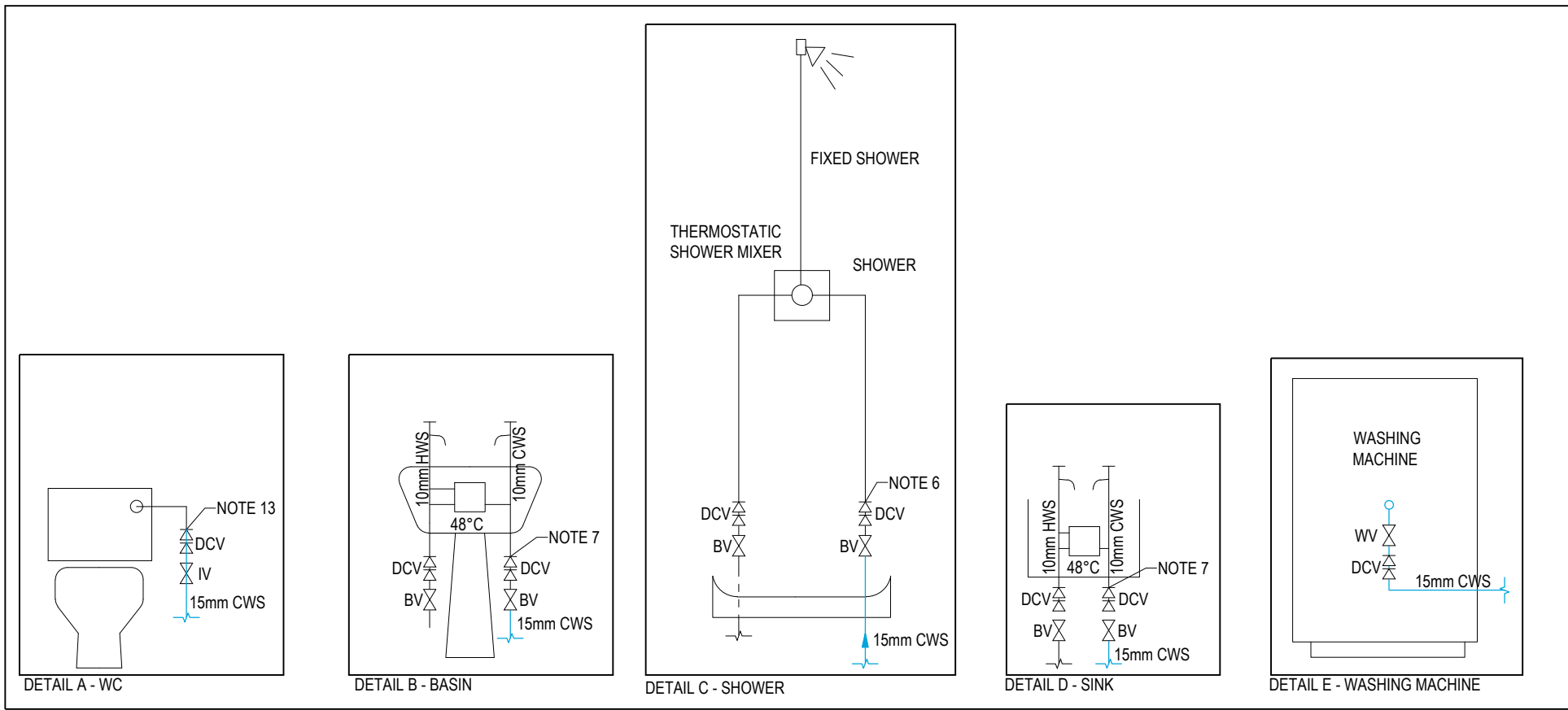


Schedule							
REF	Description	Manu	Model	Location	Duty	Notes	No. Units
CWST1	Water tank	Dewey waters	Sectional GRP	Town hall plant room	Nominal capacity: 8,000 litres	Sectional, internally flanged GRP tank with 2no Keraflo 1"SF KB valves. Size: 1m x 4m x 2m	1
CWBS1	Booster set	Grundfos	Hydro MPC-E 3 CRIE3-5 Product No.: 98426897	Town hall plant room	1.9 l/s at 3.05 bar	Triple pump booster set with internal expansion vessel, anti-vibration mounts and control panel	1
CWBS2	Cat 5 combined tank/booster set	Dutypoint	Minibreak	Town hall plant room	18 litre storage, max flow required 0.14 l/s at 3 bar	Combined booster and tank system with Cat 5 AB air gap, electronic pressure controller and GRP insulated tank	1



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It is the responsibility of the installer/contractor to ensure that there are no conflicts with information provided by themselves & that of any manufacturers information or relevant requirements of statutory Bodies or Client specification/ETs. If any conflicts do exist it is the responsibility of the installer/contractor to inform The Consultant/Client immediately verbally & in writing.

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NOTES

- Refer to individual dwelling drawings for the mechanical services particular details.
- The Stopcock and PRV (set at 2 bar) in the riser cupboard should have threaded or soldered fittings (not compression fitting). No compression fittings are to be used before the PRV.
- All water pipework to be in copper unless otherwise stated. All pipework smaller than 67mm is to be silver soldered and larger than 67mm is to be brazed.
- All bin store and wash down points to be provided from a Category 5 break tank to prevent possible backflow.
- All pipe work is to be insulated in ducts and voids for heat transfer. To be insulated in accordance with Building Regulations Part L and have a thermal conductivity not exceeding 0.035W/mK. All pipe work within 1m of the cylinder shall be insulated with minimum of 15mm thickness insulation. All insulation to be Class T² polyethylene tubing.
- All shower hoses located in baths and showers shall be fitted with a double check valve to prevent Fluid Category 3 contamination in accordance with the Water Regulations 1999. There must be a minimum gap of 25mm between the split over level of the toilet pan and the shower handset to prevent a Fluid Category 5 contamination in accordance with the Water Regulations 1999.
- Where basins/baths are fitted with a combination tap or mixer fitting and the hot and cold water are not balanced, the hot and cold water supply should be fitted with a double check valve to prevent Fluid Category 2 contamination in accordance with Water Regulations 1999. Should the tap outlet be submerged if basin/bath is filled to spillover level, the hot and cold water supply shall be fitted with a double check valve to prevent Fluid Category 3 contamination in accordance with Water Regulations 1999.
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- Flow restriction shall be provided on outlets, flow rates scheduled below.
- A thermostatic mixing valve set at a maximum of 48°C must be fitted to all baths, basins and sink hot water outlets. Refer Building Regulation Approved Document G (2015), section 3.65-3.68.
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- WC's are to have an AG air gap in accordance with water authorities guidance. Should a WC with an AC air gap be specified, a double check valve will be required on the supply.
- External cold water pipe work to be trace heated to prevent freezing.
- Where services are capped for future use, an isolation valve should be installed as close to the connecting branch as practicable to prevent contamination due to water in the unused pipework becoming stagnant.

LEGEND:

A/C Access cover
SAV Grundfos Anti-Surge Valve GBR81001 - Combination Surge Arrestor and Air Release Valve with drain.
DCV Double check valve
DOC Drain off cock
IV Isolation valve
LIV Full bore lockable isolation valve for commissioning and maintenance.
LS Lockshield valve
LU Loading units
OIF Overflow pipe
PRV Pressure reducing valve (Honeywell D06F)
SCV Single check valve
SPR Refer to Sprinkler Schematic for valve arrangement and continuation
STR In-Line "Y" Type Strainer
WIP Warning pipe

(M) Water board meter for tenant supply
(LM) Water board meter for landlord supply with pulsed output
(CM) Private check meter for management use with pulsed output

Normally open valve
Normally closed valve
Flexible pump connection
Aqueleak WG1 - Water leak detection system to comply with BREEM WAT02 and WAT03

P/R controlled solenoid valve to open when movement in the room is detected. To close after 15 minutes to shut off water supply to each zone if no movement is detected.

Rev	Date	Description	Scale	NTS	Size	A1
C5	09.02.2023	Added note for prevention of 'dead-legs'	DALS	EJ		
C3	18.08.2022	Added note for tank detection	DALS	EJ		
C2	04.03.2022	Added supplies to Pantry	DALS	EJ		
C1	02.02.2022	Updated CAT 5 supply	DALS	EJ		
P1	13.11.2020	Construction Issue	DALS	EJ		
P1	13.11.2020	Preliminary Issue	DALS	EJ		

Current purpose: CONSTRUCTION
Original Issue Date: 13.11.2020
Dwn: DALS
Chkd: EJ

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26-27 The Hill, Northfleet, Gravesend
Kent, DA11 9EU
www.whitecode.co.uk
T: 01322 289977 E: design@whitecode.co.uk

Title: WATER DISTRIBUTION SCHEMATIC TOWN HALL

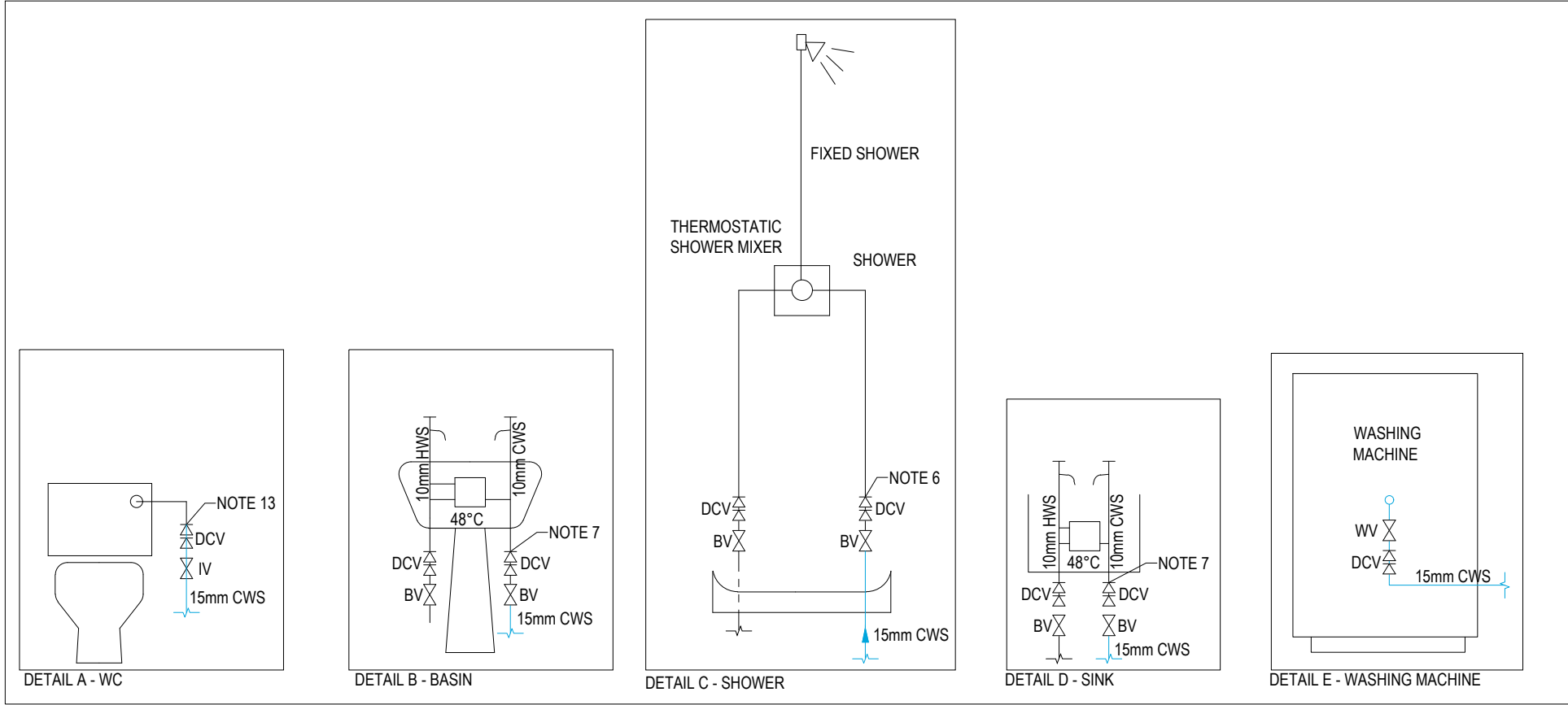
Project: HORNSEY TOWN HALL

Client: ARDMORE

Dwg Number: 10687-M-04-TH-0002

Rev: C5

Schedule							
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- NOTES
- Refer to individual dwelling drawings for the mechanical services particular details.
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- LEGEND:
- A/C Access cover
 - SAV Grundfos Anti-Surge Valve GBR81001 - Combination Surge Arrestor and Air Release Valve with drain,
 - DCV Double check valve
 - DOC Drain off cock
 - IV Isolation valve
 - LIV Full bore lockable isolation valve for commissioning and maintenance.
 - LS Lockshield valve
 - LU Loading units
 - OIF Overflow pipe
 - PRV Pressure reducing valve (Honeywell D06F)
 - SCV Single check valve
 - SPR Refer to Sprinkler Schematic for valve arrangement and continuation
 - STR In-Line "Y" Type Strainer
 - WIP Warning pipe
 - (M) Water board meter for tenant supply
 - (LM) Water board meter for landlord supply
 - (CM) Private check meter for management use
 - Normally open valve
 - Normally closed valve
 - Flexible pump connection
 - Aqualeak WG1 - Water leak detection system to comply with BREEM WAT02 and WAT03
 - PIR controlled solenoid valve to open when movement in the room is detected. To close after 15 minutes to shut off water supply to each zone if no movement is detected.

DRAWING ISSUED TO AS-BUILT STATUS FOLLOWING NO FURTHER COMMENTS FROM ARMORE AGAINST THE CONSTRUCTION ISSUE DRAWING.

Rev	Date	Description	Drawn	Chkd
AB	26.09.2024	AS BUILT	PM	JM
C6	09.02.2023	Added supplies for retail G.50	DALS	EJ
C5	09.02.2023	Added note for prevention of 'dead-legs'	DALS	EJ
C4	18.08.2022	Added note for leak detection	DALS	EJ
C3	17.08.2022	Added supplies to Pantry	DALS	EJ
C2	04.03.2022	Updated CAT 5 supply	DALS	EJ
C1	02.02.2022	Construction Issue	DALS	EJ
P1	13.11.2020	Preliminary Issue	DALS	EJ

Current purpose: AS BUILT Scale: 1:1 Size: A1
Original Issue Date: 13.11.2020 Drawn: DALS Chkd: EJ



Water Distribution Schematic
TOWN HALL

Project: HORNSEY TOWN HALL

Client: ARMORE
Dwg Number: 10687-M-04-TH-0002
Rev: AB



The Aqualeak WG is a Major Leak Detection System specifically designed to help customers meet the requirements of the WAT-02 and WAT-03 elements of the Building Research Establishment Environmental Assessment Method (BREEAM) criteria, demonstrating the environmental and sustainability credentials of the property.

The system is capable of detecting major water leaks on the mains cold water supply of a commercial building and can be located at the site boundary or as it enters the property. The WG can operate as a standalone system or be integrated with a Building Management System (BMS).

The control unit can be programmed to monitor specific volumes of water, at specific times, which allows it to cater

for set occupancy requirements. The system operates by monitoring the number of pulses given out by the pulse reader (where 1 pulse equals 10 litres of water). If the pre-set amounts are exceeded, a signal is sent to the WG unit which triggers an audible and visual alarm.

The WG can also autonomously shut off water feeds at set times to help contractors meet the CIREG best practice guidance for construction site water monitoring.

Benefits

- | | |
|--|--|
| Helps users meet BREEAM WAT-02/03 criteria | Single solution for monitoring large properties |
| Reduced risks of flooding | Can help users meet CIREG best practice guidance |
| Minimum human intervention required | Helps reduce water consumption in building |

Features

- | | |
|--|--|
| 7 day threshold programming | Capacitive touch interface |
| Multiple outputs | Audible and visual alarms |
| Pulsed input/output - 1 pulse = 10 litres | Monitors for leaks and internal system faults |
| 24 by 7 monitoring | Can monitor different thresholds at different times |
| Remote status monitoring when paired with external devices | Different flow rate monitoring at different times of the day |
| User configurable depending on monitoring requirements | Can autonomously close the valve at pre-set times of the day |

Operation

In operation, the Aqualeak WG continuously monitors the flow sensor connected to it for both circuit integrity and the presence of water. If a leak or fault is detected, the Aqualeak WG will and/or can be configured to:

- | | |
|--|--|
| Activate an audible alarm and illuminate the LEDs | Automatically switch to back-up battery if required |
| Activate default and user-defined outputs | Shut off local water supplies via a shut-off valve |
| Report its alarm status to any connected device (BMS/SMS/beacon valve) | Allow users to investigate faults/alarms and perform diagnoses |

Compliance

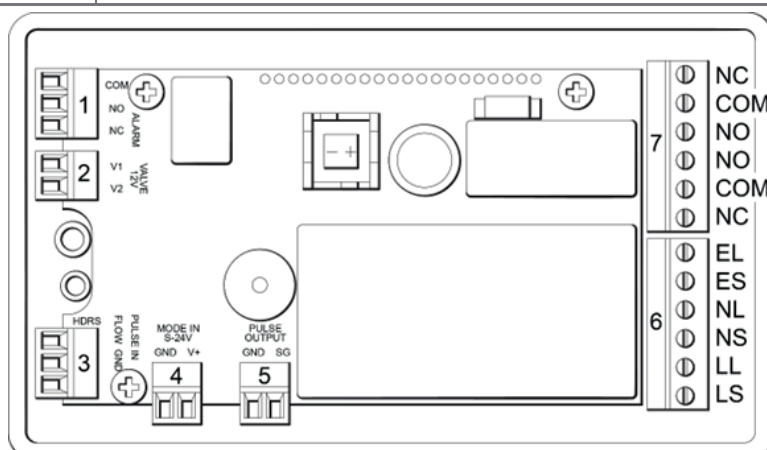
- | | |
|--------------|--|
| CE compliant | Designed and built in the United Kingdom |
|--------------|--|

Technical Specifications

Master Panel	Specification
Dimensions	146 x 86 x 69 mm - Width x Height x Depth
Weight	0.3 Kilograms
Supply Voltage	100-240 VAC (Volts / Alternating Current). 50/60 Hz frequency
Output Relay Voltage	230 VAC
Output Relay Current	8 Amps. Maximum into resistive load
Relay Minimum Load	10 Milliamps - at 5 VDC (Volts / Direct Current)
Leader Cable	Belden 9534 - variable length
Detection Response Time	1 second
Alarm (Audible)	85 Decibels within 0.6 m range
Alarm (Visible)	LED indicator on front panel
Operating Temperature	0 to +50°C
Display	3 lines x 16 characters LCD
Operating Temperature Valve	0 to +60°C
Operating Humidity	10 to 95% - Relative humidity (non-condensing) at 45°C
Operating Altitude	0 to 3,000 Metres
Storage Temperature	-20 to +70°C
Input channels	1

Input-Output Connections

Item	Name	Notes	Relay Abbreviations
1	Alarm Relay	COM NO NC	COM = Common NC = Normally Closed NO = Normally Open
2	Latching Valve Output	Connection for latching solenoid valve	
3	Meter Input	PULSE IN Flow GND	
4	Mode In S-24V	Connection for external alarm	
5	Pulse Output (for BMS)	GND SG	
6	Mains Supply / Loop	E E N N L L	Main Abbreviations
			LS = Live Supply LL = Live Loop NS = Neutral Supply NL = Neutral Loop ES = Earth Supply EL = Earth Loop
7	Mains Alarm Relay 1 & 2	NC COM NO NO COM NC	Mains Alarm Relay Abbreviations
			NC COM NO NO COM NC
8	Back-Up Battery	The supplied battery should be installed prior to initial set-up	



Hornsey Town Hall

BREEAM Refurbishment & Fit Out 2014

Post Construction Site Inspection Report

Prepared for Ardmore

Assessment Reference BREEAM-0081-6108

Revision 1

24th October 2024



WHITECODE
CONSULTING



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Rev No.:	Date:	Status/Comments:	Prepared by:	Position
1	24.10.24	Post Construction	Katy Venables	BREEAM Assessor

1.0 Introduction

This report has been produced by Whitecode Consulting Ltd who is licensed by BRE to carry out BREEAM Assessments. The Post Construction review aims to provide evidence obtained from a site inspection to ensure that commitments made during the design and construction process have been implemented in accordance with BREEAM criteria.

The site is registered under BREEAM Refurbishment and Fit Out 2014, covering Parts 1-4 and seeks to achieve a Good rating which requires a score of 45 or above.

The site inspection occurred on 24th October 2024 at 10.00am in the presence of Elliot Bacon, Senior Design Manager at Ardmore.

2.0 Site Description

The proposed development application was granted consent by the London Borough of Haringey in March 2018 (application reference: HGY/2017/2220). The approved planning application includes:

"Refurbishment and change of use of the Hornsey Town Hall from b1 use class and sui-generis to a mixed use scheme comprising a hotel (use class c1), food and beverage uses (use classes a3 and a4), community uses (use class d1, d2 and sui-generis) and co-working use (use class b1). Removal of east wing extension and erection of east wing roof extensions. The erection of a 7 storey building and part 4, part 5, part 6, part 7 storey building to the rear and associated car parking at basement level. Change of use of the ground floor of Broadway Annex to food and beverage use (use class a3 and a4) and change of use of the first and second floors to residential use. The erection of an extension to the rear of the Broadway Annex and erection of a residential mews block to the rear of the Broadway Annex. Comprising 146 residential units in total. Alterations and landscaping improvements to the town hall square and open spaces."

3.0 Site Inspection Findings

Energy

Ene 06 Energy Efficient Transportation Systems

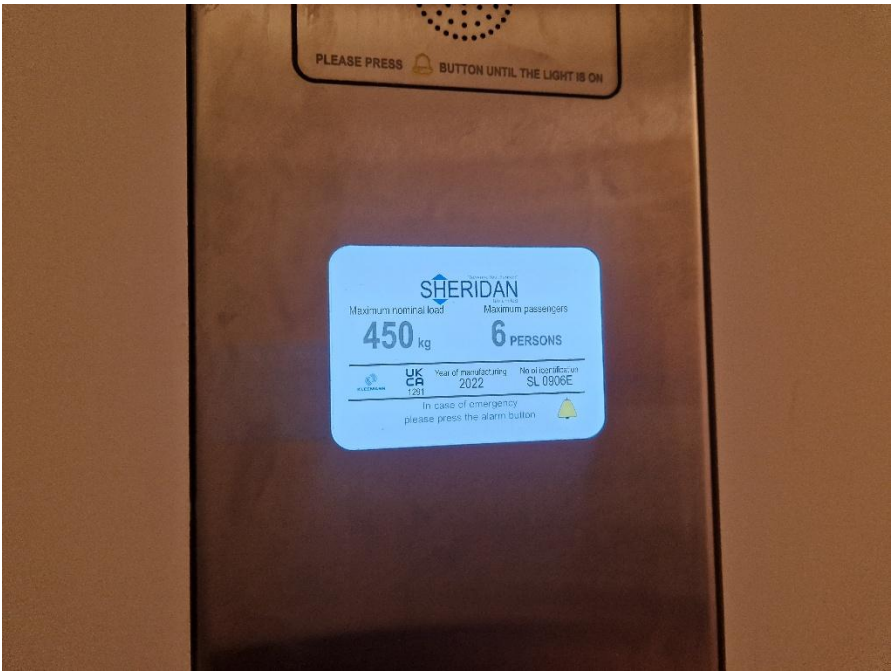
Design Specification

Design Stage information indicated Kleeman's lifts were proposed.

Visual Inspection

Kleeman lifts have been installed which is consistent with design stage proposals.











Water

Wat 01 Water Consumption

Design Specification

The Transport Statement by RPS confirmed that there is a nursery, primary school, post office, supermarket and leisure centre within 400m of the development.

Visual Inspection

Only wash hand basin taps and WC's have been installed in the Town Hall. These appear consistent with the datasheets provided by Ardmore. It is understood that flow rate testing will be carried out.





Wat 02 Water Metering

Design Specification

The internal water schematic showed a water meter with a pulsed output on the incoming mains to the building.

Visual Inspection

Aquamotion water meters have been installed in the building.





Wat 03 Water Leak Detection

Design Specification

The internal water schematic indicated a WG1 Aqualeak leak detection system was proposed.

Visual Inspection

A WG1 Aqualeak leak detection system has been installed.



Waste

Wst 03 Operational Waste

Design Specification

Drawings showed the location of a bin store for the Town Hall/Hotel and the types and volumes of the bins provided. The drawing also indicated the access routes for the waste collection company.

Visual Inspection

A Bin store has been provided for the Town Hall and Hotel which is consistent with the design intent. The bins themselves are labelled with the material that can be deposited in it (food, mixed recyclables, general waste) as well as the main door to the bin store having signage. A tap for washdown is also provided. Lights are controlled by PIR.



Signage provided on the door within the bin store.



Commercial bins include signage indicating what materials can be placed within them.



General waste bins have signage on them stating 'General Non-Hazardous Compactable Waste'.



PIR controls the lighting in the bin store.

Pollution

Pol 02 Nox Emissions

Design Specification

The plant room drawing indicated that a Rehema CHP and Hoval Ultragas gas boiler were proposed for the development.

Visual Inspection

Rehema CHP engine and a Hoval Ultragas gas boiler have been installed in the energy centre.



Rehema CHP engine.



Hoval Ultragas Boilers.

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