOUR CONTROL COVERS TO INLET WORKS
105. ODOUR CONTROL UNIT
106. ODOUR CONTROL COVERS TO TOTTENHAM LOW LEVEL INLET WORKS
107. ODOUR CONTROL UNIT
108. CHP
109. NEW ODOUR CONTROL COVERS TO 4No EXISTING SECONDARY DIGESTORS
110. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
111. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
112. PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
113. FINAL SETTLEMENT TANKS MCC KIOSK
114. FINAL EFFLUENT CHANNEL AND CHAMBERS
115. FINAL SETTLEMENT TANKS 7 TO 10
116. RAS SAS PUMPING STATION
117. FLOW SPLITTER CHAMBER FS2
118. FINAL SETTLEMENT TANKS 5 & 6
119. FINAL SETTLEMENT TANKS 1 TO 4
120. AERATION LANES WITH IFAS SYSTEM
121. FLOW SPLITTER CHAMBER FS1
122. ODOUR CONTROL UNIT
123. SLUDGE STORAGE TANKS AND PUMPING STATION
124. FTFT PUMPING STATION, MCC ROOM & BLOWER HOUSE
125. PRIMARY SETTLEMENT TANKS WITH ODOUR COTROL COVERS
126. POWER GENERATORS WITH SET UP TRANSFORMES
127. FTFT INLET CHANNEL
128. CONSTRUCTION COMPOUND TO BE RETAINED AS PARKING/STORAGE AREA
129. EDUCATION CENTRE (REFURBISHED EXISTING BUILDING)
130. STRAIN PRESSES

KEY TO LINETYPES

- PLANNING APPLICATION AREA
- OTHER LAND IN OWNERSHIP OF APPLICANT
- WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

PHASE 1
SITE SET UP AND ENABLING WORKS

PHASE 2
STREAM A
SWITCH OFF STREAM AND CLEAN TANKS
DEMOLISH TANKS AND PLANT
BUILD NEW TANKS AND PLANT
COMMISSION AND SWITCH ON STREAM

PHASE 3
STREAM B
SWITCH OFF STREAM AND CLEAN TANKS
DEMOLISH TANKS AND PLANT
BUILD NEW TANKS AND PLANT
COMMISSION AND SWITCH ON STREAM

PHASE 4
STREAM C
SWITCH OFF STREAM AND CLEAN TANKS
DEMOLISH TANKS AND PLANT
CONVERT NEW STORM TANKS

PHASE 5
FINAL COMMISIONING AND LANDSCAPING

PLANNING APPLICATION DRAWING NUMBER A630-AMK-110

10 0 10 20 30 40 50 m
SCALE 1:1250

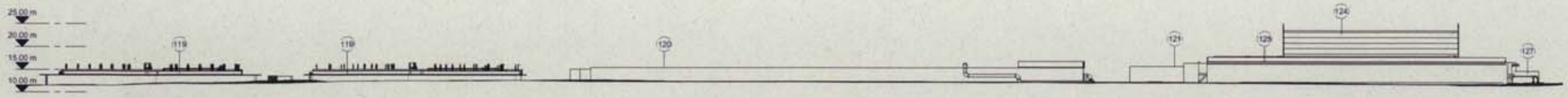
DRAWINGS CAN BE SCALED FOR PLANNING PURPOSES

Iss	Description	Dsgnr	Chkd/Appd	Date
C	ISSUED FOR PLANNING APPLICATION	PsW	NMc/NJ	18.06.2014
B	PLANNING APPLICATION	PSW	NMc/DH	10.04.2014
A	ISSUED FOR INFORMATION	PsW	NMc/DH	31.01.2014

Thames Water Utilities
ENGINEERING
Gainsborough House
Manor Farm Road, Reading RG2 0JN

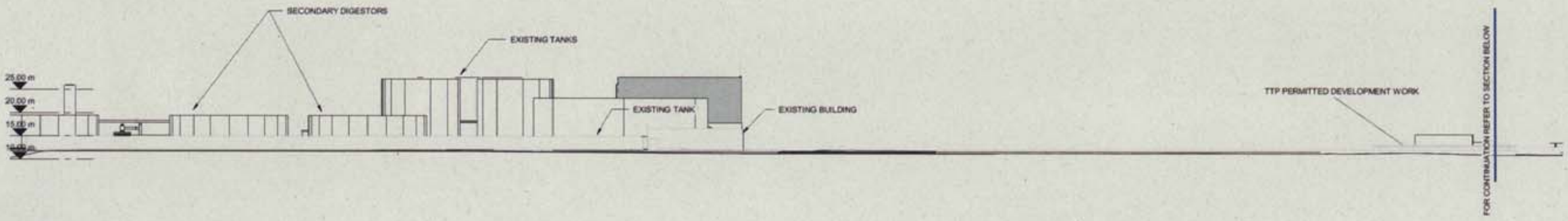
Location Code:	OS Reference:	Security Reference:	Drawn By:
-	-		PsW
Project Group: -	**Sub Process:** -	**Sheet Size:** A0	**Scale:** As indicated

Location / Town: LOCATION
Site Name: Deephams STW Upgrade
Project Name: Deephams
Contract Name: Deephams STW Upgrade
Drawing Title: PROPOSED SITE LAYOUT - KEY PLAN
Drawing No.: A630-AMK-000-00-SHT-P- 00602
Rev: C



1 | SOUTH WEST ELEVATION

00651 | SCALE 1:500



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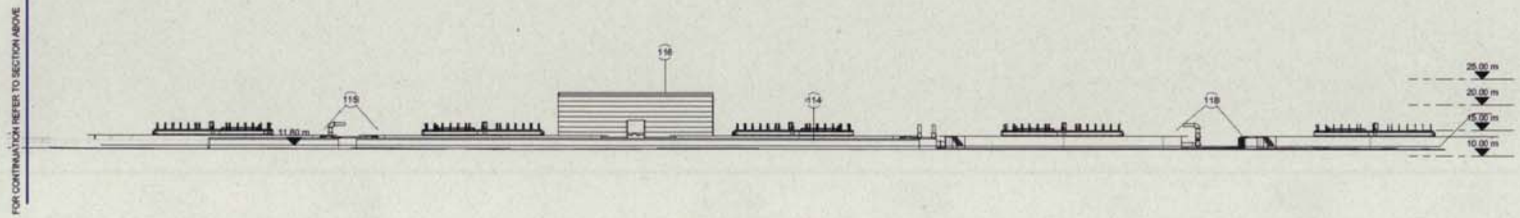
00651 | SCALE 1:500



3 | CONT. SOUTH EAST ELEVATION

00651 | SCALE 1:500

AMK

AECOM Project Ref: 60XP4221

NOTES

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KEY TO WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

101. AERATION LANES WITH IFAS SYSTEM
102. HIGH VOLTAGE SWITCH ROOM
103. CONTROL ROOM
104. ODOUR CONTROL COVERS TO INLET WORKS
105. ODOUR CONTROL UNIT
106. ODOUR CONTROL COVERS TO TOTTENHAM LOW LEVEL INLET WORKS
107. ODOUR CONTROL UNIT
108. CHP
109. NEW ODOUR CONTROL COVERS TO 4No EXISTING SECONDARY DIGESTORS
110. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
111. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
112. PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
113. FINAL SETTLEMENT TANKS MCC KIOSK
114. FINAL EFFLUENT CHANNEL AND CHAMBERS
115. FINAL SETTLEMENT TANKS 7 TO 10
116. RAS SAS PUMPING STATION
117. FLOW SPLITTER CHAMBER FS2
118. FINAL SETTLEMENT TANKS 5 & 6
119. FINAL SETTLEMENT TANKS 1 TO 4
120. AERATION LANES WITH IFAS SYSTEM
121. FLOW SPLITTER CHAMBER FS1
122. ODOUR CONTROL UNIT
123. SLUDGE STORAGE TANKS AND PUMPING STATION
124. FTFT PUMPING STATION, MCC ROOM & BLOWER HOUSE
125. PRIMARY SETTLEMENT TANKS WITH ODOUR COTROL COVERS
126. POWER GENERATORS WITH SET UP TRANSFORMES
127. FTFT INLET CHANNEL
128. CONSTRUCTION COMPOUND TO BE RETAINED AS PARKING/STORAGE AREA
129. EDUCATION CENTRE (REFURBISHED EXISTING BUILDING)
130. STRAIN PRESSES

PLANNING APPLICATION DRAWING NUMBER A630-AMK-107

SCALE 1:500

DRAWING CAN BE SCALED FOR PLANNING PURPOSES

Rev	Description	Dsgn	Chkd/Appd	Date
C	ISSUED FOR PLANNING APPLICATION	PsW	NMc/NJ	18.06.2014
B	PLANNING APPLICATION	PSW	NMc/DH	10.04.2014
A	ISSUED FOR INFORMATION	JH	MC/NMc	12.03.2014

Thames Water Utilities
ENGINEERING

Location Code: -	OI Reference: -	Security Reference:	Drawn By: PsWARD
Project Group: -	Sub Process: -	Sheet Size: A1	Scale: As indicated

Location / Town: LOCATION

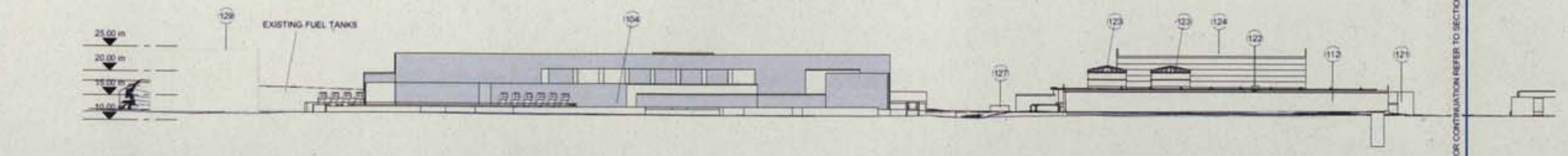
Site Name: Deephams STW Upgrade

Project Name: Deephams

Contract Name: Deephams STW Upgrade

Drawing Title: SITE ELEVATIONS - PLANNING SHEET 1 OF 2

Drawing No: A630-AMK-000-00-SHT-P-00651 | Rev: C



1 | NORTH EAST ELEVATION
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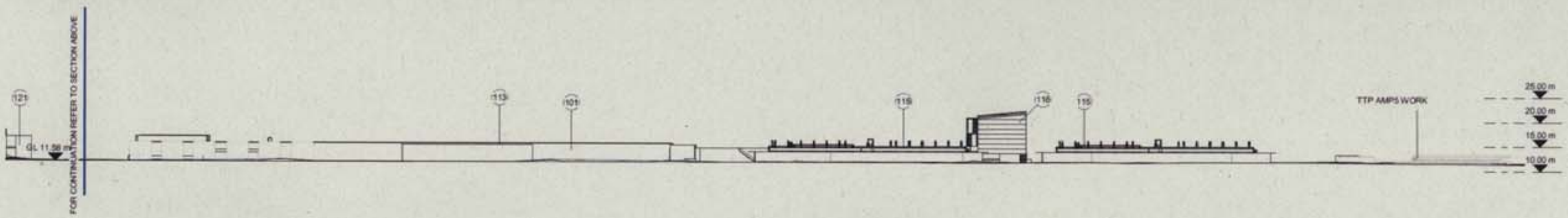

1 | CONT. NORTH EAST ELEVATION
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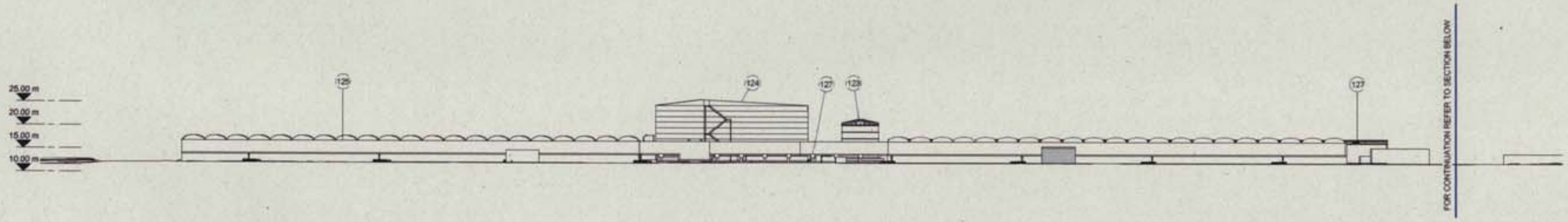

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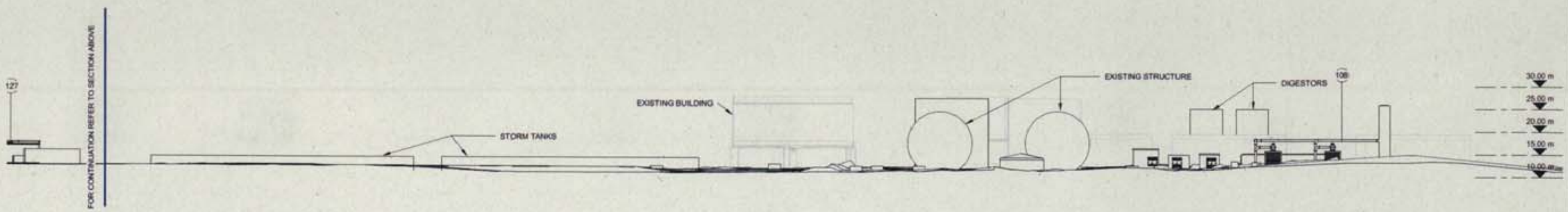

2 | CONT. NORTH WEST ELEVATION
00652 | SCALE 1:500

AMK

113

NOTES

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3.

KEY TO WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

101. AERATION LANES WITH IFAS SYSTEM
102. HIGH VOLTAGE SWITCH ROOM
103. CONTROL ROOM
104. ODOUR CONTROL COVERS TO INLET WORKS
105. ODOUR CONTROL UNIT
106. ODOUR CONTROL COVERS TO TOTTENHAM LOW LEVEL INLET WORKS
107. ODOUR CONTROL UNIT
108. CHP
109. NEW ODOUR CONTROL COVERS TO 4No EXISTING SECONDARY DIGESTORS
110. EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
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116. RAS SAS PUMPING STATION
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127. FTFT INLET CHANNEL
128. CONSTRUCTION COMPOUND TO BE RETAINED AS PARKING/STORAGE AREA
129. EDUCATION CENTRE (REFURBISHED EXISTING BUILDING)
130. STRAIN PRESSES

PLANNING APPLICATION DRAWING NUMBER A630-AMK-108

0 5 10 15 20 25
SCALE 1:500 m

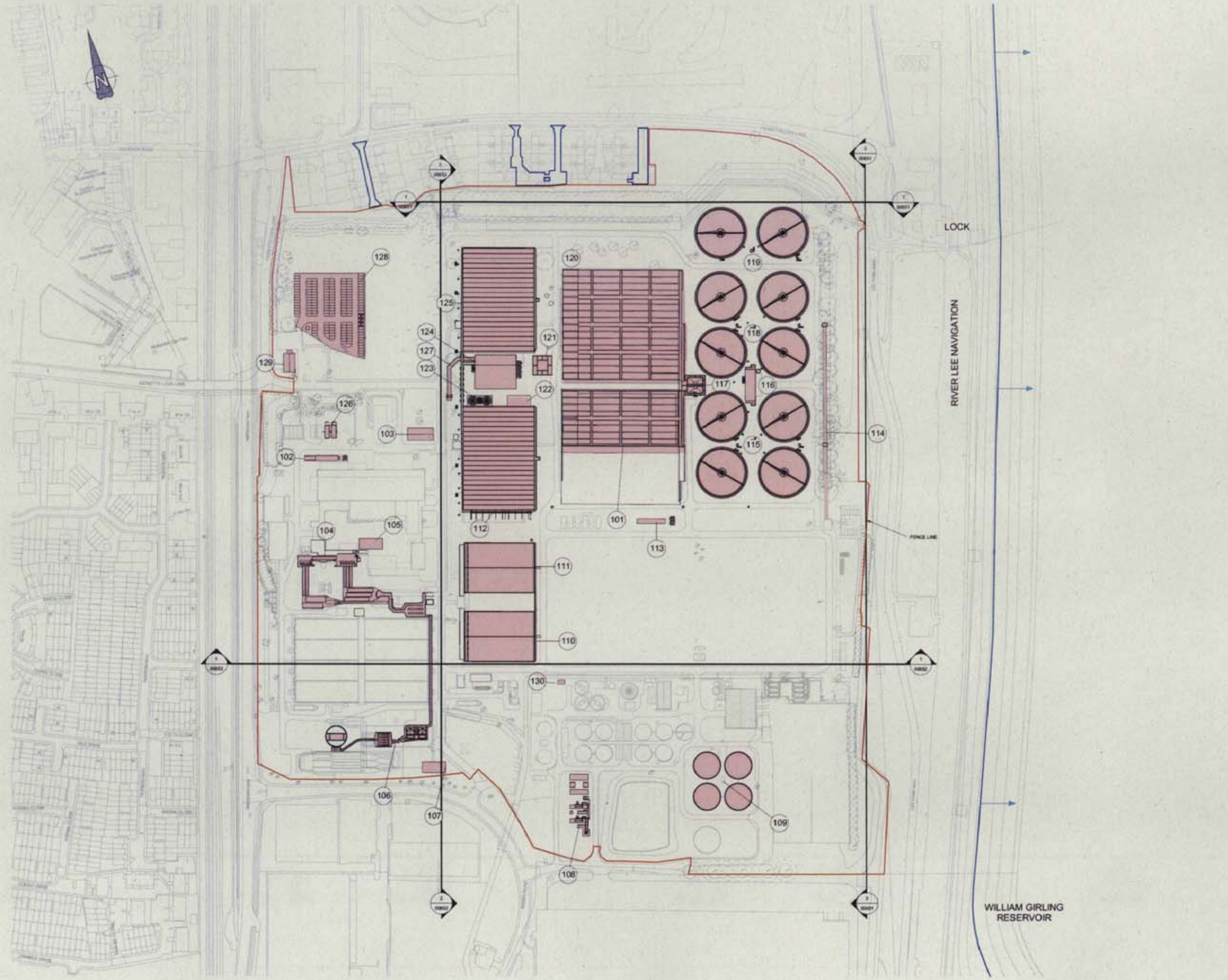
DRAWING CAN BE SCALED FOR PLANNING PURPOSES

Rev	Description	Dsgn	Chkd/Appd	Date
C	ISSUED FOR PLANNING APPLICATION	PsW	NMc/NJ	18.06.2014
B	PLANNING APPLICATION	PSW	NMc/DH	10.04.2014
A	ISSUED FOR INFORMATION	JH	MC/NMc	12.03.2014

Thames Water Utilities
ENGINEERING

Location Code: -	OS Reference: -	Security Reference:	Drawn By: PsWard
Project Group: -	Sub Process: -	Sheet Size: A1	Scale: As indicated

Location / Town: LOCATION
Site Name: Deephams STW Upgrade
Project Name: Deephams
Contract Name: Deephams STW Upgrade
Drawing Title: SITE ELEVATIONS - PLANNING SHEET 2 OF 2
Drawing No.: A630-AMK-000-00-SHT-P-00652 Rev: C



AMK

NOTES

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KEY TO WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

101 AERATION LANES WITH IFAS SYSTEM
102 HIGH VOLTAGE SWITCH ROOM
103 CONTROL ROOM
104 ODOUR CONTROL COVERS TO INLET WORKS
105 ODOUR CONTROL UNIT
106 ODOUR CONTROL COVERS TO TOTTENHAM LOW LEVEL INLET WORKS
107 ODOUR CONTROL UNIT
108 CHP
109 NEW ODOUR CONTROL COVERS TO 4No EXISTING SECONDARY DIGESTORS
110 EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
111 EXISTING PRIMARY SETTLEMENT TANKS CONVERTED TO STORM TANKS
112 PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
113 FINAL SETTLEMENT TANKS MCC KIOSK
114 FINAL EFFLUENT CHANNEL AND CHAMBERS
115 FINAL SETTLEMENT TANKS 7 TO 10
116 RAS SAS PUMPING STATION
117 FLOW SPLITTER CHAMBER FS2
118 FINAL SETTLEMENT TANKS 5 & 6
119 FINAL SETTLEMENT TANKS 1 TO 4
120 AERATION LANES WITH IFAS SYSTEM
121 FLOW SPLITTER CHAMBER FS1
122 ODOUR CONTROL UNIT
123 SLUDGE STORAGE TANKS AND PUMPING STATION
124 PTFT PUMPING STATION, MCC ROOM & BLOWER HOUSE
125 PRIMARY SETTLEMENT TANKS WITH ODOUR CONTROL COVERS
126 POWER GENERATORS WITH SET UP TRANSFORMERS
127 PTFT INLET CHANNEL
128 CONSTRUCTION COMPOUND TO BE RETAINED AS PARKING/STORAGE AREA
129 EDUCATION CENTRE (REFURBISHED EXISTING BUILDING)
130 STRAIN PRESSES

KEY TO LINETYPES

PLANNING APPLICATION AREA
OTHER LAND IN OWNERSHIP OF APPLICANT
WORKS FOR WHICH PLANNING PERMISSION IS BEING SOUGHT

PLANNING APPLICATION DRAWING NUMBER A630-AMK-106

DRAWINGS CAN BE SCALED FOR PLANNING PURPOSES

Rev	Revision	By	Chk'd	Date
C	ISSUED FOR PLANNING APPLICATION	PvW	[illegible]	[illegible]
B	PLANNING APPLICATION	PvW	[illegible]	[illegible]
A	ISSUED FOR INFORMATION	PvW	[illegible]	[illegible]

Thames Water Utilities
ENGINEERING

Drawn by: PvW
Sheet Size: A0
Scale: As indicated
Location: LOCATION
Site Name: Deephams STW Upgrade
Project Name: Deephams
Contract Name: Deephams STW Upgrade
Drawing Title: PROPOSED SITE LAYOUT - ELEVATION LOCATIONS
Drawing No: A630-AMK-000-00-SHT-P-00653
Rev: C

Table 3.2: Buildings plant and other development proposed in the Upgrade

Proposed Building, structure or process item (number refers to item on Site Layout Plan A630-AMK-105 Rev C)			Construction Phase	Dimensions (metres) All dimensions listed are external			Colours and Materials	See Planning Application Drawing Numbers for details
				Length	Width	Height		
101	Aeration Lanes with IFAS System (STREAM B)		3	106.7m	51.4m	3.2m to top of wall 4.3m incl handrail 4.6m incl odour control covers	Fair Finish Concrete Structure Handrail: Galvanised steel	A630-AMK-157 A630-AMK-158 A630-AMK-159 A630-AMK-160 A630-AMK-161
102	High Voltage Switch Room		2	20.4m	4.4m	Approx. 3.85m	Walls: Brick Built Doors: Level 3 security external double doors (outwards opening), colour signal blue. Access: One end accessible via stairs and opposite end via access slope.	A630-AMK-130
103	Control Room		2	23.5m	11.6m	4.35m	Walls: GRP cladded wall panels. Roof: GRP with roof lights Handrail: Galvanised steel Doors: UPVC Windows: UPVC	A630-AMK-131
104 & 106	Odour Control Covers	Inlet Works Tottenham Low Level Inlet Works	2	Various to fit existing channels	Various to fit existing channels	0.3m above existing walls	Steel – Grey Moonstone	A630-AMK-112
105	Inlet Works Odour Control Unit (OCU)		2	21.5m	10m	12.75m maximum height 10m stack height	External Tank Surfaces and Pipework: Colour – Grey (Moonstone) RAL 7035	A630-AMK-116

Proposed Building, structure or process item (number refers to item on Site Layout Plan A630-AMK-105 Rev C)			Construction Phase	Dimensions (metres) All dimensions listed are external			Colours and Materials	See Planning Application Drawing Numbers for details
				Length	Width	Height		
107	Tottenham Low Level Odour Control Unit (OCU)		2	21.5m	10m	12.75m maximum height 5m stack height	External Tank Surfaces and Pipework: Colour – Grey (Moonstone) RAL 7035	A630-AMK-116
108	CHP	HV Kiosk	5	17m	5.5m	4.5m	HV & LV Kiosk: External Building Materials, Walls & Roof: Coated steel sheet. Colour – Grey (Moonstone) RAL 7035 Exterior Doors: Painted Steel Colour – Grey (Moonstone) RAL 7035. Facia, Gutters and Louvres to match walls and roof.	A630-AMK-175
		LV Kiosk	2	17m	4.3m	3.5m		
		CHP Units (x2)	2	17m	3.5m	4.1m	2 x CHP Units attached to exhaust stack by pipes from heat exchangers and through coolers.	A630-AMK-175
		Exhaust Stack	2	N/A	6.2m Ø	14.9m	Colour – Grey (Moonstone) RAL 7035	A630-AMK-175
109	New Odour Control Covers to 4 No Existing Secondary Digesters		5	N/A	6.3m Ø	1.10m	Steel – Grey Moonstone	A630-AMK-178
110 & 111	PSTs converted to storm tanks (STREAM C)		4	64.8m	47.1m	0.7m to top of wall 1.8m incl handrail [GL varies]	Fair Finish Concrete Structure Handrail: Galvanised steel	A630-AMK-170 A630-AMK-171

Proposed Building, structure or process item (number refers to item on Site Layout Plan A630-AMK-105 Rev C)		Construction Phase	Dimensions (metres) All dimensions listed are external			Colours and Materials	See Planning Application Drawing Numbers for details
			Length	Width	Height		
112	Primary Settlement Tanks (PSTs) with Odour Control Covers (STREAM B)	3	96.4m	68.0m	4.55m to top of wall 5.65m incl handrail 5.65m inc odour control covers	Fair Finish Concrete Structure Handrail: Galvanised steel Grey Glass reinforced Plastic (GRP) covers to contain odour.	A630-AMK-153 A630-AMK-154 A630-AMK-155 A630-AMK-156
113	FST MCC Kiosk	2	26.0m	4.3m	3.4m	External Building Materials Walls and Roof: Coated steel sheet. Colour – Grey (Moonstone) RAL 7035. Exterior Doors: Painted Steel Colour – Grey (Moonstone) RAL 7035. Facia, gutters & Louvres to match walls and roof.	A630-AMK-150
114	Final Effluent Channel	2	183.5m	2.1m	2.0m – 2.8m (variable height)	Fair Finish Concrete Structure Concrete Segments Handrail: Galvanised steel (AMK)	A630-AMK-148
	Connection Chambers (x2)	2	4.7m	3.3m	2.7m incl handrail	Fair finish concrete to vertical surfaces. Trowelled finish concrete to horizontal surfaces. Handrails & Staircases: Galvanised Steel	A630-AMK-148
115	Final Settlement Tanks (FSTs) 7 – 10 (STREAM B)	3	N/A	47.8m Ø	2m to top of wall 3.1m incl handrail 4.56m max height	Fair Finish Concrete Structure Handrail: Galvanised steel	A630-AMK-162 A630-AMK-163

Proposed Building, structure or process item (number refers to item on Site Layout Plan A630-AMK-105 Rev C)		Construction Phase	Dimensions (metres) All dimensions listed are external			Colours and Materials	See Planning Application Drawing Numbers for details
			Length	Width	Height		
116	RAS / SAS Pumping Station	2 and 3	38.1m	12.12m	10.1m roof height 11.2m incl handrail [GL varies]	Walls: coated steel profiled sheet, grey (moonstone) Roof: Brown/Green system including a grass and plants surfacing. Doors & Roller Shutters: signal blue painted steel. Fascia Gutters & Louvres: to match walls and roof	A630-AMK-144 A630-AMK-145 A630-AMK-165 A630-AMK-166
117	Flow Splitter Chamber FS2	2	18.4m	18.8m	2.8m top of wall 3.9m incl handrail	Fair Finish Concrete Structure Handrail and stairs: Galvanised steel	A630-AMK-141 A630-AMK-142 A630-AMK-143
118	Final Settlement Tanks (FSTs) 5 & 6 (STREAM A)	2	N/A	47.8m Ø	2m to top of wall 3.1m incl handrail 4.56m max height	Fair Finish Concrete Structure Handrail and stairs: Galvanised steel	A630-AMK-126 A630-AMK-129
119	Final Settlement Tanks (FSTs) 1 – 4 (STREAM A)	2	N/A	47.8m Ø	2m to top of wall 3.1m incl handrail 4.56m max height	Fair Finish Concrete Structure Handrail and stairs: Galvanised steel	A630-AMK-125 A630-AMK-128
120	Aeration Lanes with IFAS System (STREAM A)	2	106.7m	102.65m	3.2m to top of wall 4.3m incl handrail 4.6m incl odour control covers	Fair Finish Concrete Structure Handrail: Galvanised steel	A630-AMK-121 A630-AMK-122 A630-AMK-123 A630-AMK-124
121	Flow Splitter Chamber FS1	2	18m	18m	4m to top of wall 5.1m incl handrail	Fair Finish Concrete Structure Handrail: Galvanised steel Floor: Steel Flooring Mesh	A630-AMK-140

Proposed Building, structure or process item (number refers to item on Site Layout Plan A630-AMK-105 Rev C)		Construction Phase	Dimensions (metres) All dimensions listed are external			Colours and Materials	See Planning Application Drawing Numbers for details
			Length	Width	Height		
122	Stream A and B Odour Control Unit (OCU)	2	21.5m	10m	12.75m maximum height 10m stack height	External Tank Surfaces and Pipework: Colour – Grey (Moonstone) RAL 7035	A630-AMK-116
123	PST Sludge Storage Tanks (x2) and pumping station	3	22.8m slab	10.0m slab 7.9m Ø tanks	8.8m max tank height	Storage Tanks: Glass Coated Steel External Pump Surfaces and Pipework: Colour – Grey (Moonstone) RAL 7035	A630-AMK-167
124	FTFT pumping station, Blower House & MCC Room	2	37.9m	31.8m	11.3m maximum height 12.4m incl handrail	Walls: Coated steel profiled sheet, grey (moonstone) Roof: Brown/Green system including a grass and plants surfacing. Doors & Roller Shutters: signal blue painted steel. Fascia Gutters & Louvres: to match walls and roof	A630-AMK-133 A630-AMK-134 A630-AMK-135 A630-AMK-136 A630-AMK-137 A630-AMK-138 A630-AMK-139
125	Primary Settlement Tanks (PSTs) with Odour Control Covers (STREAM A)	2	97.0m	67.7m	4.55m to top of wall 5.65m incl handrail 5.65m (with odour control covers)	Fair Finish Concrete Structure Handrail: Galvanised steel Grey Glass reinforced Plastic (GRP) covers to contain odour.	A630-AMK-117 A630-AMK-118 A630-AMK-119 A630-AMK-120
			Typical internal lane size 60m x 13m				
126	Power Generators with set up Transformers	2	11m	15m	3m	External Surfaces: Colour – Grey (Moonstone) RAL 7035	A630-AMK-105
127	PST Inlet channel	2	60m	2.8m	4.55m to top of wall 5.6m incl handrail	Fair Finish Concrete Structure	A630-AMK-132

Proposed Building, structure or process item (number refers to item on Site Layout Plan A630-AMK-105 Rev C)		Construction Phase	Dimensions (metres) All dimensions listed are external			Colours and Materials	See Planning Application Drawing Numbers for details
			Length	Width	Height		
	Flash mixing channel	2	12.7m	2.9m	6.2m max height, incl handrail	Handrail: Galvanised steel Grey Glass reinforced Plastic (GRP) covers to contain odour.	
129	Education Centre (Refurbished existing Building)	5	24.2m	10.6m	4.8m	Roofing: Existing Concrete Tiles Exterior Walls: Existing brick	A630-AMK-177
130	Strain presses	5	6.2m	2.5m	5.5m	External Surfaces: Colour – Grey (Moonstone) RAL 7035	A630-AMK-176

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Agenda Item 5

LONDON BOROUGH OF ENFIELD

PLANNING COMMITTEE	**Date :** 18th November 2014

Report of Assistant Director, Planning, Highways & Transportation	**Contact Officer:** Andy Higham 020 8379 3848 Sharon Davidson 020 8379 3841 Ms Claire Williams 02083794372	**Ward:** Ponders End

Ref: 14/02996/FUL & 14/02997/LBC	**Category**: Full Application

LOCATION: Middlesex University, Queensway, Enfield, EN3 4SA

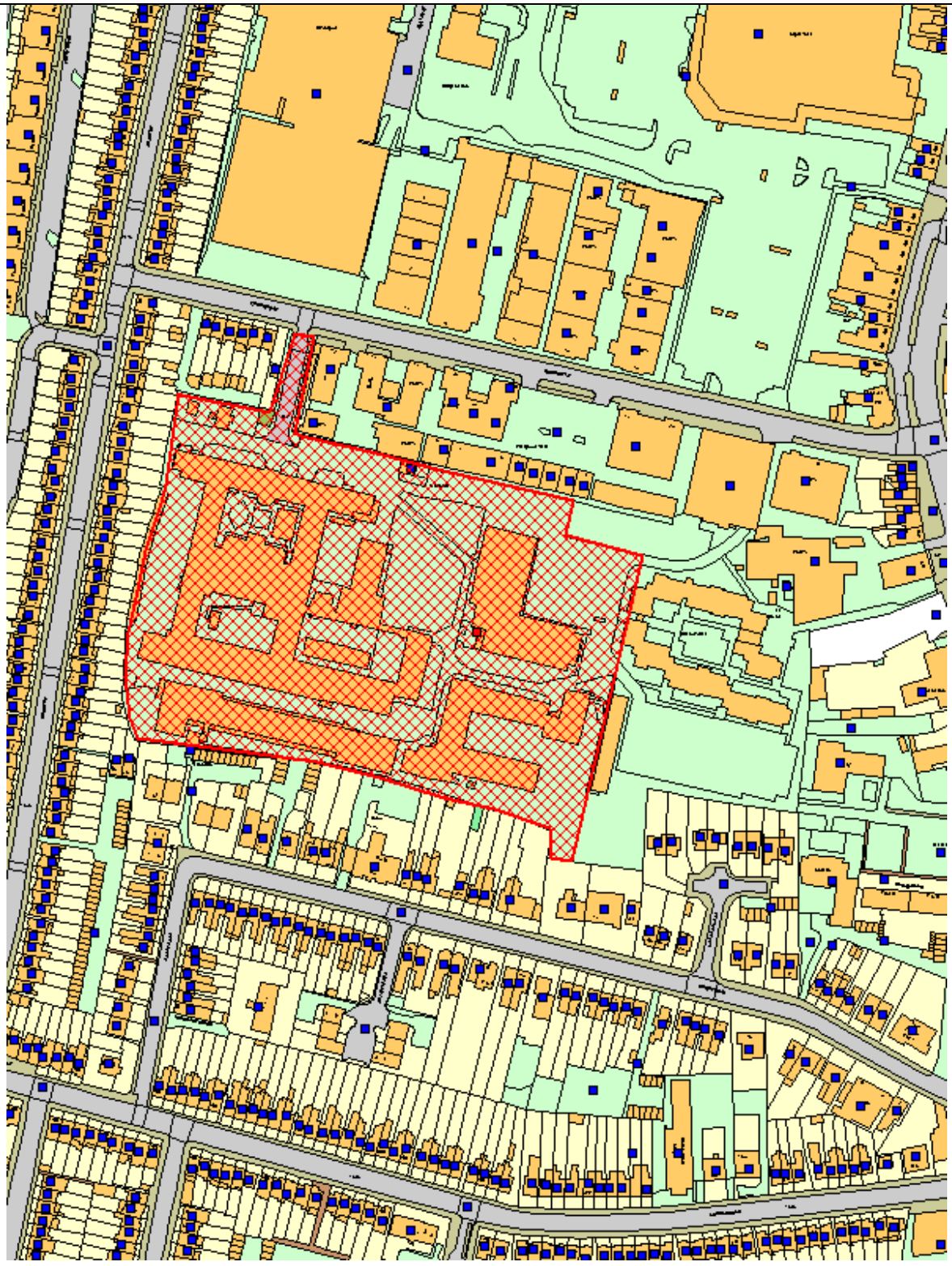
PROPOSAL: Conversion of existing building to an eight form entry secondary academy with a 480 pupil sixth form to provide a total capacity of 1680 students involving refurbishment of existing caretaker's house, Broadbent building and gymnasium, a 3-storey teaching block to the south of Broadbent building, erection of a sports hall with changing facilities to south of gymnasium together with demolition of rear workshops, courtyard infill and attached single storey buildings and demolition of McCrae, Roberts and Pascal buildings, construction of a multi-use games area (MUGA), hard court area, car park with 2 coach parking / drop off zone, additional vehicular access to Queensway and associated landscaping.

Applicant Name & Address: Mr Jason Wheelock Middlesex University Queensway Enfield EN3 4SA	**Agent Name & Address**: Miss Katie Robinson Middlesex University Queensway Enfield EN3 4SA

RECOMMENDATION:

That subject to the Environment Agency withdrawing their objection and pending the completion of a satisfactory Section 106 Agreement, the Head of Development Management / Planning Decisions Manager, planning permission shall be granted be **GRANTED** subject to conditions.

Ref: 14/02996/FUL **LOCATION: Middlesex University, Queensway, Enfield, EN3 4SA**



ENFIELD Council

Scale 1:1250

North

1. Site and Surroundings

1.1 The application site measures 2.8 hectares and is located on the former Middlesex University campus site on Queensway in Ponders End. Historically the site has been used for educational purposes originally accommodating the former Enfield Technical College, and later the Middlesex University who vacated the site in 2008 following the rationalisation and relocation of the university facilities to other sites around London. The site has remained vacant since this time.

1.2 To the north of the application site is the Queensway Industrial Estate which is designated as a Locally Significant Industrial Site. To the east, outside the application site, but still land in the applicant's ownership, is the remainder of the Middlesex University campus that includes the Ted Lewis building built in 1994. Further to the east is Ponders End High Street which comprises a mix of retail, community and associated facilities including a mosque, the former police station site, a library, nurseries, a plastics factory and retail units in the immediate vicinity. To the west and south of the application site are residential dwellings. The west comprises two storey terraced dwellings on Kingsway, and the south comprises a mix of detached and semi-detached dwellings and flats along Derby Road.

1.3 The former university campus benefits from two vehicle access points from Queensway, one adjacent to No.50 Queensway and the other through the multi-storey car park.

1.4 The application site comprises a number of buildings including the Broadbent building, Caretaker's House, a Gymnasium, workshops, multi storey car park and student accommodation buildings known as the Pascal Building, McCrae Building and the Roberts Building.

1.5 The Broadbent building, gymnasium and Caretaker's Cottage were constructed in 1938 – 1941 and were listed as Grade II buildings in 2000. The Broadbent is a three storey building with a six storey tower positioned centrally within the front of the building. It has been extended and altered and is located to the west of the site. Since listing and vacation of the site, the building has been systematically stripped of all original window furniture (bronze fittings) and several of the cast iron radiators. Terrazzo stair nosings have been damaged and there have been obvious attempts to lift the parquet flooring in places. The curved bench from the front entrance hall has been removed, but is still on site.

1.6 The gymnasium lies to the east of the Broadbent building and the Caretaker's Cottage is located within the north west corner of the site. The McCrae, Roberts and Pascal buildings were constructed at a later stage between the 1950's and 1970's.

1.7 The application site lies within Flood Zone 1 and the Ponders End Place Shaping Priority Area.

2. Proposal

2.1 The application seeks full planning permission and listed building consent for the conversion of the existing Broadbent building to an eight form entry

secondary academy with a 480 pupil sixth form to provide a total capacity of 1680 students involving refurbishment of the existing caretaker's house, Broadbent building and gymnasium, the erection of a new three storey teaching block to the south of the Broadbent building, erection of a sports hall with changing facilities to the south of the gymnasium together with demolition of the rear workshops, courtyard infill and attached single storey buildings and demolition of McCrae, Roberts and Pascal buildings, construction of a multi-use games area (MUGA), hard court area, car park with two coach parking / drop off zones, additional vehicular access to Queensway and associated landscaping.

2.2 The Pascal Building, McCrae Building, Roberts Building, single storey extensions within the northern courtyard to the Broadbent building, the single storey workshop to the rear of the Broadbent building and the Student Union Forum would be demolished to accommodate the proposal.

2.3 The three storey rear extension to the Broadbent Building would measure approximately 55 metres in width, 12.6 metres in height and 19 metres in depth. The proposed extension would be approximately 1.6 metres wider than the side elevations of the existing central element of the building. The extension would result in the Broadbent building measuring an overall depth of approximately 97 metres.

2.4 The extension would comprise aluminium windows and a brick external finish. The extension would comprise a flat roof with a parapet to enclose the external plant. A 250 square metre PV array at a 30 degree pitch would be sited on the new roof. The overall height of the extension would be set approximately 1.2 metres higher than the roof level of the existing Broadbent building.

2.5 In terms of refurbishment works to the Broadbent building, the existing steel framed single glazed windows along the north, east and west elevations of the Broadbent building would be replaced with double glazed thermal broken aluminium framed windows. The ground floor windows on the eastern elevation, the front windows within the tower, the three storeys of curved glazing facing the courtyard and the second floor glazing to the rear northern elevation which serves a corridor would be retained and repaired.

2.6 Various internal alteration works are proposed to facilitate re-use of the building, including installation of new services. Non-original partitions would be removed to allow reinstatement of the building’s original plan arrangement of flexible teaching accommodation, and all toilets would be reinstated to their original locations to the east and west ends of the front wing at ground floor level and adjacent to the north-west and north-east stairs at the upper levels. The former assembly hall would also be reinstated to be used as a main function space for communal school activities and events and would involve removal of the existing unsympathetic modern mezzanine, lift and stairs. The auditorium space is significant for its role in the Broadbent’s history as a communal focus for the college.

2.7 The retention and refurbishment of existing key internal elements that contribute to the significance of the listed building would also be undertaken and include the open space and decorative features of the main entrance hall at ground floor (including parquet flooring, terrazzo stairs and tiled columns) and the four main staircases at either end of the teaching ranges.

2.8 An original link between the existing Broadbent building and gymnasium would be reinstated. The glazed link would measure approximately 13 metres in width, 3 metres in depth and 5 metres in height.

2.9 The new sports hall with a flat roof and a brick external finish would be sited to the south of the existing gymnasium abutting the proposed link. The building would measure 42 metres in depth, 19 metres in width and 9 metres in height.

2.10 The windows of the gymnasium would be retained and refurbished.

2.11 To the south of the Broadbent building an external dining terrace with a depth of 7 metres and a width of 42 metres is proposed. A hard court multi use games area (MUGA) would be sited adjacent to the new sports hall. The southern courtyard within the Broadbent building would be reinstated and smaller courtyards across the site would be introduced. A large informal soft play space would be sited to the east of the site and habitat areas to the south.

2.12 A one way system would be introduced with vehicles entering the site from the north eastern access (through the multi storey car park) and exiting the site from the north western access. The multi storey car park is currently within the ownership of the applicant, however the multi storey car park and the remaining area of land to the east of application site is to be acquired by the Council to form the new Electric Quarter development. As part of the Heads of Terms for the acquisition of land, the Council will demolish the multi storey car park and this is due to take place in 2016. Both accesses will be used during the construction phase, however initially the school would only be served by the north eastern access.

2.13 A total of 120 parking spaces would be sited along the north and west boundaries of the site. Covered cycle storage areas would provide a total of 64 cycle spaces (48 spaces for students and 16 spaces for members of staff) with the ability to expand in the future. Drop off bays for six cars/ two coaches would be sited in close proximity to the north western access. A service area is proposed to the south west of the site.

2.14 A total of 111 staff would be employed with 108 full time members of staff and 35 part time members of staff. The hours of operation of the school would be 7am – 5pm Monday to Friday with staggered start and finish times for year groups 7 - 11 and sixth form. The school would be open for community activities between 5pm – 9pm Monday to Friday and 9am – 6pm Saturday to Sunday.

2.15 The following additional/ amended drawings and documents have been received:

- Location plan - the red line on the location plan has been amended to include the multi storey car park because the north eastern access through the multi storey car park forms part of the proposal but was not originally included.
- Amended elevations showing a green wall to the south elevation of the sports hall and a double coping to the proposed extension to the Broadbent building
- Drawing showing views to the access stair
- Drawing showing details of the western access
- Cycle storage plan and elevations
- Statement of Education Need

- Statement of use of the Caretakers House
- Use of Brick Bond Statement
- Window Strategy Summary
- Construction Management Plan

3. Relevant Planning History

3.1 TP/08/1982 - Redevelopment of part of site to provide a total of 92 residential units, comprising partial demolition and conversion of Broadbent building to create 61 self-contained flats, incorporating roof terrace to tower, together with gymnasium and swimming pool (D2 use), conversion of existing gymnasium into village hall (D1 use) and erection of 31 two and 3-storey terraced houses, associated access road, car parking and landscaping. (Phase 1) - Withdrawn 29 April 2009.

3.2 LBC/08/0023 - Demolition of part single storey, part 2-storey extension to side and rear of existing Broadbent building together with part removal of internal walls to all floors and removal of mezzanine floor to existing library to facilitate conversion to 61 flats, gymnasium, swimming pool and village hall, together with associated external alterations – Withdrawn 30 April 2009.

3.3 P12-02254SOR - Demolition of some existing buildings on site, the conversion of the Grade II Listed Broadbent Building, gymnasium and caretakers cottage and redevelopment of site for residential use to provide a maximum of 560 dwellings on the Queensway site and to the High Street frontage together with up to 2000 sq.m. retail floorspace to the High Street frontage, up to 1600sq.m. commercial floorspace and provision of up to 500 sq.m. for community facility within the Queensway site, with associated car parking, access, and infrastructure. EIA not required – 25 October 2012.

3.4 P12-00732PLA - Redevelopment of site to provide a total of 471 residential units and 975 sq.m. of commercial B class floorspace in a 4-storey block, comprising partial demolition and conversion of Grade II Listed Broadbent building and demolition of remaining buildings, erection of a terrace of 40 x 2-storey 4-bed houses to southern boundary, with accommodation in roof space and front dormer windows; erection of 10 x 4-storey blocks comprising 295 units (134 x 1-bed, 82 x 2-bed, 79 x 3-bed) incorporating roof terraces; erection of 1 x 2-storey block of 8 x 1-bed units; erection of a 3-storey extension to south elevation of Broadbent building together with construction of second floor extension above central link to provide a total of 128 units (111 x 1-bed, 16 x 2-bed, 1 x 4-bed) together with refurbishment of existing listed gymnasium building to communal facilities for residents, construction of associated access roads linked to Queensway, car parking, play space, landscaping and retention of pedestrian link to High Street. – Refused on 14.02.2013 for the following reasons:

1. The proposal, by virtue of the density, mix and tenure of units proposed, the concentration on starter and one-bed units, the lack of family units and the failure to make any provision for affordable housing, would fail to create a balanced and sustainable community on this key strategic site within Ponders End and this would prejudice the regeneration of this area. In this respect the development would be contrary to London Plan policies 3.4, 3.5, 3.8, 3.9, 3.11,

3.12, 3.13 ,7.1 and 8.2, Core Policies 3, 5, 9, 40, 41 and 46 of the Enfield Plan Core Strategy and National Planning Policy Framework.

2. *The proposed development, and particularly the size, siting and design of blocks 5, 10 and 15 in relation to adjoining sites, would prejudice the development potential of those sites and particularly the size, siting and design of blocks 10 and 15 would fundamentally compromise the comprehensive redevelopment of the High Street frontage, as identified in the Ponders End Central Planning Brief, detrimental to the regeneration of this area. In this respect the development would be contrary to London Plan policy 7.1, Core Policies 40 and 41 of the Enfield Plan Core Strategy, Policy (II)H8 of the Unitary Development Plan, the Ponders End Central Planning Brief and the National Planning Policy Framework.*

3. *The proposed development, by virtue of its density, design, layout, massing and access would result in a poor quality and illegible environment that fails to satisfactorily integrate with its surroundings, fails to provide a safe and secure environment for future residents and which would fail to take the opportunities available for improving the character and quality of the area and the way it functions. In this respect the development would be contrary to London Plan policies 3.2, 3.5, 7.1, 7.3, 7.4, 7.5 and 7.6 of the London Plan, Core Policies 4, 30 and 41 of the Enfield Plan Core Strategy, Policies (II)GD3, and (II)H8 of the Unitary Development Plan, the Ponders End Central Planning Brief and National Planning Policy Framework.*

4. *The proposal by reason of the works proposed to the fabric of the Broadbent Building, including the proposed extension to the auditorium, together with the demolition of the Caretaker's Cottage, would result in undue harm to the significance of the heritage asset, contrary to London Plan policies 7.8 and 7.9, Core Policy 31 of the Enfield Plan Core Strategy, Planning Policy Statement 5 Practice Guide and the National Planning Policy Framework.*

5. *The proposed development would result in the generation of additional traffic on the local and strategic road network, exacerbating existing capacity issues, without making provision for appropriate mitigation to improve accessibility to the site for non- car modes. In this respect the development would be contrary to London Plan policies 6.1, 6.2, 6.3, 6.9, 6.10 and 6.12, Core Policies 24, 25 and 26 of the Enfield Plan Core Strategy and Policy (II)GD6 of the Unitary Development Plan.*

6. *The applicant has failed to provide adequate information for the Local Planning Authority to determine the likely impact of the proposals on protected species (bats, reptiles and black redstarts), which are a material consideration. This is contrary to the Enfield Plan Core Strategy policy CP36, the London Plan Policy 7.19 and national planning policy in the form of Government guidance on biodiversity in the planning system - Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within The Planning System (not revoked by the NPPF) and if the Local Planning Authority were to approve the application it could be found to have failed to comply with its duties under the 2010 Habitat Regulations.*

7. *The applicant has failed to demonstrate how opportunities have been taken to "protect or enhance the natural environment" and "improve biodiversity" which is contrary to the National Planning Policy Framework, the Enfield Plan Core Strategy Policy CP36 and the London Plan Policy 7.19.*

8. *Insufficient evidence has been submitted to demonstrate that the submitted energy strategy adheres to the principles of the energy hierarchy, represents the most efficient use of plant, delivers an adequately sized energy centre and aligns with the overall strategic objective to deliver a decentralised energy network to the North East Enfield and Ponders End strategic development area to accord with Strategic Objective 2 and Policies CP20 and CP40 of the Enfield Plan Core Strategy, emerging Policy DMD51 of the Development Management Document, the emerging North East Enfield AAP, Policies 5.2, 5.3, 5.5, 5.6 and 5.7 of the London Plan and the National Planning Policy Framework.*

3.5 P12-00733HER - Partial demolition and conversion of Grade II Listed Broadbent building to provide a total of 128 units (111 x 1-bed, 16 x 2-bed, 1 x 4-bed) involving erection of a 3-storey extension to south elevation, construction of second floor extension above central link together and alterations to windows, refurbishment of listed gymnasium building to communal facilities for residents and demolition of listed Caretaker's Cottage in association with redevelopment scheme under Ref: P12-00732PLA – Refused on 8 February 2013 due to the following reason:

The proposal by reason of the works proposed to the fabric of the Broadbent Building, including the proposed extension to the auditorium, together with the demolition of the Caretaker's Cottage, would result in undue harm to the significance of the heritage asset, contrary to London Plan policies 7.8 and 7.9, Core Policy 31 of the Enfield Plan Core Strategy, Planning Policy Statement 5 Practice Guide and the National Planning Policy Framework.

Planning application reference P12-00732PLA and listed building consent reference P12-00733HER sought the wholesale replacement of the existing original crittal windows with double glazed aluminium windows. This was considered to result in harm to the heritage asset and it was recommended that the windows, as a key feature, should be retained and adapted unless irreparable.

3.6 P12-02677PLA - Demolition of existing buildings on site (excluding the Broadbent Building, Gymnasium, Caretakers Cottage, multi storey car park to the Queensway frontage and 198 High Street) and the redevelopment of the site to provide a mix of residential (Class C3), business (Class B1), retail (Classes A1-A4) and community uses (Class D1), hard and soft landscaping and open space, new connection (vehicle and pedestrian) to High Street via College Court, retention and alteration of existing accesses to Queensway, car and cycle parking (including alterations to car parking arrangements within College Court) and all necessary supporting works and facilities, including an energy centre; the retention, refurbishment and extension of the listed Broadbent building, retention and refurbishment of the associated caretakers cottage and gymnasium to provide up to 43 residential units, 2,141sq.m (GIA) of commercial/live work floor space (Class B1) and 427sqm (GIA) of community use (OUTLINE with some matters reserved - Access). Committee decision. Approved on 5 March 2013.

3.7 14/03280/PADE Demolition of the non-listed buildings (Roberts building, McCrae building and Pascal building) - Approved 8 September 2014 and not yet implemented.

3.8 P12-02678HER - Works involving the partial demolition, alteration and extension of the listed Broadbent buildings, gymnasium and caretaker's cottage to accommodate new residential (Class C3), business (Class B1) and community use (Class D1). – Withdrawn on 30 September 2014.

3.9 14/03223/CEB - Soft strip and asbestos removal from Broadbent building and ancillary university buildings involving the removal of carpets, vinyl, WC partitions, stud walls (not part of original layout), light fittings, debris, chairs, tables etc. to allow asbestos removal from below the current floor finishes and asbestos removal from service duct and pipework gaskets etc. Granted 28 October 2014.

4. Consultations

4.1 Statutory and Non-Statutory Consultees

Traffic and Transportation

4.1.1 In response to the original submission Traffic and Transportation expressed concerns with the following:

- The quality of the pedestrian environment on Queensway.
- The robustness of the Transport Assessment in particular to the anticipated level of parental drop off.
- The information included within the Construction Management Plan.
- The provision of electric charging points and cycle spaces.
- The lack of detailed proposals of the north eastern vehicular access and exclusion of the access area within the red line of the application.
- The lack of detailed proposals of the pedestrian and cycle access routes to the High Street.

4.1.2 As a consequence revised plans and additional information have been received and several conditions would be attached to any grant of planning permission relating to the design of both access points, an amended Construction Management Plan, electric charging points and cycle spaces.

4.1.3 In terms of highway mitigation measures the following should be secured:

- Section 278 Agreement to cover the provision of raised entry treatments/build outs or similar arrangement at both vehicular access points into the site from Queensway, localised widening of footways near the access junctions with Queensway, repaving of footway and crossovers (over a distance of 15m on each side of the eastern and western access points).

- Section 106 Agreement - a contribution of £33,000 should be secured for implementation of traffic management and implementation of parking/waiting restrictions in Queensway together with provision of a new crossing facility towards the eastern end of Queensway. The new crossing will allow for a safe crossing of pupils amongst the various commercial vehicles using it.

English Heritage

4.1.4 'Significance: The origin of the present buildings began with the Ediswan Institute at the beginning of the twentieth century, then offering technical evening classes, and eventually being purchased by the LCC and developed into the Enfield Technical College and the development of this site. The college gradually transformed into a polytechnic and latterly the Middlesex University. As such it has moderate historic and communal value.

4.1.5 The buildings are Grade II listed, principally for their aesthetic and architectural value. Designed by W.T. Curtis and H.W. Burchett the site embodies many of the theoretical discussions of modern educational architecture taking place in the 1930s. Construction began in 1938 and continued intermittently following the conclusion of the Second World War.

4.1.6 The design, form and materials show strong links to Dutch and Scandinavian architecture of the same period, notably that of W.M. Dudok. This is evident through the large glazed expanses, the central entrance tower, and the tiled giant-order columns. Technically advanced materials such as Crittall glazing, and the ideological alignment of the modern movement, would both have been very fitting design choices for an innovative technological institution.

4.1.7 Impact: The proposal is for the conversion of the redundant site to an eight form entry secondary academy and sixth form. The principal impacts upon the significance of the listed building are as follows:

- The replacement of the majority of Crittall 'universal section' windows with thermally broken aluminium windows of matching profile.
- The demolition of the original workshop range to the rear of the site.
- The proposal will bring about significant benefits to the listed buildings, including:
- The restoration of the entrance lobby, hall, gymnasium, and southern courtyard.
- The retention of more windows than previously consented schemes have allowed.
- The return to an educational use for the site.

4.1.8 Policy: The Government's National Planning Policy Framework (NPPF) sets out its position regarding the protection of the historic environment (cf. Section 12). This policy requires the particular understanding of the significance of the site, the avoidance of less than substantial harm except where justified by significant public benefit, and the pursuit of opportunities to enhance or better reveal the historic environment.

4.1.9 Position: In our view the educational use of this Grade II listed building is the best possible use that can be achieved. The conversion of the building's interior spaces will not entail any major disruption of the building's essential planning, and the original circulation will largely be reconstituted where it has been obscured by later work.

4.1.10 Certain elements of the proposal mentioned above will have a significant impact on the building, and it is regrettable to see the loss of such a large amount of original Crittall glazing. However, in the context of the wider scheme and the generous public benefits afforded by the conversion of the

building to a secondary school we consider this harm to be less than substantial.

4.1.11 The loss of the workshop range is equally unfortunate. The college's original technical function was evidenced through these buildings. We would encourage the council to require a recording of this range prior to demolition, and for the applicant to retain some signifier of this section of the site in the delivery of the replacement three-storey range (i.e. through the name of that area, or through architectural detailing that might reference the form of the lost workshops).

4.1.12 Having considered the scheme as a whole, and the relative significance of those elements of the building affected by the proposals, English Heritage would support this application, with the condition that suitable recording is carried out of the workshop range prior to demolition'.

Tree Officer

4.1.13 The Tree Officer raised no objection to the proposed development. A suitable condition was suggested to secure an effective tree protection plan for the retained trees. Although the landscape master plan indicates that there will be a significant improvement to the green infrastructure of the site, there should be an increase of softening and screening planting around the boundary including additional tree planting. The Tree Officer suggested that this may have to be shown in an indicative drawing before a decision is made to show that it can be achieved. However an indicative drawing has not been submitted.

Transport for London (TfL)

4.1.14 TfL advise that due to the proposals location, the site would be very well served by the bus network. However it is envisaged that capacity issues will arise by 2017.

4.1.15 Funding has been set aside for envisaged demand increases; however they feel that further monitoring is warranted post 2017 to gauge the extent of demand created. With this in mind, TfL explained that some form of agreement would need to be novated where additional funds can be sought to mitigate any longer term capacity issues.

4.1.16 The applicant submitted a letter which sets out that TfL has received funding to cover the costs of the provision of any necessary bus service enhancements resulting from Free Schools for which planning permission is granted in the lifetime of the parliament. TfL have confirmed that a financial contribution is not required.

Environmental Health

4.1.17 Environmental Health raises no objection.

4.1.18 The noise assessment submitted with the application is suitable and sufficient and the report is accepted.

4.1.19 The contamination survey recommends a stage 2 site investigation to address contamination issues and contamination may also arise which was not previously known and therefore two conditions have been suggested.

4.1.20 Demolition and construction will lead to dust emissions from site and as there are residents in close proximity to the development a condition is required.

Biodiversity Officer

4.1.21 The ecological report confirms that there are no perceived ecological constraints to the proposed development. Any approval should be subject to the following conditions: Nesting Birds, Bats - Destructive Demolition, Biodiversity Enhancements and SuDS & Green Roof.

Thames Water

4.1.22 No objections subject to conditions and technical information requirements being forwarded to the applicant.

Urban Design Officer

4.1.23 The Urban Design Officer expressed concerns with the following:

- The size and massing of the three storey rear extension.
- The proposed landscaping and boundary treatments.
- The loss of the route through the site.
- The Caretakers Cottage being left vacant.
- The blank façade of the sports hall.

Heritage Officer

4.1.24 The Heritage Officer welcomes the following:

- The return of the buildings to a sustainable educational use.
- Removal of the accretive development from within the central courtyard and return of the former assembly hall to its original configuration.
- Return of the gymnasium to its original use, retention of its original glazing and the former link structure restored.
- Retention of the original glazing within the tower structure and curved rear projection.
- Reinstatement of the former courtyard garden.

4.1.25 The Heritage Officer expressed strong concerns with the following:

- Lack of a full window by window condition survey to justify the package of retention/ replacement proposed. Such extensive window replacement in a historic building is considered to constitute substantial harm and the case has to be made for it.
- An earlier window condition survey by West Leigh has not been submitted or updated. The lack of maintenance means that many windows are in poor condition but it is not clear how extensive the problem is.

- The consultants suggestion that the windows are of limited 'archaeological' significance – this is not accepted and the Council should look for their retention and repair as a first option.
- The new three storey extension is taller and wider than the existing buildings contrary to pre-application advice. However the new build could be offset by the benefits the rest of the scheme could bring subject to what is resolved with the windows.
- Absence of information on proposals affecting significant parts of the original fabric make it hard to assess the full effects of the proposals on the building.

The Twentieth Century Society

4.1.26 As per previous pre-application comments, The Twentieth Century Society welcome the principle of these applications which the Society views as demonstrating a sensitive and conservation led approach to the adaptation of the grade II listed buildings. The proposals include removing much of the later unsympathetic in-fill development in the internal courtyards, and the retention of the caretaker's house. The Society also welcome the retention of the original glazing on the stair tower and on the east and west elevations of the gymnasium.

4.1.27 However, at pre-application stage The Twentieth Century Society raised concerns about the impact of the proposed replacement aluminium double glazed curtain walling system, given the particular importance that the current single glazed Crittall has to the appearance and character of the Broadbent building. The Society recommended that an up to date condition survey of the existing windows be carried out, and are disappointed that the comments have not been addressed and that no up to date survey has been submitted with the applications. The Society would expect such a survey to be an important element in any justification for the large scale loss of historic fabric proposed.

4.1.28 In the pre-application advice the Society also requested that a mock-up be assembled on site to inform the windows strategy. The Society have not seen this documented in any of the application material, which would have helped inform their advice. The Society are not convinced by the level of detail provided that the proposed double glazed aluminium curtain walling system will not harm the character and appearance of the listed building.

4.1.29 The Twentieth Century Society reluctantly object to the applications in their current form due to the harm that the replacement curtain walling system would have on the character and appearance of the historic building.

Environment Agency (EA)

4.1.30 The EA object to the application as submitted because the Flood Risk Assessment does not meet the requirements of the National Planning Policy Framework and the associated Practice Guide.

4.1.31 The applicant has not demonstrated that the peak discharge rate for all events up to and including the 1 in 100 chance in any year critical storm event, including an appropriate allowance for climate change, will not exceed 3 times the greenfield runoff rate. Where 3 times the greenfield runoff rate

cannot be met, evidence must be provided that demonstrates the greatest feasible reduction has been achieved, which must be a minimum of a 50% reduction in line with the London Plan Supplementary Planning Guidance.

4.1.32 The applicant has not demonstrated that sustainable drainage systems (SuDS) will be used and maximised on site to provide storage for surface water generated on site, in line with the National Planning Policy Framework paragraph 103, that requires development to give priority to the use of SuDS.

4.1.33 The EA have indicated that their objection can be addressed by demonstrating through their surface water strategy that the proposed development will not create an increased risk of flooding from surface water and that the surface water run-off rate has been reduced to 3 times the greenfield runoff rate or by at least 50% in line with the London Plan Policy 5.13 and its Supplementary Planning Guidance on Sustainable Design and Construction.

4.1.34 The EA have agreed to the agent submitting an updated Technical Note to stand alongside the Flood Risk Assessment rather than producing a new assessment. The Technical Note was submitted to the EA on Monday 5 November 2014. The EA have 21 days to respond to additional information, however comments are likely to be received by 14 November 2014.

Sustainable Design Officer

4.1.35 In response to the original submission the Sustainable Design Officer expressed concerns with the following:

- The Energy Statement only serves to achieve compliance with the current Building Regulations. The Statement does not mention strategies to address the existing listed building or the potential to connect to a proposed DEN. The Statement ignores the requirements of Policy DMD51 and Policy 5.2 of the London Plan.
- A Flood Risk Assessment has been submitted but lacks engagement with SuDS and the requirements of Policy DMD 61.
- The development appears to achieve a 'Very Good' rating although the pre-assessment sets a 'Good' rating baseline and it is unclear as to the scope of the assessment.
- Green roofs or living walls have not been incorporated within the scheme.

4.1.36 The agent has submitted additional information, a revised Energy Statement and an updated Technical Note to stand alongside the Flood Risk Assessment. The Sustainable Design Officer has confirmed that the additional information is acceptable but several conditions would be required and a connection to a DEN would be required.

Conservation Area Group:

4.1.37 Members to be updated.

Education:

4.1.38 Heron Hall is already factored into secondary provision in the borough and has been taking three forms of entry (90 students) since September 2013. The admissions booklet shows the school as taking in the same amount of pupils in September 2015.

4.1.39 The Council is reliant on the places provided by Heron Hall Academy to meet statutory responsibility to provide enough school places to meet demand. There is not enough spare capacity in local schools to cover 90 places if they are not provided next year.

4.1.40 However, with academies the Council are not involved in how the building capacity is provided – of course they have to follow due process in terms of planning, building control, etc. so they should have planned to deliver the extra building capacity required in line with their resource and decant plan for how secondary children move from the current secondary provision at Cuckoo Hall to the new provision in the new and remodelled buildings.

4.2 Public response

4.2.1 Letters were sent to 698 adjoining and nearby residents. The consultation period expired on 8 September 2014. A site notice was posted on 3rd September 2014 and expired on 24th September 2014 and a press notice was published on 17 September 2014 and expired on 1 October 2014. No responses have been received.

4.2.2 Following the receipt of a location plan with an amended red line a new site notice was erected on 3 November 2014 and will expire on 17 November 2014. Members will be verbally updated at Committee of any comments that are received.

5 Relevant Policy

5.1 The National Planning Policy Framework (NPPF) published in March 2012 allowed local planning authorities a 12 month transition period to prepare for the full implementation of the NPPF. Within this 12 month period local planning authorities could give full weight to the saved UDP policies and the Core Strategy, which was adopted prior to the NPPF. The 12 month period has now elapsed and as from 28th March 2013 the Council's saved UDP and Core Strategy policies will be given due weight in accordance to their degree of consistency with the NPPF.

5.2 The Development Management Document (DMD) policies have been prepared under the NPPF regime to be NPPF compliant. The Submission version DMD document was approved by Council on 27th March 2013 and has now successfully been through examination. It is expected that the document will be adopted at full Council in November 2014. The DMD provides detailed criteria and standard based policies by which planning applications will be determined, and is considered to carry significant weight.

5.2.1 The policies listed below are considered to be consistent with the NPPF and therefore it is considered that due weight should be given to them in assessing the development the subject of this application.

5.4 London Plan

Policy 3.16 - Protection and Enhancement of Social Infrastructure
Policy 3.18 - Education Facilities
Policy 3.19 - Sports Facilities
Policy 5.2 - Minimising Carbon Dioxide Emissions
Policy 5.3 - Sustainable Design and Construction
Policy 5.4 - Retrofitting
Policy 5.10 - Urban Greening
Policy 5.11 - Green Roofs and Development Site Environs
Policy 5.13 - Sustainable Drainage
Policy 6.3 - Assessing Effects of Development on Transport Capacity
Policy 6.13 - Parking
Policy 7.4 - Local Character
Policy 7.6 - Architecture
Policy 7.8 - Heritage Assets and Archaeology

5.5 Core Strategy (adopted November 2010)

CP8 - Education
CP11 - Recreation, Leisure, Culture and Arts
CP20 - Sustainable Energy Use and Energy Infrastructure
CP21 – Delivering Sustainable Water Supply, Drainage and Sewerage Infrastructure
CP24 - The Road Network
CP25 - Pedestrians and Cyclists
CP28 – Managing Flood Risk through Development
CP30 – Maintaining and Improving the Quality of the Built and Open Environment
CP31 - Built and Landscape Heritage
CP32 - Pollution
CP36 - Biodiversity
CP40 - North East Enfield
CP41 - Ponders End
CP46 – Infrastructure Contributions

5.6 Unitary Development Plan (UDP) (adopted March 1994)

(II)C17 Development within Curtilage of Listed Building
(II)GD3 Design
(II)GD6 Traffic implications
(II)GD8 Site Access and Servicing
(II)T13 Access onto Public Highway

5.7 Proposed Submission Version DMD (March 2013)

DMD16 - Provision of New Community Facilities
DMD37 - Achieving High Quality and Design-Led Development
DMD44 - Preserving and Enhancing Heritage Assets
DMD45 - Parking Standards
DMD47 - New Roads, Access and Servicing
DMD48 - Transport Assessments
DMD49 - Sustainable Design and Construction Statements
DMD50 - Environmental Assessment Methods
DMD51 - Energy Efficiency Standards

DMD68 - Noise
DMD69 - Light Pollution
DMD74 - Playing Pitches
DMD79 - Ecological Enhancements
DMD80 - Trees on Development Sites
DMD81 - Landscaping

5.8 Other relevant Policy/ Guidance

North East Enfield Area Action Plan (Proposed Submission 2014)
Ponders End Central Development Brief (adopted May 2011)
Section 106 Supplementary Planning Document (adopted November 2011)

National Planning Policy Framework (NPPF)
National Planning Practice Guidance (NPPG)

6. Analysis

Principle of Development:

6.1 Historically the site has been used for educational purposes originally accommodating the former Enfield Technical College and later the Middlesex University. Although the site is currently vacant it was previously in educational use and therefore the use of the site as a secondary school is considered acceptable in principle. The proposed academy would also help meet the future need for secondary school places in the area.

6.2 The Ponders End Central Planning Brief (adopted May 2011) identifies the Middlesex University campus site for residential led mixed use development. Although the application site would accommodate an educational use, the land to the east of the application site is to be acquired by the Council with an intention to bring forward a comprehensive housing-led, mixed use regeneration scheme known as the Electric Quarter. This would be in accordance with the requirements of the Ponders End Central Planning Brief (adopted May 2011).

6.3 The submitted Planning Statement states that the Broadbent building would be available for community uses. This would be in accordance with Policy DMD16 of the Proposed Submission DMD which seeks efficient and effective use of land and buildings, and where appropriate, provides opportunities for co-location, flexible spaces and multi-use. The Council would be keen to encourage the use of the schools assets to the wider community through use of the playing fields, sports hall and classrooms for adult evening classes and other community uses. A condition requiring a community use plan would be attached to any grant of planning permission.

Educational Need:

6.4 There has been an expansion in primary schools in the borough in recent years and consequently there will be a need to accommodate this expansion at secondary school level in years to come. Heron Hall is already factored into secondary provision in the borough and the Council is reliant on the places provided by Heron Hall Academy to meet statutory responsibility to provide

enough school places to meet demand. However as an academy the Council are not involved in how the building capacity is provided.

6.5 The case for the need to provide a new secondary school in the proposed area was made in a bid document which was reviewed and accepted by the Department for Education. The Statement of Education Need submitted during the planning application process states that a new school would offer cost effective high quality education for parents and pupils to choose, and would meet a basic future need in the area for secondary school places.

6.5 The Statement states that there will be a shortage of secondary school places in the borough and in recent years Enfield has received three emergency funding grants from the Department for Education. The first amounted to £6.9m (2009), the second £10m (2010) and the third £5.5m (2011). Furthermore the adjoining Boroughs, Barnet, Waltham Forest and Haringey will have a shortage of secondary places by 2014, and by 2015 the increase in birth rates and other demographic trends will result in even greater pressure in Enfield and the neighbouring boroughs**.** The London Council's report in April 2011 on "School Place Shortages in the Capital" indicated a growth of 100,000 primary age pupils between 2010/11 and 2014/15. This would therefore require additional secondary students across London with the increased demand starting in 2015/16 and rising subsequently.

6.6 The secondary school is currently operating from the Cuckoo Hall Academy in Edmonton and will relocate to the Broadbent building in September 2015. Any delay to the opening of the proposed new school would impact on the continuity of education for the existing primary school and secondary school students. Currently there are 90 Year 7 students and 80 Year 8 students on roll at Heron Hall. A further 90 will join the school in September 2015 which is the point at which accommodation is required on the application site for a total of 260 students. There would be a logistical problem of accommodating the existing and new secondary school students on the current school site. There would be insufficient outside space and insufficient specialist curriculum areas such as laboratories and drama rooms. Consequently it would result in significant costs in relocating the school to temporary accommodation.

6.7 A significant delay to the programme of works would result in a minimum requirement of a terms temporary accommodation, and there may also be a minimum requirement of 52 weeks applied to the accommodation which would be subject to fit out requirements, ICT, infrastructure, ICT and decant costs incurred by the school which may result in an overall cost of £800,000. The applicant is therefore keen to avoid any delays to the proposed development. However it should be noted that the original target for submission was 17 January 2014 with the aim to take the planning application to the Planning Committee on 22 April 2014. The planning application and listed building consent application was validated on 8 August 2014.

Impact on Listed Building:

6.8 Policy DMD44 of the Proposed Submission DMD states that applications for development which fail to conserve and enhance the special interest, significance or setting of a heritage asset will normally be refused.

6.9 The Broadbent building is Grade II-listed in recognition of its special architectural and historic importance. Designed by Curtis and Burchett of the

Middlesex County Architects Department as a technical college it had, until it became redundant in 2008, been in educational use since its construction. Since there has been no real need for extensive alteration, large portions of the building survive extensively intact.

6.10 Until the 1930s educational institutions built by local authorities followed in the architectural tradition established in the 1870s by the School Boards. They were of traditional construction and were generally brick-built with Queen Anne-style timber windows. The need for a cheaper means of building led Curtis and Burchett to look to the continent for a radically different style and way of building.

6.11 Willem Dudok, the City Architect of Hilversum in the Netherlands provided the inspiration for their new, modernist style. Characterised by concrete and steel construction, dramatic, large, linear blocks with seemingly vast expanses of metal windows, brick cladding and decorative tiles. Curtis and Burchett adopted and modified Scandinavian Modernism for their own range of institutional buildings. Despite the stylistic departure the Broadbent building continues many of the traditional principles of educational buildings in this country with large, flexible internal spaces, large windows and ventilation across corridor-plan blocks.

6.12 There are a number of later additions to the Broadbent building including the southern courtyard which has been largely filled in by extensions. The space between the Broadbent and the gym also has numerous accretions that are of minimal value. Internally, a couple of the original corridor walls have been removed and either a central corridor inserted or the wing has been left open-plan. The auditorium has a later mezzanine and lift shaft which date from its use as a library. These compromise the appreciation of the double-height space, though the coved ceiling, stage and proscenium arch appear all intact. The setting has also been compromised, partly by numerous new buildings and the hard standing which surrounds them, but also from a recent lack of maintenance of the site. The workshops were altered in the 1990s and although included in the listing are not of integral significance to the site because they do not display the same innovative characteristics as the other listed buildings.

6.13 The buildings proposed to be demolished are those which make the least contribution to the significance of the setting of the listed building, and include unsympathetic modern additions that have compromised the appreciation of the original layout and design of the site. The removal of the existing inappropriate modern additions would therefore reveal the architectural significance of the listed building.

6.14 The Heritage Officer was consulted on the proposed scheme and has acknowledged that elements of the proposal including the demolition of the student accommodation buildings and extensions to the Broadbent building; retention of the original glazing to the tower structure and the curved rear projection; reinstatement of the former courtyard gardens; return of the former assembly hall to its original configuration; reuse of the gymnasium and retention of its original glazing and reinstatement of the original link between the gymnasium and the Broadbent building; would all be of benefit to the architectural significance of the listed building.

6.15 In terms of the new three storey rear extension to the Broadbent building, it is considered that although the proposed extension would be set both wider and

higher than the existing Broadbent building, the introduction of an architectural detail in line with the roof of the existing building to reference the height of the existing building would minimise any significant impact on the special character and appearance of the building.

6.16 Officers have requested that the extension be reduced in height to further minimise any significant impact to the existing building. However the agent has explained that the building height is essential due to the need to match the existing floor levels for accessibility and functionality; the specific room heights required in the Education Funding Agency's Facilities Output Specification; and the extent of roof plant required which is itself a function of putting all the heavily serviced facilities (excluding science) in the new extension in order to minimise detrimental impact on the listed building.

6.17 Although the height of a new extension to the Broadbent building was raised as a concern at the pre-application stage, given the reasons put forward for the need for the proposed height of the extension, the location and general design of the extension and the introduction of an architectural detail to visually reference the height of the existing building, on balance, the proposed extension is considered acceptable. It is also considered that the bulk of the new extension could be offset by the benefits that the overall scheme would bring.

6.18 The new sports hall has been appropriately sited to the rear of the existing gymnasium and would be of scale and design that would respect the character and appearance of the Broadbent building and the gymnasium.

6.19 In terms of external materials, the three storey extension and new sports hall are proposed to have a stretcher bond brick external finish. The current buildings have an English bond brick exterior and the use of English bond was advised at a pre-application meeting.

6.20 The Design and Access Statement states that the extension and sports hall have been designed to be deferential to the existing building in terms of their location, materials and proportion, while at the same time ensuring that they are clearly expressed as modern interventions rather than attempting to mimic the originals. Although the applicant/ agent's aim is to 'complement' rather than match the existing brickwork which is an acceptable approach, it is considered that the use of a stretcher bond and the sample brick that has been seen by Officers on site would not respect the special character and appearance of the listed building.

6.21 The applicant advises that one of the main reasons for not using English bond is due to the cost (approximately £220,000). The agent has also stated that the new buildings are to be of cavity construction with a half-brick thick external leaf and to mimic English bond would require the use of snapped headers or specials which they believe would be perverse as well as confusing.

6.22 At a meeting held with the applicant, agent and Officers to discuss outstanding issues with the scheme, the Heritage Officer suggested the use of alternative cladding materials for the sports hall to help reduce the costs so that an English brick bond could be used on the extension only. The applicant/ agent has rejected this suggestion concluding that the use of matching stretcher bond brickwork on both the new extension and sports hall would have less of a detrimental impact on the setting of the listed buildings than the use of English

bond on the extension and cladding panels on the sports hall. This is not supported by Heritage Officers.

6.23 Internal alterations, repairs and refurbishment are proposed to the principal fabric of the Broadbent building. The internal fabric is simple but in evidence throughout much of the building and is in variable condition. For instance the corridors and classrooms have parquet floors, the stairways terrazzo and some of the original radiators are evident within the building. These are high quality materials that are in keeping with the aesthetic of simple, functional elegance which is an important characteristic of the building. Sufficient information has however not been provided to assess the full effects of the proposals on the building, and therefore several conditions would need to be attached to any grant of planning permission requiring details on the repair, refurbishment, retention and removal of the internal historic fabric.

6.24 The significance of the cottage is essentially as a relatively intact example of well-designed educational buildings of the period. The Caretaker's Cottage is being retained and re-used, however additional information was not initially provided. An indicative timetable for proposed occupation was requested by the Heritage Officer to ensure that the building remains in use and does not become the target of vandalism. A statement has been submitted that confirms in the short term the Caretaker's Cottage would function as an additional base room for the site and security staff, thereby maintaining a suitable use whilst the medium term plans are finalised. In the medium term it is planned to bring the Caretaker's House back into use potentially as part of the sixth form teaching facilities or community use. A condition requiring the Caretaker's House to be weather tight would be attached to any permission.

6.25 Notwithstanding the above, the Heritage Officer has expressed strong concerns with regard to the replacement of the original Crittal windows which are a key element of the significance of the listed building. A window by window condition survey has not been submitted to justify why an extensive replacement of the windows is required, and in the absence of this information the proposed scheme would result in substantial harm to the listed building. In addition sufficient justification has not been provided as to why double glazed steel windows similar to the original windows have not been used rather than the proposed double glazed aluminium windows.

6.26 These views are echoed by the Twentieth Century Society who raise an objection to the proposed scheme in its current form, due to the harm that the replacement curtain walling system would have on the character and appearance of the historic building. Despite acknowledging that elements of the proposed works would have a significant impact on the listed building, English Heritage have raised no objection to the scheme, due to the public benefits afforded by the conversion of the building to a secondary school, and the wider context of the scheme. In coming to the Heritage Officer's conclusion the long term history of the site has been taken into consideration whereas English Heritage have looked at the wider general benefit of the scheme.

6.27 Pre-application advice was sought at the end of 2013 for the proposed conversion of the Broadbent building into a school. The requirement of a window by window condition survey was identified at this stage. The need to provide a report regarding the condition of the windows with any subsequent planning application was also highlighted within the pre-application enquiry response. Officers advised that whilst the challenge of achieving an efficient

building in terms of ventilation is recognised, total replacement of all glazing was not accepted at that stage, and would require a more robust justification together with details of the proposed replacement. It was also noted that other art modern buildings in the borough have been rejected for listing, because they do not have their original windows, so the total loss is bound to devalue the listed building in terms of heritage integrity.

6.28 It is also important to acknowledge that planning application reference P12-00732PLA and listed building consent reference P12-00733HER sought the wholesale replacement of the existing original crittal windows with double glazed aluminium windows. This was considered to result in harm to the heritage asset and it was recommended that the windows, as a key feature, should be retained and adapted unless irreparable. The replacement of the existing original windows is therefore not a new issue and has been demonstrated as a major concern to the Local Planning Authority in the past.

6.29 Planning application ref P12-02677PL sought to repair the windows within the north elevation of the building. The majority of the remaining glazing was proposed to be replaced with double glazed W20 steel windows, which would have provided a close match to the original windows but provide better thermal insulation. The repair and replacement of the windows was informed by a technical report that assessed what could feasibly be conserved and provided justification for the loss of original fabric.

6.30 The Broadbent building has been empty since 2008, and the windows have therefore not been maintained and many are in poor condition. As part of a previous planning application for the building, a firm called West Leigh who specialise in steel windows were commissioned to carry out a report on their condition, and the most sensitive and practical options for repair and/or reinstatement. The 2012 report concluded that the deterioration of the windows had occurred very much on an elevation by elevation basis rather than window by window. However the application proposed the retention and refurbishment of significantly more windows than currently proposed in this application, particularly for the stairwell windows and the principal north elevation excluding the tower. Whilst the extract submitted from the report identifies windows by number on elevations and proposes elevation-based approaches to retention/ replacement, it does not go into the condition on a window-by-window basis, or justify why more extensive replacement is now required on grounds of condition.

6.31 The Heritage Statement submitted with the current application contains a few sample condition photographs and refers to the West Leigh 2012 condition survey. However the full West Leigh document was not submitted as part of the formal planning application process, and only an extract of the document which has not been updated has been subsequently submitted. The agent has been reluctant to submit a window by window condition survey due to costs and the conclusions that were set out in the West Leigh report that found that the majority of windows were beyond economic repair. The report was undertaken in 2012 and therefore the windows would have likely to have deteriorated further. The agent is however currently working on producing a window by window condition survey and the report should be available before the Planning Committee so that Officers can update Members on the findings.

6.32 In developing the current proposal the agents prepared a Window Strategy. They investigated three options for window improvements (Option 1 - repair and

refurbish, Option 2 - steel replacement system and Option 3 - aluminium replacement system). The cost benefit analysis for steel and aluminium windows is set out in table 1. The agents concluded that the replacement of windows with a steel window system would not meet thermal performance standards, and would incur severe cost premiums which could impact on the viability of the school. The business case for the replacement windows states that the extra over costs to change to a steel framed window would contribute nearly half of the new build cost of a two further entry primary school. Whereas the replacement of the windows with an aluminium window system replicating the existing window proportions, fenestration patterns, site lines and feature detailing, with the identified areas of glazing retained and refurbished would be a viable solution. It should be noted that the existing steel non thermally broken single glazed window system is no longer manufactured, therefore any replacement would be of a different profile.

	Option 1 – Aluminium	**Option 2 - Steel**
Window Construction Cost	£2,160,434	£3,051,755
Heating System Construction Cost	£336,259	£599,000
Heating Cost Saving (over 20 years)	-£397,800	
Benefit Less Cost	£2,098,893	£3,650,755
Cost benefit for Option 1	£1,551,862	

Table 1: Cost Benefit Analysis of Aluminium vs Steel Windows.

6.33 It is the Heritage Officer's view that the proposed new windows would prejudice the character of the host building, and that this harm cannot be justified in terms of any public benefit that might be achieved by the proposal. The proposed replacement windows are considered to be a significant departure from the pattern and form of the original windows. The proposed windows are of a significantly greater depth than the existing windows and the windows would change the pattern of opening lights. The sample window was available to view on site. Consequently the Heritage Officer has suggested that a more suitable alternative unit should be put forward that respects the existing character and appearance of the building and replicates as closely as possible the existing fenestration in order for the scheme to be acceptable.

6.34 In response to the Heritage Officer's comments the agent stated that '*Whilst Crittall do offer double glazed systems (eg 'Corporate W20') they do not have a thermally broken system. Their windows do not therefore meet Part L of the Building Regulations, resulting in 'cold bridging' and the risk of condensation. We would therefore be forced to use secondary glazing which would be visually detrimental in itself and risk the need for increased mechanical ventilation together with additional louvres through the external building fabric. It would also be functionally detrimental as it would impact on the interior. Furthermore, the W20 frames would not match the originals in that the opening lights would be evident (as is not currently the case) with wider sightlines and smaller glazing panes. Furthermore, the W20 sections can only accommodate a 16mm*

double glazed unit which has a lower thermal performance than a standard 24mm unit.

6.35 *Thermally broken steel windows would have deeper sections than the originals, the sightlines would be significantly wider and the opening lights would be evident. Steel windows thermally broken, are also still of poorer thermal performance hence the impact on the Schools environmental systems. Therefore we have proposed a high performance aluminium system*'.

6.36 In terms of current building regulations, listed buildings fall into a class of building where special considerations may apply. When undertaking work on or in connection with a listed building, the aim should be to provide improved thermal performance and adequate ventilation as far as is reasonable and practically possible. The work should not prejudice the character of the host building or increase the risk of long-term deterioration of the building fabric or fittings.

6.37 In summary on the heritage issues, there are many welcomed benefits of the proposed scheme which seek to reclaim plan form, fabric and some internal spaces of the original and to bring the building back into its original use. However the original Crittal windows are integral to the character and special architectural interest of the listed Broadbent building, and in the absence of a window condition survey to justify the extensive replacement of the existing original windows, and the proposed replacement windows, the Heritage Officer is unable to support the proposed development because the scheme would result in substantial harm to the special interest and architectural and historic significance of the listed building. This would be contrary to Policy CP31 of the adopted Core Strategy and Policy DMD44 of the Proposed Submission DMD (March 2013) which seeks development to conserve and enhance the special interest, significance or setting of a heritage asset.

Impact on Street Scene and Design

6.38 Policy DMD 37 of the Proposed Submission DMD states that applications for development that are not suitable for its intended function, that is inappropriate to its context, or which fail to have appropriate regard to its surroundings, will be refused.

6.39 The surrounding area has a mixed character, with Victorian terraces contrasting with the industrial buildings along Queensway and the Broadbent building. Given the site would remain as an educational use, and the proposed scale and nature of the development it is not considered that the proposal would result in any demonstrable harm to the character and appearance of the area.

6.40 The proposal has capitalised on the opportunities available on the site in terms of its layout. For instance the single storey additions to the Broadbent building and the student accommodation building blocks would be demolished. This would reduce the extent of built form on the site and has enabled new hard and soft informal social spaces with different functions and characters for the students to be introduced across the site. The new sports hall has been appropriately sited to the rear of the existing gymnasium and would be of a scale and design that would respect the character and appearance of the Broadbent building and the gymnasium. Parking spaces are located to the north and west of the site and a one way vehicular access route is proposed which would help ensure that the site does not become excessively congested.

6.41 The Ponders End Central Planning Brief seeks to create a sequence of connected public streets and spaces through the Middlesex University site from the High Street and Queensway, and reinforce pedestrian and cycle connections to Southbury and Ponders End Stations. Currently it is unclear how the proposed entrances to the east of the site would link with existing roads and pedestrian networks. The agent along with the Regeneration Team have confirmed that the details will be developed and come forward as part of the Electric Quarter development, this issue will therefore be dealt with by condition. Visual links from both Queensway to the northern tower and from the high street/ proposed Electric Quarter development to the eastern flank of the Broadbent building would also need to be retained. This will be managed through landscaping and boundary treatment conditions.

6.42 The Urban Design Officer raised concerns with the height of the proposed extension and suggested that an architectural detail is introduced at the same height as the existing roof line to visually reference the height of the existing building if the extension is not reduced in height. As previously discussed in this report, it is considered that although the proposed extension would be set both wider and higher than the existing Broadbent building, the introduction of an architectural detail in line with the roof of the existing building would minimise any significant impact on the special character and appearance of the building. Furthermore considering its location to the rear of the building and the public benefits the overall scheme would bring the extension is considered acceptable.

6.43 In terms of boundary treatments the existing brick retaining wall and fences along the western boundary would be retained; the trees and vegetation located along the south of the boundary would predominately be retained with fencing introduced; the external wall along the north of the site would be retained and a new 2.1 metre high weldmesh fence would be introduced along the eastern boundary. Weldmesh fencing adjacent to hedging would also be sited within the site. The agent has confirmed removal of the 1.2 metre high fencing proposed to enclose the Caretaker' Cottage. Full details of the proposed boundary treatments have not been provided and therefore a condition would be required to ensure that the boundary treatments do not result in any significant impact on visual amenity.

6.44 Design is an iterative process which frequently involves compromise between a number of competing and sometimes conflicting objectives. Overall it is considered that the general design of the proposed development would contribute to economic, social and environmental sustainability and would therefore be in accordance with Policy 37 of the Proposed Submission DMD.

Impact on Neighbours

6.45 Any new development should not impact on the residential amenity of neighbouring residents. The proposed development would not significantly impact on the residential amenities of the surrounding residential properties. The development would be sited closer to the common boundary with Derby Road to the south, however a minimum distance of approximately 40 metres would be maintained between the proposed rear extension to the Broadbent building and the new sports hall, and the residential properties located on Derby Road. There would also be a minimum distance of approximately 25 metres between the proposed extension and the residential dwellings located on

Kingsway. Although the proposed extension to the Broadbent building would be set higher than the existing roof level of the Broadbent building, the distances are considered acceptable to prevent loss of light or any other harm to the residential amenities of the occupants. The new hard and soft informal social spaces would be sited a minimum distance of approximately 20 meters from the dwellings located to the south of the application site and therefore due to this distance there would be no demonstrable harm to these residents in terms of noise and disturbance.

Transportation, Access and Parking

6.46 Policy DMD45 of the Proposed Submission DMD (March 2013) requires parking to be incorporated into schemes having regard to the parking standards of the London Plan; the scale and nature of the development; the public transport accessibility (PTAL) of the site; existing parking pressures in the locality; and accessibility to local amenities and the needs of the future occupants of the developments.

6.47 Policy DMD47 of the Proposed Submission DMD states that new development will only be permitted if the access road junction which serves the development is appropriately sited and is of an appropriate scale and configuration and there is no adverse impact on highway safety and the free flow of traffic. The application was accompanied with a Transport Assessment and a Travel Plan.

6.48 A one way system would be introduced with vehicles entering the site from the north eastern access (through the multi storey car park) and exiting the site from the north western access. The red line on the location plan has been amended to include the multi storey car park because the north eastern access through the multi storey car park forms part of the proposal but was not originally included.

6.49 The multi storey car park is currently within the ownership of the applicant, however the multi storey car park and the remaining area of land to the east of the application site is to be acquired by the Council to form the new Electric Quarter development. As part of the Heads of Terms for the acquisition of land, the Council will demolish the multi storey car park and this is due to take place in 2016. Both accesses will be used during the construction phase, however initially the school would only be served by the north western access.

6.50 The western access will provide the sole means of pedestrian and vehicle access into and from the site for approximately 390 pupils and 46 staff until 2016 where a condition and Section 278 Agreement would be triggered for delivery of the eastern access. Details of the western access have been provided but do not provide appropriate levels of pedestrian priority i.e. there is no provision of a pedestrian footpath/ link to the east of the access from Queensway. However this could be improved by the provision of a shared, single surface level access.

6.51 Traffic and Transportation have no concerns with the use of the two pedestrian and vehicular accesses from Queensway, however details of their design is required. Details of a suitable connection to the high street for pedestrians and cyclists would also be required via condition.

6.52 The submitted Transport Assessment concluded that mitigation is not required because the staggered school start times for Year 7-11 and sixth form help to

spread the vehicular demand associated with pupil and staff travel over the 07:00-09:00 AM period and the PM Period 1600-1800. However the proposal would substantially increase the number of pedestrians in the area and therefore a contribution of £33,000 will be secured for implementation of traffic management and implementation of parking/ waiting restrictions in Queensway, together with the provision of a new pedestrian crossing facility towards the eastern end of Queensway.

6.53 A Section 278 Agreement would also be required to cover the provision of raised entry treatments/build outs or similar arrangement at both vehicular access points into the site from Queensway, localised widening of footways near the access junctions with Queensway and repaving of the footway and crossovers (over a distance of 15m on each side of the eastern and western access points).

6.54 The application site is sited within an accessible location and has an estimated Public Transport Accessibility Level (PTAL) of 3 which equates to an average level of accessibility to public transport. It is within a short walking distance of local bus services located on the High Street and Southbury Road linking the site with the wider area. The site is also within a walking distance of Southbury Rail Station and although outside the PTAL walking distance, the site is also within 1.2km of Ponders End Rail Station.

6.55 Policies 6.3, 6.9 and 6.13 of the London Plan (2011) seek to regulate parking in order to minimise additional car travel, reduce trip lengths and encourage use of other, more sustainable means of travel. The Parking Addendum to Chapter 6 of The London Plan (2011) sets out maximum parking standards for new development dependent upon their use and level of public transport accessibility. A total of 120 parking spaces would be sited along the north and west boundaries of the site which is considered acceptable.

6.56 The levels of cycle parking should meet the requirements of Table 6.3 of the London Plan which requires one secure cycle parking space to be provided for 8 staff or students. The cycle parking should be lockable, lit, benefit from good natural surveillance, sheltered from the elements, easy to use and must not damage cycles.

6.57 A convenient and safe access to and from the stores, building and the street must be provided to comply with the London Plan Policy 6.9 and Policy DMD45 of the Development Management Document (Submission Version). Covered Sheffield cycle stands would provide a total of 64 cycle spaces (48 spaces for students and 16 spaces for members of staff) with the ability to expand in the future. Details have been submitted but further information on design is required and will be secured through condition.

6.58 A revised Construction Traffic Management Plan has been submitted and reviewed by T&T. However further information and clarification such as the type of construction vehicles that would be used and the location of wheel washing is required and therefore a pre-commencement condition would be attached to any grant of planning permission.

6.59 TfL have not objected to the proposal but has raised come concerns with regards to bus capacity in the area and have suggested that some form of agreement is made in relation to additional funds to mitigate any longer bus term capacity issues. The applicant submitted a letter which sets out that TfL

has received funding to cover the costs of the provision of any necessary bus service enhancements resulting from Free Schools for which planning permission is granted in the lifetime of the parliament. TfL have confirmed that a financial contribution is not required.

Trees and Landscaping

6.60 There are no trees on the site that are protected by a Tree Preservation Order or by being located within a Conservation Area. However a suitable condition would be required to secure an effective tree protection plan for the retained trees. This would be in line with Policy DMD80 of the Proposed Submission DMD (March 2013) which seeks to protect trees of significant amenity or biodiversity value. The Tree Officer has also requested an increase of softening and screening planting around the boundary including additional tree planting to further enhance the local environment, this would also be dealt with by condition.

Biodiversity

6.61 European Protected Species such as bats are legally protected by the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010. If protected species are present it is illegal to deliberately kill, injure, capture or disturb them, or to damage, destroy or obstruct their roosts. Section 40 of the Natural Environment and Rural Communities Act 2006 requires Local Planning Authorities to have regard to the purpose of conserving biodiversity. This is further emphasised by regulation 3(4) of the Habitat Regulations 1994 which state that Councils must have regard to the strict protection for certain species required by the EC Habitats Directive.

6.62 An Ecolological Appraisal dated July 2014 was undertaken by a qualified Ecologist and submitted with the planning application. The ecological report confirms that there are no perceived ecological constraints to the proposed development and therefore the proposed development is unlikely to result in any significant harm to any protected species. However, the Biodiversity Officer has recommended several conditions relating to Nesting Birds, Bats - Destructive Demolition, Biodiversity Enhancements and SuDS & Green Roof be attached to any permission granted. It should be noted that habitat areas are proposed along the southern boundary of the site. This would be in accordance with Policy DMD79 of the Proposed Submission DMD (Ecological enhancements).

Pollution

6.63 Policy DMD 64 of the Proposed Submission DMD sets out that planning permission will only be permitted if pollution and the risk of pollution is prevented, or minimised and mitigated during all phases of development. The Environmental Health Officer has raised no objection to the proposal and has confirmed that the noise assessment submitted with the application is suitable and sufficient. The contamination survey recommends a stage 2 site investigation to address contamination issues and therefore a condition has been suggested requesting that this information is submitted and approved by the LPA.

Sustainable Design and Construction

6.64 Policy DMD 49 of the Proposed Submission DMD states that all new development must achieve the highest sustainable design and construction standards having regard to technical feasibility and economic viability. An energy statement in accordance with Policies DMD 49 and 51 is required to demonstrate how the development has engaged with the energy hierarchy to maximise energy efficiency.

6.65 Policy DMD 50 of the Proposed Submission DMD requires major non-residential development to achieve a Very Good BREEAM rating. The proposed development would be in accordance with this requirement.

6.66 The proposal would incorporate a green wall to the south elevation of the new sports hall which would contribute to enhancing biodiversity and managing surface water run off within the site; replacement windows to improve the thermal and solar performance of the building; a new condensing gas fired boiler and use of a natural ventilation system.

6.67 As set out in Policy DMD52 all major development should connect to or contribute towards existing or planned decentralised energy networks (DEN) supplied by low or zero carbon energy. Proposals for major development which produce heat/ and or energy should contribute to the supply of decentralised energy networks unless it can be demonstrated that this is not technically feasible or economically viable. The proposed development does not plan to connect to a DEN and it has not been demonstrated that this is not possible. This would be against planning policy requirements and therefore a reason to refuse the planning application. However the proposal would be subject to connection to a DEN and this would be secured through a S106 Agreement.

6.68 The original Energy Statement submitted with the application demonstrated that the proposed PV array to be sited on the extension would be in accordance with the Building Regulations. However there was no energy strategy that addressed the existing building or referred to connecting to a decentralised energy network. The Sustainable Design Officer confirmed that this was unacceptable and a reason for refusal because it would not be in accordance with London Plan Policy 5.2 and Policy DM51 of the Proposed Submission DMD (March 2013).

6.69 The agent has submitted additional information, a revised Energy Statement and an updated Technical Note to stand alongside the Flood Risk Assessment. The Sustainable Design Officer has confirmed that the additional information is acceptable however several conditions would be required and an obligation to safeguard future connection to a DEN would be secured through a S106 Agreement.

Flood Risk

6.70 Policy DMD 59 of the Proposed Submission DMD states that new development must avoid and reduce the risk of flooding, and not increase the risk elsewhere. In consultation with the Environment Agency, planning permission will only be granted for proposals which have addressed all sources of flood risk and would not be subject to, or result in, unacceptable levels of flood risk.

6.71 The site is located within Flood Zone 1 with minimal risk of flooding from all sources. However because the development proposals are greater than 1 hectare and sited within Flood Zone 1 a Flood Risk Assessment is required and

consequently the Environment Agency were consulted. The Environment Agency along with the Sustainable Design Officer have raised an objection to the scheme because the Flood Risk Assessment lacks engagement with SuDS and does not meet the requirements of the NPPF and the NPPG.

6.72 Policy DMD 59 of the Proposed Submission DMD requires new development to manage surface water as part of all development to reduce run off in line with Policy DMD 61 of the Proposed Submission DMD which requires all development to demonstrate how proposed measures manage surface water as close to its source as possible and follow the drainage hierarchy in the London Plan. The proposal does not demonstrate how SuDs will be used and maximised on site to provide storage for surface water generated on site in line with this policy or the NPPF.

6.73 To overcome the EA's concerns it must be demonstrated that through their surface water strategy that the proposed development will not create an increased risk of flooding from surface water and that the surface water run-off rate has been reduced to 3 times the greenfield runoff rate or by at least 50% in line with the London Plan Policy 5.13 and its SPG Sustainable Design and Construction. The surface water strategy must demonstrate that the use of SuDs has been given priority over more traditional pipe and tank systems, providing justification where it is not considered practicable to utilise SuDs on site.

6.74 The EA have agreed to the agent submitting an updated Technical Note to stand alongside the Flood Risk Assessment rather than producing a new assessment. The Technical Note was submitted to the EA on Monday 5 November 2014. The EA have 21 days to respond to additional information; however the EA have confirmed that comments are likely to be received by 14 November 2014.

S106

6.75 S106 agreements are required to make acceptable development which would otherwise be unacceptable in planning terms. Table 5.1 of the S106 SPD summarises the range of planning obligations that the Council will seek for different types and scale of development across the borough. In terms of schools, sustainable transport measures/ transport is the highest priority followed by tackling climate change and public realm provision/ green infrastructure and landscape features/ biodiversity.

6.76 In accordance with CP46 of the adopted Core Strategy, contributions may be sought and pooled where necessary for development that places demand on the road network within the locality of the development, and contributions may be required for significant highway works in the borough's place shaping priority areas. However wherever possible the provision of new facilities should be made on site.

6.77 Traffic and Transportation have confirmed the highway mitigation measures that should be secured as part of the proposed scheme. A financial contribution of £33,000 will be secured through a Section 106 Agreement for implementation of traffic management and implementation of parking/waiting restrictions in Queensway together with the provision of a new crossing facility towards the eastern end of Queensway. The new crossing will allow for a safe crossing of pupils amongst the various commercial vehicles using it.

6.78 An obligation to safeguard future connection to a DEN would be secured through a Section 106 Agreement.

6.79 A Section 278 Agreement will also be secured to cover the provision of raised entry treatments/ build outs or similar arrangements at both vehicular access points into the site from Queensway, localised widening of footways near the access junctions with Queensway and repaving of footway and crossovers (over a distance of 15m on each side of the eastern and western access points).

CIL

6.80 As of the April 2010, new legislation in the form of CIL Regulations 2010 (as amended) came into force which would allow 'charging authorities' in England and Wales to apportion a levy on net additional floorspace for certain types of qualifying development to enable the funding of a wide range of infrastructure that is needed as a result of development. Since April 2012 the Mayor of London has been charging CIL in Enfield at the rate of £20 per sqm. The Council is progressing its own CIL but this is not expected to be introduced until 2015. A Mayor's CIL charge is not applied to vacant buildings brought back into the same use and therefore the proposed development is not CIL liable. In addition education uses are zero-rated for the Mayoral CIL.

7.0 Conclusion

7.1 Policy 31 of the adopted Core Strategy and Policy DMD44 of the Proposed Submission DMD states that when considering development proposals affecting heritage assets, regard will be given to the special character and those applications for development which fail to conserve and enhance the special interest, significance or setting of a heritage asset will normally be refused. This approach is consistent with that set out at a national level with the National Planning Policy Framework stating:

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.

7.2 Furthermore, at Paragraph 132 it states:

"When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should

be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional."

7.3 It goes on to state at Paragraph 133 and 134 that:

"Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- The nature of the heritage asset prevents all reasonable uses of the site; and
- No viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and
- Conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and
- The harm or loss is outweighed by the benefit of bringing the site back into use.

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."

7.4 The applicant has acquired the site and listed building in full knowledge of the refusal of planning application reference P12-00732PLA and listed building consent reference P12-00733HER which had sought the wholesale replacement of the existing original crittal windows with double glazed aluminium windows. This approach to the replacement of the windows was considered to result in substantial harm to the heritage asset and it was recommended that the windows, as a key feature, should be retained and adapted unless irreparable.

7.5 The current proposals involve extensive replacement of the original steel windows with new double glazed aluminium windows. It is considered that it would result in substantial harm to the special interest and architectural and historic significance of the Grade-II listed Broadbent building. It is acknowledged that English Heritage have raised no objection to the principle of replacing the existing windows but the window condition survey to support this has yet to be completed or submitted in support of the current proposals to justify the extensive replacement of the existing original windows. Sufficient justification of the use of double glazed aluminium windows over steel windows has also not been provided. It is considered therefore that the proposed replacement windows would undermine if not remove the heritage value of the listed building and the proposal would be contrary to Policy CP31 of the adopted Core Strategy and Policy DMD44 of the Proposed Submission DMD (March 2013) which seeks development to conserve and enhance the special interest, significance or setting of a heritage asset.

7.6 These concerns where identified by the Council at the pre-application stage when it identified the information that would be required with any formal

planning application in light of the planning history and the constraints on the site. Regrettably, this advice has not fully been taken on board and requested information has not been submitted. Viability and the financial pressures on delivering projects of this nature have also been fully recognised and officers have sought to take a pragmatic and proactive stance from the pre-application stage, throughout the planning application process through negotiations, attending meetings and site visits and suggesting solutions to reduce any significant impact on the listed building and reduce the number of pre-commencement conditions. In so doing, it is recognised even in the comments of CAG, that the key heritage significance is the glazing to the building with significant flexibility to support this being achievable on the material and use of brick bond. Despite this, the applicant/ agent has not been willing to amend the proposal in terms of the replacement windows, the size of the extension to the Broadbent building, the brick sample and bond. Officers have compromised and accepted elements of the scheme such as the height and width of the extension due to the overall public benefits the scheme will bring to the local community but with no further progress, it has been left to assess the scheme notwithstanding the substantial harm identified, against the criteria set out in the National Planning Policy Framework.

7.7 The key here is whether the harm or loss is outweighed by the benefit of bringing the site back into use.

7.8 It is recognised that the application would ensure that the listed building is rescued from vacancy and further neglect; and furthermore see the Broadbent building brought back into its original education use. The proposals also seek to reclaim plan form, fabric and some internal spaces of the original which is welcomed. However, the main benefit would be the degree to which this would meet current and future need within the Borough for secondary school places.

7.9 The Council is reliant on the places provided by Heron Hall Academy to meet their statutory responsibility to provide enough school places to meet demand. With a high proportion of children and young people and a growing population, the new secondary school would help meet the growing need for secondary schools in the borough. There has been a significant expansion in primary schools in the Borough in recent years and this will eventually feed through into a need for expansion in the secondary sector. Consequently there will be a need to accommodate this expansion at secondary school level in years to come. The secondary school is not identified as a school to come forward over the plan period however it is recognised that it would provide flexibility and parental choice for the community. The existing students and future students due to start in September 2015 cannot be accommodated on the current Heron Hall site but the students could be relocated to temporary accommodation, although this would result in additional costs.

7.8 The proposed development as currently envisaged would substantially harm if not remove the heritage value of the listed building. Careful consideration has been given against this context to the weight that should be attributed to the education need in the borough which Heron Hall Academy contributes to and whether this benefit outweighs the identified harm. It is a very finely balanced argument but regrettably, it is considered the public benefit associated with the delivery of secondary school places does marginally outweigh the impact.

7.9 The Environment Agency has raised an objection to the scheme because the Flood Risk Assessment lacks engagement with SuDS and does not meet the

requirements of the NPPF and the NPPG. However an updated Technical Note to stand alongside the FRA has been submitted to the EA and the Local Planning Authority and this may lead to the EA withdrawing their objection.

8.0 Recommendation

That subject to the Environment Agency withdrawing their objection and pending the completion of a satisfactory Section 106 Agreement, the Head of Development Management / Planning Decisions Manager, planning permission shall be granted BE GRANTED subject to the following conditions:

1. Development to start within three years.
2. Development to be in accordance with approved plans.
3. Details of external materials.
4. Repair schedule and method statement for the terrazzo stair floor and cill repairs.
5. Additional detailed drawings.
6. Room by room schedule of removal/ retention of original radiators and parquet flooring.
7. Recording of the workshops and a signifier of this section of the site.
8. All satellite dishes and radio antennae to be removed.
9. Caretaker's Cottage to be weather tight.
10. Details and drawings of the PV array. Service and maintenance
11. EPC
12. Energy Statement
13. SuDS details
14. BREEAM
15. Water Efficiency
16. Green Procurement
17. Site Waste Management Plan
18. Considerate Constructors
19. Rain Water Harvesting
20. Nesting Birds
21. Bats – Destructive Demolition
22. Biodiversity Enhancements
23. Tree Protection Plan
24. Landscaping Scheme
25. Details of Enclosure
26. Details of the two vehicular access arrangements and delivery of second vehicle access by September 2016
27. Details of the pedestrian access to the high street (temporary and permanent)
28. Temporary School Traffic Access Management Plan based on the western access
29. Permanent School Traffic Access Management Plan based on both accesses
30. Details and drawings of electric charging points
31. Details and drawings of the cycle parking
32. Contamination Investigation and Assesment of the extent of contamination
33. Written approval of Remediation Strategy if contamination found during the works
34. Construction Traffic Management Plan
35. Restricted Hours – Opening
36. Community Use Plan

That LISTED BUILDING CONSENT BE GRANTED subject to the following conditions:

1. Development to start within three years.
2. Development to be in accordance with approved plans.
3. Details of external materials.
4. Repair schedule and method statement for the terrazzo stair floor and cill repairs.
5. Additional detailed drawings.
6. Room by room schedule of removal/ retention of original radiators and parquet flooring.
7. Recording of the workshops and a signifier of this section of the site.
8. All satellite dishes and radio antennae to be removed.

Notes

Application site boundary

Additional land under same ownership

Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning	KR	NM
B	09.09.14	For Planning - Access points indicated	KR	NM
C	29.10.14	For Planning - Red line revised	KR	NM
D	30.10.14	For Planning	KR	NM

Key Plan

N

Project
Willmott Dixon
Heron Hall Academy

Drawing
Site Location Plan

Scale
1:1250 @ A3

Date
11.07.14

Status
For Planning

Drawn by
KR

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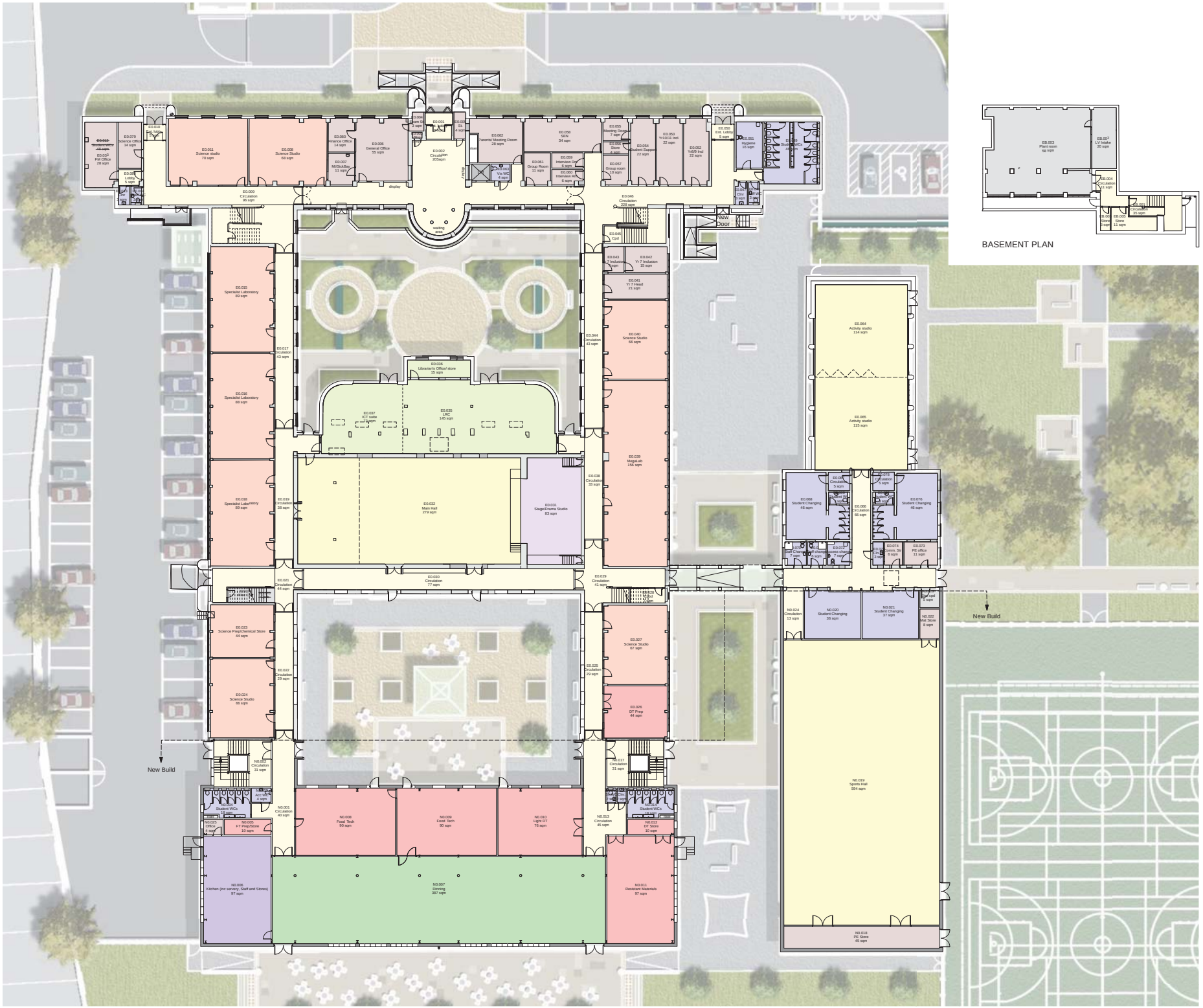

BASEMENT PLAN

Notes
Based on Plowman Craven survey '29822 BIM Heron Hall Academy, Prov 5' 15.11.13

The landscape arrangement has been developed in response to consultation with Heron Hall Academy and the Education Funding Agency. The proposals will be refined in further detail as part of the ongoing design process and for agreement with Enfield Planning department in discharge of a landscape planning condition. It is proposed that such discharge will be required prior to commencement of the landscape works.

Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning	KR	KR
B	08.08.14	Room numbers added. Existing doors nibs removed. Room layouts ammended to SEN and student support. Existing rooflights to LRC shown.	CLL	KR
C	13.08.14	Room numbers updated & Rm 'E0.043 Yr 7 Inclusion' added/ revisions as clouded.	CLL	KR
D	27.08.14	Fm Office and student toilets. Sanitary layouts shown. Finance office. Doors as clouded.	CLL	KR
E	02.09.14	Food prep and kitchen office. For Planning.	KR	KR

Key Plan

Project
Willmott Dixon
Heron Hall Academy

Drawing
Proposed
Basement & Ground Floor Plan

Scale	Date
1:200 @ A1	22.07.14

Status
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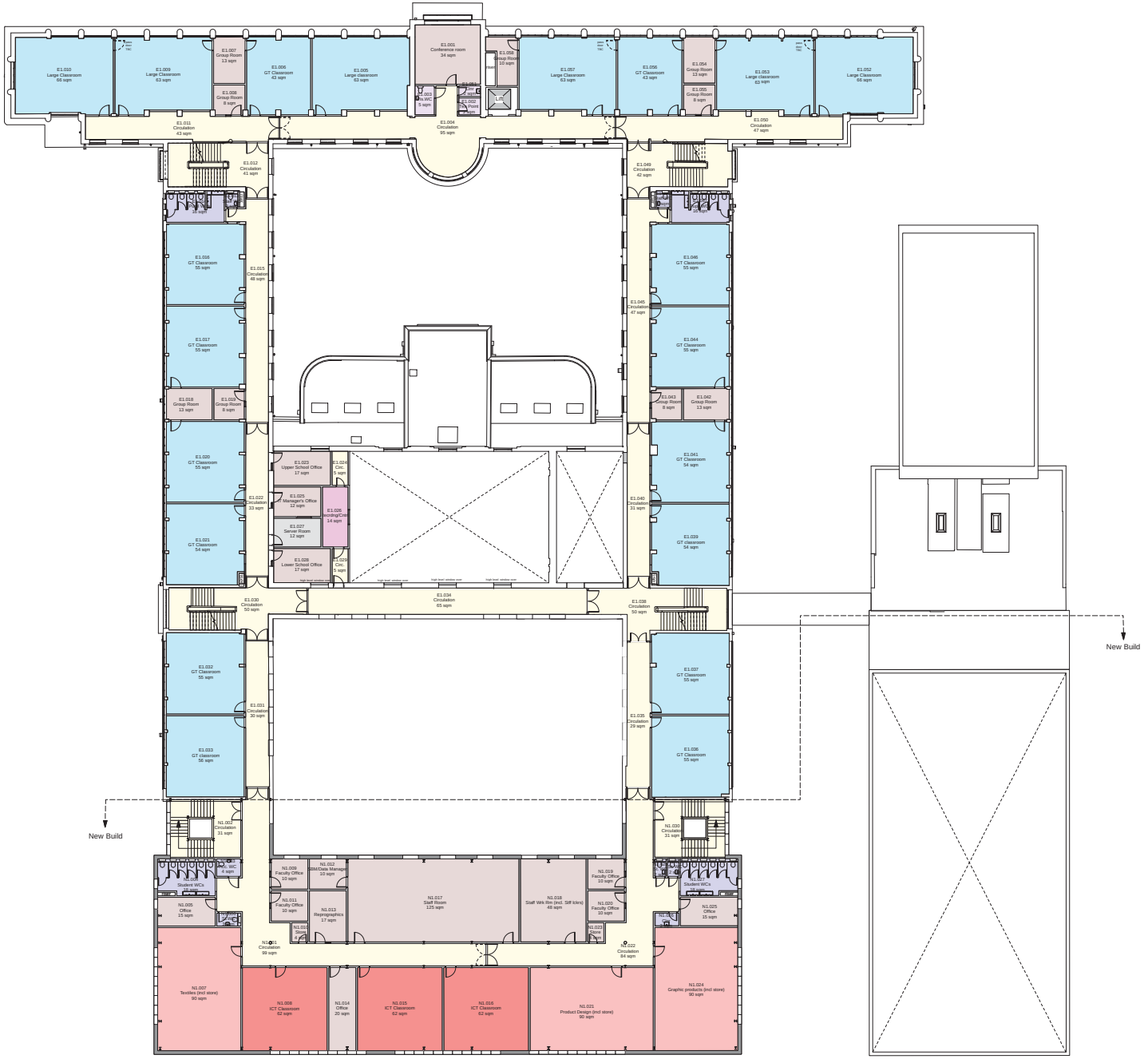

Notes
Based on Plowman Craven survey '29822 BIM Heron Hall Academy, Prov 5' 15.11.13

Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning	KR	KR
B	08.08.14	Room numbers added. Existing doors nibs removed. Group rooms, mezzanine layout.	CLL	KR
C	27.08.14	Sanitary layouts shown stores added.	CLL	KR
D	02.09.14	For Planning	KR	KR

Key Plan

Project
Willmott Dixon
Heron Hall Academy

Drawing
Proposed
First Floor Plan

Scale
1:200 @ A1

Date
22.07.14

Status
For Planning

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Notes
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Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning	KR	KR
B	08.08.14	For Information. Sports Hall doors amended.	CLL	KR
C	02.09.14	Activity studio window key. For Planning	KR	KR
D	09.10.14	For Information.Horizontal eaves detail added where clouded.	CLL	KR
E	27.10.14	Eaves detail revised to double coping. Green wall shown.	CLL	KR

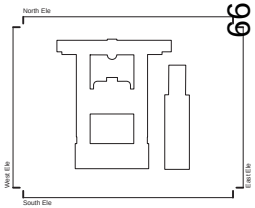
WEST ELEVATION

EAST ELEVATION

Materials Key

1. Brick
2. Retained and refurbished window
3. Replacement aluminium windows
4. New aluminium windows
5. Curtain wall glazing
6. Plant screen
7. Tiles
8. Green Wall
9. Metal Cladding Panels

Key Plan



Project
Willmott Dixon
Heron Hall Academy

Drawing
East & West Elevations

Scale
1:200 @ A1

Date
24.07.14

Status
For Planning

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Job n°_Type_Series_Revision
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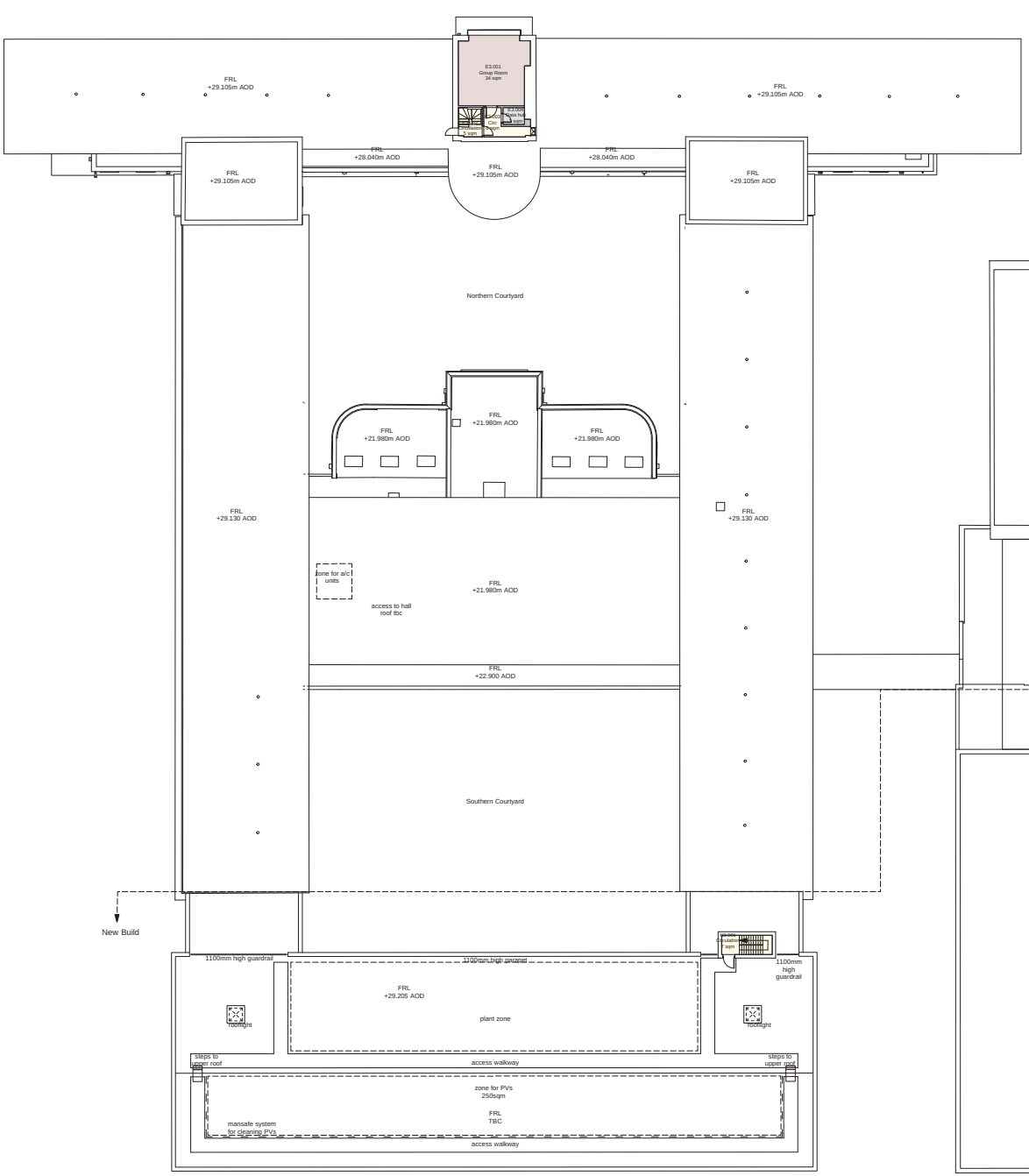
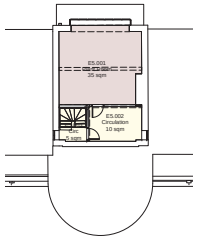
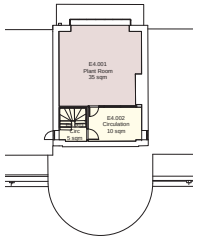


TOWER ROOF PLAN



FIFTH FLOOR PLAN



FOURTH FLOOR PLAN

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Notes
Based on Plowman Craven survey '29822 BIM Heron Hall Academy, Prov 5' 15.11.13

Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning	KR	KR
B	08.08.14	Room numbers added.	CLL	KR
C	13.08.14	Roof levels updated.	CLL	KR
D	02.09.14	For Planning.	KR	KR

Key Plan

Project
Willmott Dixon
Heron Hall Academy

Drawing
Proposed
Third, Fourth, Fifth, Tower Roof Floor Plan

Scale
1:200 @ A1

Date
22.07.14

Status
For Planning

Drawn by
CLL

Job nº_Type_Series_Revision
2467_GAD_120031_D

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Notes
Based on Plowman Craven survey '29822 BIM Heron Hall Academy, Prov 5' 15.11.13

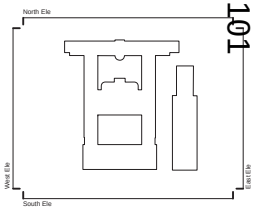
Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning.	KR	KR
B	13.08.14	Background amended to show new build. Sports hall door removed.	CLL	KR
C	02.09.14	For Planning.	KR	KR
D	09.10.14	For Information.Horizontal eaves detail added where clouded.	CLL	KR
E	29.10.14	Eaves detail revised to double coping detail. Green wall shown.	CLL	KR

NORTH ELEVATION

Materials Key

1. Brick
2. Retained and refurbished window
3. Replacement aluminium windows
4. New aluminium windows
5. Curtain wall glazing
6. Plant screen
7. Tiles
8. Green Wall
9. Metal Cladding Panels

Key Plan



SOUTH ELEVATION

Project
Willmott Dixon
Heron Hall Academy

Drawing
North & South Elevations

Scale
1:200 @ A1

Date
24.07.14

Status
For Planning

Drawn by
CLL

Job nº_Type_Series_Revision
2467_GAD_140011_E

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Notes
Based on Plowman Craven survey '29822 BIM Heron Hall Academy, Prov 5' 15.11.13

Issue	Date	Notes	Chkd	Apprd
A	24.07.14	For Planning	KR	KR
B	08.08.14	For Information. Sports Hall doors amended.	CLL	KR
C	02.09.14	Activity studio window key. For Planning	KR	KR
D	09.10.14	For Information.Horizontal eaves detail added where clouded.	CLL	KR
E	27.10.14	Eaves detail revised to double coping. Green wall shown.	CLL	KR

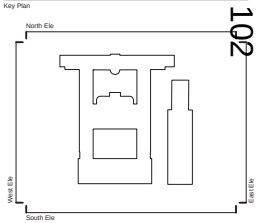
WEST ELEVATION

EAST ELEVATION

Materials Key

1. Brick
2. Retained and refurbished window
3. Replacement aluminium windows
4. New aluminium windows
5. Curtain wall glazing
6. Plant screen
7. Tiles
8. Green Wall
9. Metal Cladding Panels

Key Plan



Project
Willmott Dixon
Heron Hall Academy

Drawing
East & West Elevations

Scale
1:200 @ A1

Date
24.07.14

Status
For Planning

Drawn by
CLL

Job nº_Type_Series_Revision
2467_GAD_140021_E

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