# Development of 85 bed Care Home @ Willingdon Park Manor, Eastbourne BN22 0AB

## Estate Management Plan

### 1. Introduction

Hallmark Care Homes (Eastbourne) Limited is the freeholder of the site and will retain the freehold of the land in perpetuity.

Hallmark Care Homes (Eastbourne) Limited will be the Management Company for the site.

The Management Company will be responsible for the maintenance and management of all private roads and footways, paths and shared open spaces. This will include repair, keep in repair and maintain to a clean standard. All costs to be funded by Hallmark Care Homes Limited.

Hallmark Care Homes (Eastbourne) Limited as landowner, with a long term interest, will work with the community, encouraging residents of all ages to take an active part in the environment in which they have chosen to live.

This Management Plan sets out the approach to ensuring the estate provides an attractive environment and the roads, paths and open spaces are safe for vehicle/ pedestrian use. Specific objectives of the Management Plan are as follows :

- To ensure the safe movement of vehicles and pedestrians along the road.
- Provide a financially sustainable income for funding the management works.
- Create a safe environment which residents & vistors of all ages can enjoy
- Maintain a high standard of maintenance and care.

Management and maintenance programmes will be reviewed at no less than five yearly intervals by the Management Company to ensure that compliance with agreed layouts and management and maintenance plans remain appropriate for purpose.

Where specific on-site management operations are contracted out, there will be a preference (subject to value-for-money and competence requirements) for local contractors to be appointed.

All on-site management operations will accord with clear specifications set out in this Management Plan (and more detailed documents and specifications where relevant).

The Management Company will ensure that appropriate insurance is provided which covers all areas the Management Company is responsible for, including roads, footpaths, street lighting and shared open spaces.

## 2. Open Space and Trees

Hallmark Care Homes (Eastbourne) Limited will take full liability and long term stewardship of the all open spaces and trees.

A funding mechanism will ensure an annual and equitable income stream in perpetuity for the development to ensure the ongoing management of the all the landscape amenities. This will be wholly funded by Hallmark Care Homes Limited

General Provisions:

- The specification of any and all standards of service in maintenance specifications are deemed to be the minimum acceptable standards. Any party undertaking operations in accordance with this Management Plan will be required to carry out all operations necessary to maintain these standards.
- Specialist operations (such as the maintenance of drainage structures and their monitoring) will be overseen by Hallmark's own Operations Team. Annual audits of these structures will be carried out.
- Nursery stock which has died, stolen or been vandalised will be replaced no later than the next planting season. Replacement plants will be the same/similar species as originally approved by the Local Planning Authority and planted. If areas of planting repeatedly fail or are repeatedly vandalised, the Management Company may approach the Local Planning Authority to seek consent to vary the approved Landscape Plan.
- Areas of grass which become worn or damaged due to vandalism or excessive use will be cultivated to prepare a suitable tilth ready for seeding between April and August. Temporary fencing may be erected to protect newly seeded areas.

Contracted Labour:

- The Management Company will endeavour to source locally-based landscape contractors to the site, subject to the following:
  - The contractor must comply with all statutory requirements concerning the employment of labour whether those provisions affect the execution of the service or otherwise.
  - All operatives will at all times be employees of the contractor or be sub- contracted to the principal contractor.
  - The contractor will provide all skilled and qualified labour necessary for the expeditious carrying out of the services.
  - The contractor will ensure that the standards of maintenance are brought to the attention of each operative in relation to the provision of the services.
  - The contractor will comply with all statutory requirements concerning health, safety and welfare.
  - The contractor is responsible for ensuring that all the work equipment supplied for use in connection with the village green and open space complies with all relevant statutory requirements.

Maintenance Specification:

- Litter Picking:
  - Litter means paper, bottles, cans and sweet wrappers and other small paper, glass or plastic based products; debris means stones, bricks, twigs and any storm damaged material; fly tipping means any material purposely dumped without authority on any part of the site, including but not limited to household rubbish, household appliances, furniture or garden waste.
  - On no less than 23 occasions each year, the whole site will be walked and litter collected and removed to an off-site tipping or recycling facility. Debris and fly- tipping will be removed as necessary separately from the routine maintenance visit.

- Amenity Grass Management
  - Prior to all grass cutting operations, litter and debris shall be collected and removed off site.
  - All arisings on roads, pathways and hard-standing in general shall be removed before leaving site.
  - All growth at, and around obstacles, fence lines, shrub beds shall be cut at the same time as the mowing operation.
  - Where there are bulbs, cutting will not commence until at least 6 weeks after flowering.
  - Cutting frequency will be sufficient to ensure that the height does not exceed 75mm and that it is cut to a height of 25mm. If ground conditions or inclement weather prevent cutting operations and grass length threshold is exceeded, the contractor must notify the Management Company.
  - All amenity grassed areas will have a combined spring application of grass herbicide and fertiliser.
  - All mowing and cutting operatives will exercise care when operating machinery close to trees or shrubs. Where trees are vulnerable to damage a 600mm diameter circle at the base of the tree will be maintained free of vegetation by an application of a contact herbicide at the beginning of the grass cutting season.
  - Grass edging will include keeping the turf edge adjacent to shrub beds, tree bases and path edges (if required) evenly trimmed. All arisings will be collected and removed off site. All edges will be re-formed and using an appropriate edging tool every two years. All edges will be maintained from grass growth using long handled sheers every time the amenity grass sward is cut.
- Existing hedgerows
  - Existing hedgerows will be pruned once per annum between the months of November-January and maintained at a height of between 1.5-2m. All clippings will be removed off site.
  - The base of the hedgerow will be kept litter free.
  - All grass growth at the base of the hedge line will be strimmed once per annum during the months of September/October.
  - Any broadleaf weeds that appear (eg thistle, docken) will be spot-sprayed using a translocated herbicide.

- Heavy Standard and Standard Trees
  - Standard trees will be checked and stakes and ties adjusted on a monthly basis for firmness, vertical positioning, rot or damage. All redundant stakes will be removed not sawn off at ground level. Epicormic growth will be removed as and when required.
  - In order to improve the habit of all staked trees they must be formatively pruned twice within the first five years after planting, to encourage branching. All dead branching to be removed

also.

- Any dead or damaged trees (including any associated stakes) will be replaced with a similar size and species within the next available planting season.

- Mature Trees
  - Mature trees will be considered individually and collectively. Each year the trees will be inspected as part of a health and safety audit by a qualified arborist. The trees will be assessed in relation to their age, species, size, condition and location. If abnormal features are identified which indicates ill health or the presence of a potentially mechanical weakness a programme of work will be prepared. If there is a legislative requirement to undertake the work an application will be made to the planning authority.
  - Only specialist contractors will be contracted to undertake the work once approval is granted. All work will be undertaken in accordance with British Standard Tree Work BS 3998:2010 by operatives with a proven experience and who are properly equipped with the appropriate skills and equipment.
  - Where trees are removed, the Management Company will replace the tree with a suitable replacement native species at a location agreed with the planning authority.

## 3. Roads and Footpaths

All Roadways including footways within the managed area will be maintained to Adoptable Standards as imposed by Lewes and Eastbourne Borough Council.

General Provisions:

- Roads, footpaths, road markings and areas of hard standing will be inspected during every visit for damage to wearing course or pc kerbing.
- If a repair is required, the Management Company will instruct two specialist civil engineering contractors to inspect and provide costs to repair the damage. The Management Company will notify residents of the repair required and cost to undertake the work. The work will be instructed based on best value to Hallmark Care Homes (Eastbourne) Limited and residents.
- The costs for repairs will be covered by the Management Company from the sinking fund.
- If the repair required is deemed a health and safety risk, the relevant area will be made safe and fenced off from public use until the repair works can be completed.
- Gullies will be inspected annually for blockages and any excessive silt build up will be jet washed.
- The surface of the footpaths and hardstanding will be kept free of weed, moss and algae growth by applying a suitable contact herbicide during favourable conditions to avoid herbicide drifting onto the surrounding grass and shrubs.
- Following grass cutting operations, the footpath and hard standing will be swept for grass cuttings and debris and the arisings taken off site to a licensed tip.
- If grit bins are provided, they will be re-stocked every autumn and inspected during each maintenance visit in the winter.

Car Park Lighting:

- Each column will be visually inspected twice per annum for any structural defects.
- Each column will be subject to an electrical engineers safety inspection.
- All lights to be inspected after nightfall for illumination defects twice per annum.
- Any bulb changes, structural repairs and wiring work will be instructed by the Management Company. The Management Company will tender light maintenance contract every three to five years. One contractor will be selected on best value requirements and appointed.

## 4. Soakaways, SUDS and Drainage:

- Maintenance of the soakaways and drainage infrastructure will be in accordance with the approved Drainage Strategy refer to 8633-C-01 Rev C3 – Drainage GA Plan; Foul and Surface Water Drainage Strategy Report January 2020 – Appendix H – Surface Water Maintenance Management Plan;
- All drainage facilities (including area designated under the s278 agreement works) within the managed area will be maintained to Adoptable Standards as imposed by Lewes and Eastbourne Borough Council as necessary.
- All drains, as necessary, will be cleaned no less than every six months.

General Maintenance Plan:

| Element | Maintenance Task | Frequency |
|---|---|---|
| Rainwater Goods | Clear debris from gutters and outlets | Twice a year |
| Rainwater Goods | Inspect for cracks and leaks | Twice a year |
| Slot Drainage | Clear vegetation and debris | Monthly April – September |
| Slot Drainage | Examine drainage slots and exposed edges of channel for damage | Twice a year |
| Slot Drainage | Examine grating locking system if fitted | Twice a year |
| Slot Drainage | Inspect sumps and buckets | Twice a year |
| Slot Drainage | Inspect concrete haunch to drain where exposed | Once a year |
| Slot Drainage | Inspect levels of paves areas | Once a year |
| Slot Drainage | Clean channels | Twice a year |
| Slot Drainage | Flush channel with water | Twice a year |
| Slot Drainage | Clean sump buckets | Twice a year |
| Below Ground Drainage | Inspect for blockages | Twice a year |
| Below Ground Drainage | Remove silt and debris from manholes and inspection chambers | Twice a year |
| Below Ground Drainage | Flush underground pipes with water | Twice a year |
| Porous Block paving | Brush and clear leaves, silt and debris | Twice a year |
| Porous Block Paving | Reapply 5mm gravel to joints if required | Twice a year |
| Trench Soakaways | Flush tank with water and remove silt | Twice a year |

**SURFACE WATER MAINTENANCE MANAGEMENT PLAN**

(In accordance with planning approved Foul and Surface Water Drainage Strategy Report January 2020 – Appendix H – Surface Water Maintenance Management Plan)

**SuDS MAINTENANCE MANAGEMENT PLAN**

This document sets out the principles for the long term management and maintenance of the proposed surface water Sustainable Drainage Systems (SuDS) installed at the Care Home development at Kings Drive, Eastbourne.

The purpose of this document is to ensure that the adopting operator of the building is entrusted with a robust inspection and maintenance programme, ensuring the optimum operation of the surface water drainage network is continually maintained for the lifetime of the development and to prevent the increased risk of flooding both on and off site.

As a managed care home all SuDS systems will be the responsibility of the company operating/running the care home to maintain.

SUDS are engineered solutions that aim to mimic natural drainage processes. They help to reduce pollution of watercourses and localised flooding, as well as providing amenity benefit and biodiversity.

Key Factors to be considered during maintenance

- Undesirable plants – all efforts should be made to prevent drains becoming blocked and the growth of unintentional vegetation which could be detrimental to the intentional plant regime, biodiversity aims and the building fabric.
- Regular site attendance for litter collection, grass cutting and checking of inlets, outlets and control structures.
- Occasional visits to brush clean inlet gullies and drainage channels, remove silt from source control features.
- Drain heads and outlets – all drainage points must be checked every year and cleared out it if necessary to ensure optimum performance.

The maintenance of all drainage features serving the development will be maintained by the building owner/operator. Ongoing maintenance activities for this infrastructure are detailed below.

All those responsible for the maintenance operations should adhere to the relevant health and safety legislation for the activities listed within this report (including lone working, if relevant). Method statements and risk assessments should always be completed prior to the undertaking of any works.

**Attenuation Tanks**

The ongoing maintenance activities for below ground cellular storage crates are detailed below.

| **Cellular Storage Crates** | |
|---|---|
| ***Regular Maintenance*** | ***Frequency*** |
| Inspection - Record and clean as required | Monthly |
| Litter and debris removal | Monthly |
| ***Occasional Tasks*** | ***Frequency*** |
| CCTV survey is blockages identified, jet clean as required. In line with manufacturers recommendations | As required |
| ***Remedial Work*** | ***Frequency*** |
| Jet clean as required. In line with manufacturers recommendations | As required |

**Conventional Surface Water Drainage Features**

The maintenance of all drainage features serving the development will be maintained by the building owner/operator. Ongoing maintenance activities for this infrastructure are detailed below.

| Maintenance Activity | Action | Frequency |
|---|---|---|
| Check gully pots, linear drainage channels and catchpits | Check, clean and empty gully pots and catchpits as required to remove debris and sediment | Regular - Monthly |
| Check manholes and inspection chambers | Inspect manholes and inspection chambers for any signs of blockages. Clean, jet and empty as required | Regular - Annually |
| CCTV survey and jetting of drains | Check the integrity of drains, jet and clean as required. Remove collected debris as required | As necessary<br>Every 5 years |
| Hydrobrake chambers / Vortex Flow Control – visual inspection | Check and remove any silt build up or blockages in accordance with the Manufacturers recommendations | Typically annually or as required |

**Hydrobrake Flow control Device**

The ongoing maintenance activities for the vortex flow control device should be in line with manufacturer recommendations. A summary of the typical expected requirements is detailed below.

| **Hydrobrake Flow Control Device** | |
|---|---|
| ***Regular Maintenance*** | ***Frequency*** |
| Inspection - Record and clean as required | Monthly |
| Litter and debris removal | As required |
| ***Occasional Tasks*** | ***Frequency*** |
| Service – in line with manufacturers recommendations | As required in line with manufacturers recommendations |

**Records**

A service log will be maintained which will include details of all scheduled maintenance required. Logs will be incorporated that record when checks were carried out and whether any actions are deemed necessary. If actions are required, a breakdown of the maintenance measures undertaken or in progress will be logged along with the date when the action was or is to be scheduled.

Records will be maintained by the management company for a minimum period of 5 years.

## 5. Management of use of external amenity areas.

The external landscaped garden areas will be for use of the residents and their visitors only.
Typically, this involves small groups of people at any given time. During the summer months there may be occasional outside events involving larger numbers of people. The majority of visitors arrive/depart between the hours of 8am to 8pm and our reception team are on duty during these times.

Each ground floor resident bedroom has patio area seating for typically 2nr people, with a maximum of upto 4nr people.
Each Dining / Lounge patio area has seating for a maximum of 12nr people, as depicted within the landscape plans.
The summer and winter terrace areas provide outside recreation space at 1st floor level for those residents who prefer or are unable to utilize the ground level landscaped gardens. The Winter and summer terrace areas have seating for 13 nr and 8 nr people respectively.
The summerhouse located within the landscaped garden has seating for a maximum of 8nr people.
Garden areas are available for use between 8am and 8pm, excessive noise will not be acceptable.
Care staff will ensure that these areas are maintained in good condition and clean and tidy after use.

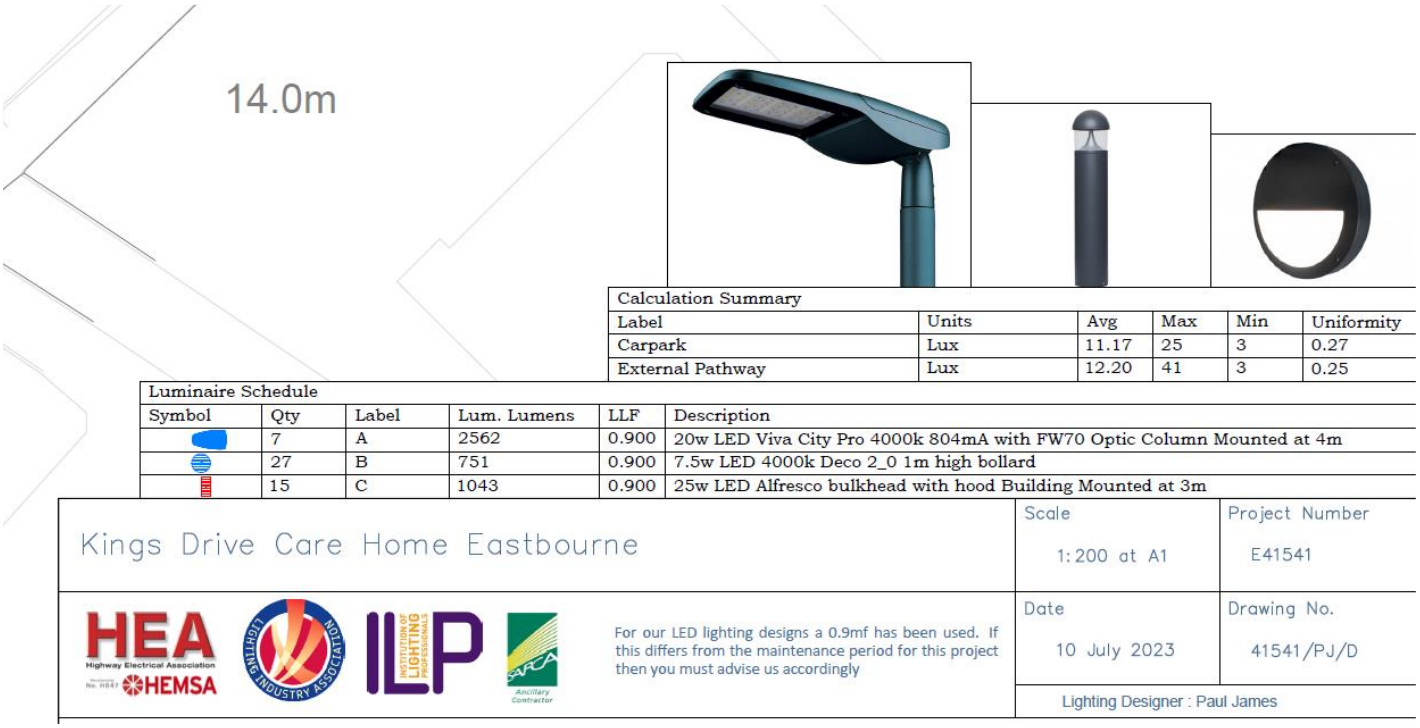
<u>Cafe Facility</u>

- The Cafe will be for the exclusive use of the residents & their visitors only.
- The external space to the west elevation, which allows for external seating will have restrictive opening hours of 8am to 8pm daily, excessive noise will not be acceptable.

## 6. External Lighting installed including specifications.

The external lighting installed is shown within Kingfisher drawing 41541/PJ/D dated 10/07/23. See Drawing Appendix.

The drawing extract below indicates the light fittings installed.



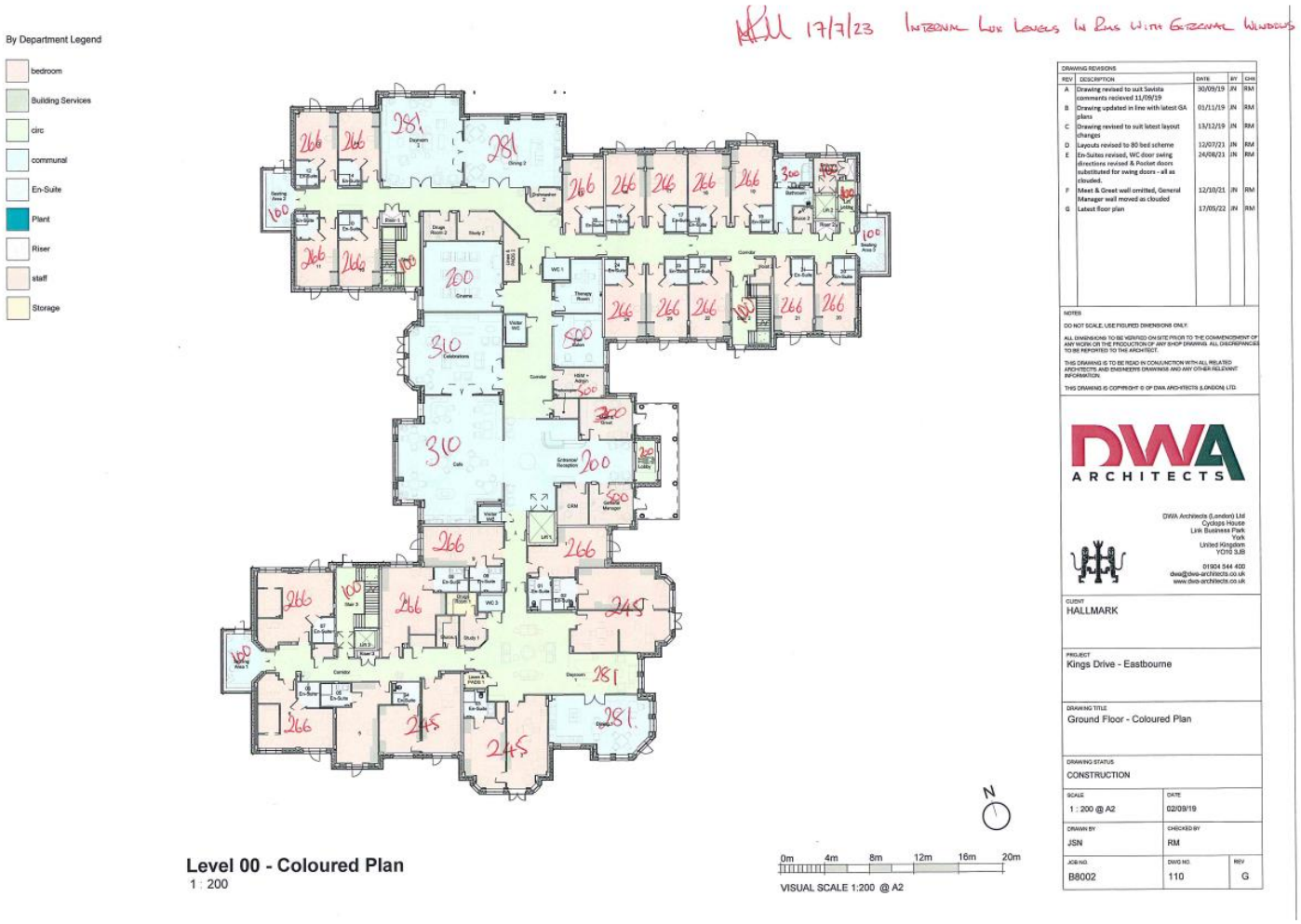

Car park column lights - 20w LED Viva City Pro 4000k 804mA with FW70 Optic Column Mounted at 4m.
Landscape garden footpath area bollards - 7.5w LED 4000k Deco 2_0 1m high bollard.
Bulkhead fittings to building - 25w LED Alfresco bulkhead with hood Building Mounted at 3m.

The Kingfisher external lighting drawing indicates the LUX levels achieved around the home external areas.

The external lighting will be controlled via timeclock and an incorporated photocell to ensure that the fittings will only be illuminated in the hours of darkness. Timeclock control enables the home management to time on / off control to their required settings, considerate of neighbouring properties.

## 7. Details to restrict light spill from interior lights to the exterior of the building.

The attached floor plans markup below indicates the internal light lux levels achieved.



By Department Legend

- bedroom
- Building Services
- circ
- communal
- En-Suite
- Plant
- Riser
- staff
- Storage

**Level 01 - Coloured Plan**
1 : 200

0m 4m 8m 12m 16m 20m
VISUAL SCALE 1:200 @ A2

| DRAWING REVISIONS | | | | |
|---|---|---|---|---|
| REV | DESCRIPTION | DATE | BY | CHK |
| A | Drawing revised to suit Savista comments recieved 11/09/19 | 30/09/19 | JN | RM |
| B | Drawing updated in line with latest GA plans | 01/11/19 | JN | RM |
| C | Drawing revised to suit latest layout changes | 13/12/19 | JN | RM |
| D | En-Suites revised, WC door swing directions revised & Pocket doors substituted for swing doors - all as clouded. | 24/08/21 | JN | RM |
| E | Latest floor plan | 17/05/22 | JN | RM |

NOTES
DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
ALL DIMENSIONS TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK OR THE PRODUCTION OF ANY SHOP DRAWING. ALL DISCREPANCIES TO BE REPORTED TO THE ARCHITECT.
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELATED ARCHITECTS AND ENGINEERS DRAWINGS AND ANY OTHER RELEVANT INFORMATION.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CLIENT: HALLMARK
PROJECT: Kings Drive - Eastbourne
DRAWING TITLE: First Floor - Coloured Plan
DRAWING STATUS: CONSTRUCTION

| SCALE | DATE |
|---|---|
| 1 : 200 @ A2 | 02/09/19 |
| DRAWN BY: JSN | CHECKED BY: RM |
| JOB NO: B8002 | DWG NO: 111 — REV: E |

By Department Legend

- bedroom
- Building Services
- circ
- communal
- En-Suite
- Plant
- Riser
- staff
- Storage

**Level 02 - Coloured Plan**
1 : 200

0m 4m 8m 12m 16m 20m
VISUAL SCALE 1:200 @ A2

| DRAWING REVISIONS | | | | |
|---|---|---|---|---|
| REV | DESCRIPTION | DATE | BY | CHK |
| A | Drawing revised to suit Savista comments recieved 11/09/19 | 30/09/19 | JN | RM |
| B | Drawing updated in line with latest GA plans | 01/11/19 | JN | RM |
| C | Drawing revised to suit latest layout changes | 13/12/19 | JN | RM |
| D | En-Suites revised, WC door swing directions revised & Pocket doors substituted for swing doors - all as clouded. | 24/08/21 | JN | RM |
| E | Latest floor plan | 17/05/22 | JN | RM |

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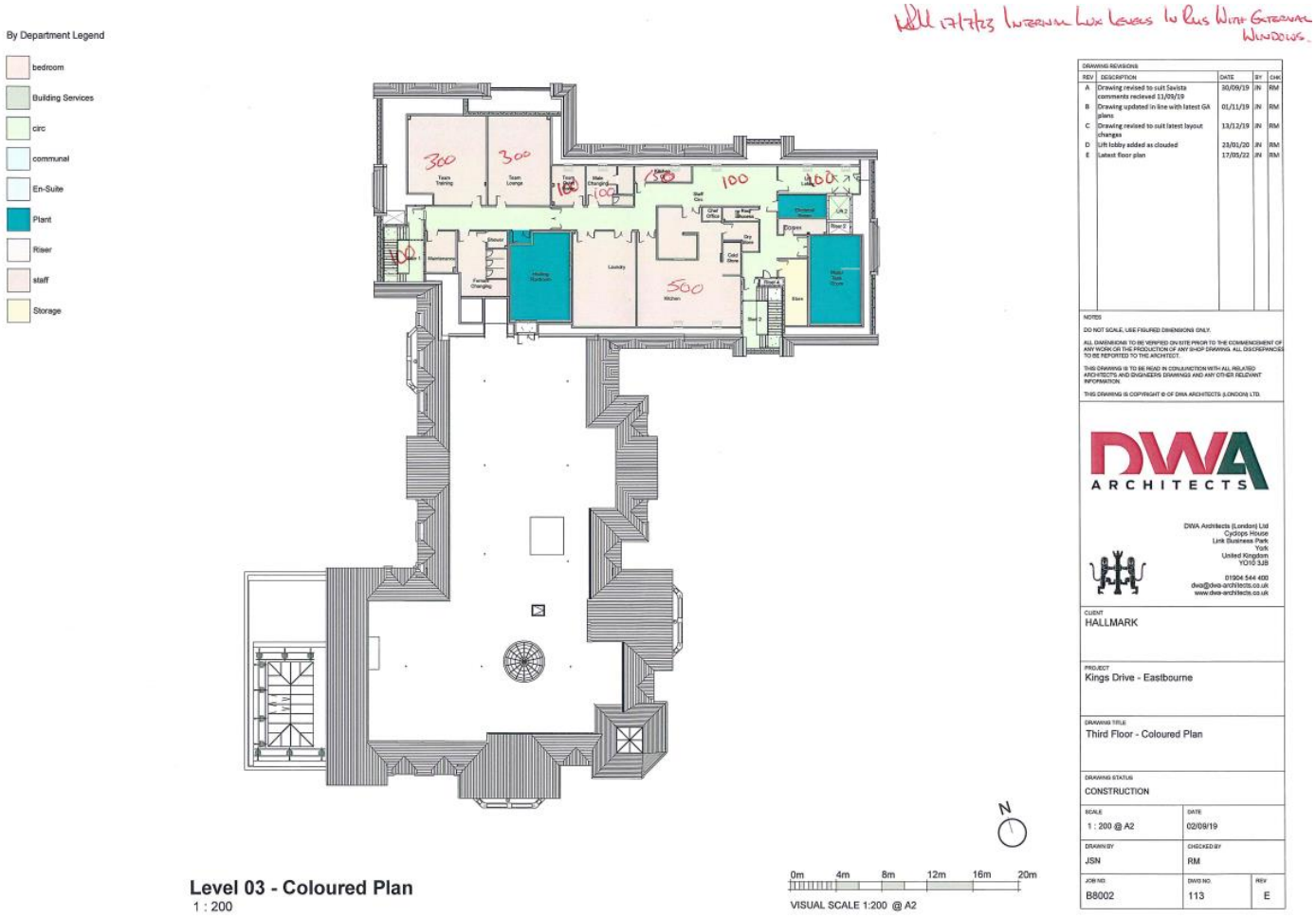
CLIENT: HALLMARK
PROJECT: Kings Drive - Eastbourne
DRAWING TITLE: Second Floor - Coloured Plan
DRAWING STATUS: CONSTRUCTION

| SCALE | DATE |
|---|---|
| 1 : 200 @ A2 | 02/09/19 |
| DRAWN BY: JSN | CHECKED BY: RM |
| JOB NO: B8002 | DWG NO: 112 — REV: E |



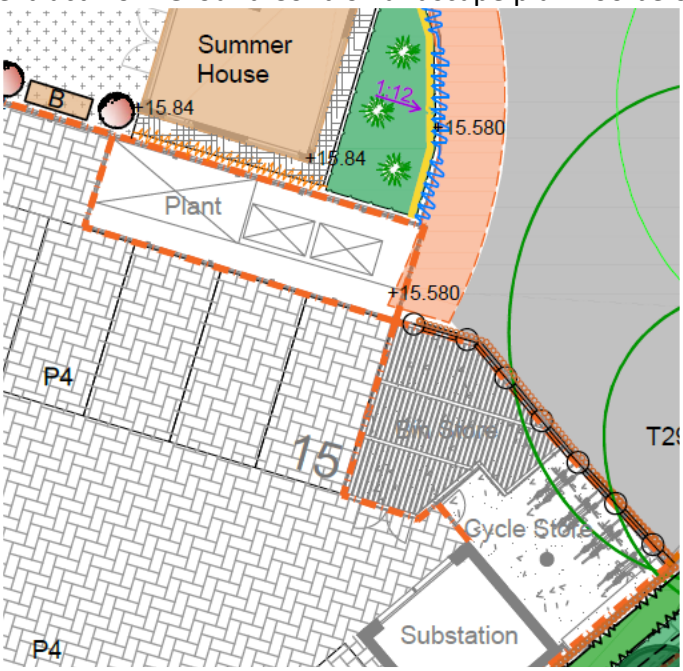

All external windows and doors are fitted with either curtains to resident areas or blinds to offices and back of house areas. For those communal windows and doors, in particular those near boundaries, curtains are closed by care staff during the evening as part of their routine checks.
Bedroom curtains are closed during the evenings, by either residents or care staff.

## 8. Details of any plant and machinery to be installed, including full specifications.

The following summarises the key mechanical plant installed along with full specification, with specific consideration to noise and air emissions.
In accordance with planning approved elevation and roof plan drawings, mechanical plant is contained at third floor level or within the roof structure recessed plant wells, to hide roof plant from external view and the restrict any plant noise / air emissions experienced.

**Standby Generator**

A standby diesel generator is to be installed to provide backup power supply in the event of power failure. The standby generator is located within a 2200mm high timber close boarded fence enclosure, please see extract from Ground Control landscape plan 100 below:




The full generator Technical Submission is included with Appendix 1 Technical submissions.
The DT Gen generator model being supplied and installed is Model: DTG145S/B.
DT Gen are proposing to supply a 135kVA prime rated generator to support the care home, the generator will be complete with an integrated bunded base tank and housed within an acoustic canopy rated at 83dBA @ 1 metre.
The generator set shall be housed within an acoustic canopy; this canopy will be fitted with ventilation grilles and acoustic attenuation. This attenuation shall reduce the external noise to a level which complies with the stage 2 levels of the European Community Directive 2000/14/EC.
As noted within the Technical Submission document, *"For Silent generators the acoustic weatherproof enclosure is manufactured from sheet steel with large maintenance access doors to both sides of the engine and the control panel, the silencer is mounted within the enclosure with the tail pipe terminating through the roof. Canopies are designed to reduce the noise emitted from the generator to 85 dBA at 1 m / 68 dBA at 7 m distance in assumed free field conditions."*
The generator acoustic weatherproof enclosure is contained alongside gas and electric meters within a 2200mm high timber close boarded fence enclosure.
The manufacturer has further advised: *"The generators are acoustically treated internally with heat resistant acoustic foam to absorb as much sound as possible to bring the overall noise level down to 85db @ 1m. in*

*the exhaust/air discharge chamber it is also lined with the acoustic foam on all walls to absorbs as much noise coming out via the radiator and exhaust. This is also a top discharge so any noise will be fired up in the air rather than straight out at head height. The 85db reading takes this into account.*
*In terms of maintenance for the noise parameters or air discharge there isn't a set maintenance program as such.*
*What is recommended is that the generator canopy is kept in good condition, not allowing rust to develop and form holes. If sound treatment comes away internally, to replace it immediately. So just basic maintenance of the canopy will prolong it's life. Also keeping to maintenance schedule of the engine will keep it as quite as it can be, but inevitably engines do get louder as they get older depending on how much use they get."*
Hallmark will undertake all planned maintenance for the generator in accordance with manufacturers schedules contained within the M&E manuals.

**Comfort Cooling**

The comfort cooling system will be a VRF or VRV system with multiple fan coil units connected to large condensing units. The condensers will be located on the lower roof level (above second floor). Condensers to be installed complete with anti-vibration mounting.
The condenser unit locations are shown on CityServe 3rd floor Heating and AC Layout drawing CML-C-390-M404-1 Rev B.
The external condensing units are manufactured by LG Comfort Cooling Model ARUN100LSS0 and LG DC24RQ U24.
Technical Submission document Ref.001 and 002 respectively.
VRF AC Condensers LG ARUN100LSS0 - The worst-case noise levels are defined on Table 1 - Mechanical Plant Summary Sheet, 58 dBa (Sound Pressure Level) 84 dBa (Sound Power Level).
AC Split Condensers LG DC24RQ U24 The worst-case noise levels are defined on Table 1 - Mechanical Plant Summary Sheet, 55 dBa (Sound Pressure Level) 65 dBa (Sound Power Level).
All plant is located at roof level and contained within the designed roof structure, a recessed formed to house plant and restrict noise breakout.

**Ventilation system (roof mounted Air Handling Unit)**

The AHU shall operate on timeclock control to provide the following:
• Daytime (0700-2200hours) – operate at 100% commissioned rate
• Nighttime (2200-0700 hours) – operate at 25% or commissioned rate (% rate to be adjustable)
The roof mounted Air Handling Unit installed is shown on CityServe drawing CML-C-390-M404-1 Rev B. Third Floor Heating and AC Plan.
The roof mounted Air Handling Unit fan installed is by manufacturer Flaktwoods CairPLUS SX 128. Technical Submission document Ref.005.
The Air Handling Unit (including silencers) noise breakout level 56dB(A).
Job & atmosphere side attenuators to reduce sound levels to NR35 internally and NR45 at roof level discharge/intake.
Please see Tech Sub Ref.008. for attenuator specification by SPEK Noise Control.
All plant is located at roof level and contained within the designed roof structure, a recessed formed to house plant and restrict noise breakout.

**Kitchen Extract**

The main kitchen for the home is provided by GS Caterings Ltd located on the 3rd floor, their layout drawings (5816 S1-3) are contained within Appendix 1
The kitchen layout and canopy extraction ductwork to roof level can be seen on CityServe drawing CML-C-390-M204-1 Rev D Third Floor Ventilation.
Kitchen extract fans, Tech Sub Ref.003, are by Flaktwoods 40JM.BIF(200)/20/2/6/20.
The kitchen extract fan breakout level from the in-line ductwork fan is 75dB(A) @3m.
The kitchen extract ductwork fan at roof level includes a sound attenuator, a MElinex lined sound attenuator, please see Tech Sub Ref.008. for attenuator specification by SPEK Noise Control.
Located at roof level away from windows, etc. Job & atmosphere side attenuators are fitted to reduce sound levels to NR40 internally and NR45 at 3m from exhaust.
All plant is located at roof level and contained within the designed roof structure, a recessed formed to house plant and restrict noise breakout.

**Kitchen Supply Fan**

The kitchen layout and canopy supply air ductwork can be seen on CityServe drawing CML-C-390-M204-1 Rev D Third Floor Ventilation.
The Kitchen supply fan, Tech Sub Ref.004, are by Flaktwoods ACON-02804458.
The kitchen supply fan breakout level from the in-line ductwork fan is 51dB(A) @3m.

The kitchen supply fan includes a sound attenuator, please see Tech Sub Ref.008. for attenuator specification by SPEK Noise Control.
Located at roof level away from windows, etc. An attenuator is fitted to reduce sound levels to NR40.
All plant is located at roof level and contained within the designed roof structure, a recessed formed to house plant and restrict noise breakout.

**Laundry dryer extract ductwork**

The laundry equipment for the home is provided by Girbau and is located at 3rd floor level, the equipment installed is contained within their laundry layout drawing, contained within Appendix 1.
The laundry is to be provided with supply and extract ventilation from main AHU.
Tumble dryers require tumble dryer extract ductwork to roof level Tumble dryer exhaust to be installed with in-line fan and exhaust ductwork, rising to and terminating on roof. Make-up supply air will be ducted from the roof to the laundry area, with normally closed shut-off grille into the laundry opening only when dryers in operation. No fan required for make-up air – supply to be driven by exhaust fan.
The laundry layout and dryer extraction ductwork to roof level can be seen on CityServe drawing CML-C-390-M204-1 Rev D Third Floor Ventilation attached.
The dryer exhaust duct terminates at roof level and is contained within the designed roof structure, a recessed well formed to house plant and restrict noise breakout.

**Boilers and Combined Heat & Power Unit (CHP)**

The heating system shall be fed by both gas fired combined heat and power unit (CHP) and gas fired boilers. The CHP unit shall be a thermally led gas fired reciprocating engine with an electrical generator to produce electricity to supplement the buildings electrical supply. The CHP engine shall act as the lead boiler for the heating system. The gas boilers shall only operate during peak times when the CHP engine cannot meet the demand. A buffer vessel shall be provided, to provide back end protection to the CHP.
The boilers and CHP system are contained within the 3rd floor plant room, refer to Cityserve drawing CML-C-

390-M802 Rev A.
Boiler and CHP flue systems are shown on Midtherm drawing 7253-01.
Boiler and CHP flue terminations at roof level are shown on CityServe drawing M204-1.
CHP model installed within the plantroom is the SAV Loadtracker XRGi20 with condensing technology, see Tec Sub Ref.007.
CHP Sound data extracted from data sheet.
Combined Heat & Power Unit (CHP) – Breakout noise level - Sound pressure level at a distance of up to 1 m= 49dB(A). within plantroom.
CHP Exhaust Gas data extracted from data sheet.
Emissions (Test data at max. output) CO < 50 mg/Nm3 26 NOx, pond, HCV2,3 < 240 mg/kWh 10

The boiler model installed within the plantroom is (3nr boilers) the Potterton Sirius 3 130, see Tech Sub Ref. 006 boiler data sheet.
Boiler Sound data extracted from data sheet.
Boilers – Max. 35dBa at 1m. within plantroom.
Boiler exhaust data extracted from data sheet.
NOx Level (Dry @ 0% O2) 17 mg/kWh.
The CHP and boiler flue exhaust terminates at roof level and are contained within the designed roof structure, a recessed formed to house plant and restrict noise breakout and air emissions.

All M&E plant will be maintained in accordance with manufacturers details and maintenance schedules contained within the M&E operations manuals.

## 9. Summary

The roads, footpaths (highways) and lighting that fall under the ownership of Hallmark will abide by basic principles as detailed within these recommendations and will adhere to a maintenance and monitoring strategy that will be reviewed annually to ensure it remains fit for purpose and safeguards the assets it is designed to protect.

Budgets will be set on an annual basis to ensure the assets' ongoing functionality.

Budgets apportioned to the ongoing inspection, maintenance and upkeep of these assets will take into account the requirement to provide the safe and convenient movement of people and goods.
Appropriate insurance will be provided that shall cover all areas Hallmark are responsible for, including roads, footpaths and street lighting.

Although a minimal street lighting inspection regime has been scheduled, all residents will be encouraged to report street lighting outages via the Hallmark Customer Care service to ensure instances are addressed in a sustainable and timely manner.

Hallmark understand the importance of regular planned maintenance and the effect this has on the operation of highways put in place. Visual on foot inspections of roads, footpaths and associated infrastructure will take place in accordance with the aforementioned highways and lighting maintenance schedule. A written report will be prepared on the condition of the road. These will be called a 'Road Audit'. Inspectors will be New Roads and Street Works Act qualified supervisors, they will photograph, note and categorise defects into three categories:

One : Defect poses an immediate risk to highway safety and serviceability. Defect requires immediate remedial works to bring it up to a safe and serviceable standard

Two: Defect does not pose an immediate risk to highway safety and serviceability. However, the defect will require attention within a twelve- month period to ensure continued serviceability

Three: Minor cosmetic imperfections that don't impact on highway safety and serviceability and may require attention within a twelve to twenty- four-month period.

All M&E plant will be maintained in accordance with manufacturers details and maintenance schedules contained within the M&E operation & maintenance manuals. This will ensure all M&E systems operate within designed parameters, and any noise, light and air emissions generated by the development and referenced within this report are within predetermined and approved limits.