

Kitchen ventilation and ASHP plant associated with approved hotel at 13 High St Corsham

Design and Access statement

Introduction

This application is supplementary to the previously consented application for the conversion of the former bank at 13 High St. Corsham, into a boutique hotel with ancillary brasserie style restaurant ref PL/2022/09459 & PL/2022/09717 LBC. In addition to the refurbishment of the Grade II listed building, the approved development also includes outdoor social areas, a new small single storey extension for the restaurant kitchen, connecting to a larger single storey extension for new plant rooms beside parking spaces for hotel visitors at the rear of the building and approx. 200 sqm of PV panels at roof levels of the adjacent Martingate shopping precinct with associated battery storage providing renewable energy for the hotel. The application drawings also showed kitchen ventilation equipment including fresh supply, extract and vertical flue on the flat roof of the new kitchen extension with ASHPs mounted set back on the flat roof of the plant room. Planning Condition 12 of the approval set acoustic limits for plant noise and we have found it impossible to fit the necessary acoustic attenuation on the flat rooftops within the current site boundary. To accommodate the necessary acoustic attenuation the redline site boundary for this new application includes the flat roof of the Little Kitchen unit of the Martingate shopping precinct in addition to the approved flat roofed kitchen and plant room extensions currently being built in the grounds of the listed building at 13 High St. Part of the car park in the grounds of the listed building is also included for relocation of ASHPs to accommodate the acoustic attenuation at roof level,

Site Location

The site includes the flat roofed kitchen and plant room extensions to No13 High St, currently under construction, part of the car park adjacent and the flat roof of the Little Kitchen, unit 12 of the Martingate Centre.

Noise reduction targets set in PL/2022/09459 Condition 12

13 High Street (Corsham House hotel) is located in the centre of Corsham and bounded by a pedestrianised section of Corsham High Street to the east, the pedestrianised Martingate shopping precinct to the south, the grounds of Alexander House and Holton House to the north and the service area of the Martingate shopping precinct to the West. The site is well shielded from the nearest road, Post Office Lane, some 50m to the North, beyond the 3 storey Alexander House and Holton House and consequently the background and ambient noise levels are notably very low, particularly at night when the Martingate shopping precinct service yard is not in use. Initially the Environmental Control and Protection Officer asked for plant to be designed to meet a rated level of -5dB below the background noise level but due to the unusually low background and ambient noise levels our acoustic consultants proposed that it might be more appropriate to treat this as a context in which "absolute levels might be as, or more, relevant to the assessment of noise impact than the margin by which the rating level exceeds the background"(as defined by BS 4142:2014+A1:2019) and a Plant Noise Rating Target of 35 dBA was agreed.

Meeting the Noise reduction targets

Discussions between our acoustic consultant and suppliers of noise reduction equipment confirmed that it would be possible to obtain attenuators to meet the revised acoustic requirements agreed in the planning approval however the size of the attenuators required and consequent impact on the rooftop plant layout was not anticipated with the result that we have had to extend and relocate parts of the kitchen ventilation plant to allow the greater degree of in-duct attenuation required. This additional application reflects the changes to the plant strategy that have developed to accommodate the required Plant Noise Rating Target of 35 dBA as follows:

- The arrangement of the kitchen ventilation equipment has been repositioned to allow for the greater degree of in-duct attenuation required.
- A mitigation strategy has been developed for breakout noise from the intake and exhaust fans.
- The Air Source Heat Pumps have been relocated from the roof, now required for ventilation ductwork, to an acoustically attenuated enclosure at ground level in the rear car park.

See revised Noise Impact Assessment and accompanying drawings and documents for further detail

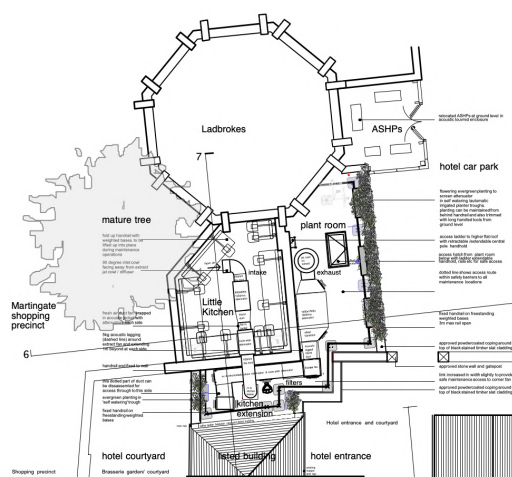
Revised layout and relocation of kitchen ventilation equipment. See also accompanying drawings/data sheets

At planning application stage we showed the kitchen ventilation equipment including intake and extract fans filtration and a vertical flue all on the flat roof of the new kitchen extension with space between the intake and exhaust for maintenance access to both, and ASHPs providing hot water, heating and ambient cooling for the hotel mounted, set back, on the flat roof of the plant room beside the hotel car park, however to achieve the required noise attenuation the attenuator between the extract fan and the exhaust flue, is sized at 1500mm high x 1500mm wide x 1800mm long and is impossible to fit on the kitchen extension roof as in the previous layout, so is now located together with the exhaust flue on the larger flat roof over the plant room.

At planning application stage, several Air Source Heat Pumps were located, set back out of sight from ground level on the plant room roof, but with the large attenuator and exhaust flue now occupying so much of the flat roof area the ASHPs must be relocated. To minimise the area required for the ASHPs we are using fewer, larger units which are also taller and slightly noisier and will require an open topped surrounding acoustic attenuating louvred screen approx. 2.4m high to stay within the agreed noise limits. The 11 parking spaces for the hotel have been re-arranged to provide an area at ground level sufficient to accommodate the new ASHP enclosure whilst still allowing the recommended minimum of 6m between opposing rows of cars and delivery vehicle access.

In addition to UV treatment in the cooker hood for odour elimination, the kitchen ventilation extract ductwork includes odour elimination and particle filtration equipment using ozone injection and electrostatic filters which require sufficient and safe access for regular cleaning, maintenance and filter replacement and must be situated before the extract fan which also requires access for regular maintenance and cleaning. For most efficient operation the extract fan is best located at a 90degree bend in the extract route between the odour elimination, electrostatic particle filtration and pre-fan attenuator on the smaller flat roof over the kitchen extension and the larger post-fan attenuator and exhaust flue on the plant room roof. For maintenance access this flat roof area has been maximised as much as possible (approx. 250mm) without causing detrimental visual impact.

The fresh air intake fan also requires attenuation before and after the fan, increasing the overall cross section and length of ducting with the result that even keeping this on the kitchen extension roof, and allowing for the necessary maintenance access beside the extract ducting would require stacking of the fresh air ducting above the extract ducting to some 2m in height which we find unacceptable in close proximity to the listed building. After many unsuccessful attempts to create a workable and accessible layout on the kitchen extension and plant room roofs, we have had to relocate the fresh air intake ducting onto the roof of the immediately adjacent Martingate shopping precinct 'Little Kitchen' shop unit which is outside the site boundary but in the same ownership. The ducting will be located in the centre of the flat roof set back from the parapets to either side to limit visibility and to accommodate a fold down safety rail around the roof.



Left: Plan of revised plant layout with intake above 'Little Kitchen', extract above the kitchen extension and plant room and ASHPs in new enclosure in the hotel car park. See drawings submitted as part of this application for more detail. Right: Flat roof of the 'Little Kitchen' unit with Martingate shopping precinct and mature tree to left, Ladbrokes slightly taller unit beyond and kitchen extension roof under construction at bottom.

The ducting at this upper roof level will be out of sight from the public walking at ground level in the shopping precinct and from visitors approaching the hotel via the car park. In views from upper floors of surrounding buildings it will be obscured by, or seen against, the foliage of the mature chestnut tree in the shopping precinct. The ducting will drop from the upper roof down to the lower roof in approximately the same location that the previously approved extract flue rose.



Pedestrians view towards 'Little Kitchen' walking up the Martingate shopping precinct from the High St. Only the angled intake duct dropping down from the upper roof will be visible to pedestrians in the shopping precinct with the rest being out of sight, and for occupants of the 1st floor flats opposite, any rooftop ducts on the Little Kitchen will be well screened by the mature tree's foliage in summer and branches in winter. Temporary white painted hoarding to openings in the wall will be removed following installation of decorative railings in the openings.



Pedestrians view towards 'Little Kitchen' and 13 High Street, walking down the Martingate shopping precinct towards the High St. Temporary white painted hoarding to openings in the wall will be removed following installation of decorative railings in the openings. any rooftop ducts on the Little Kitchen will be well screened by the mature tree's foliage in summer and branches in winter

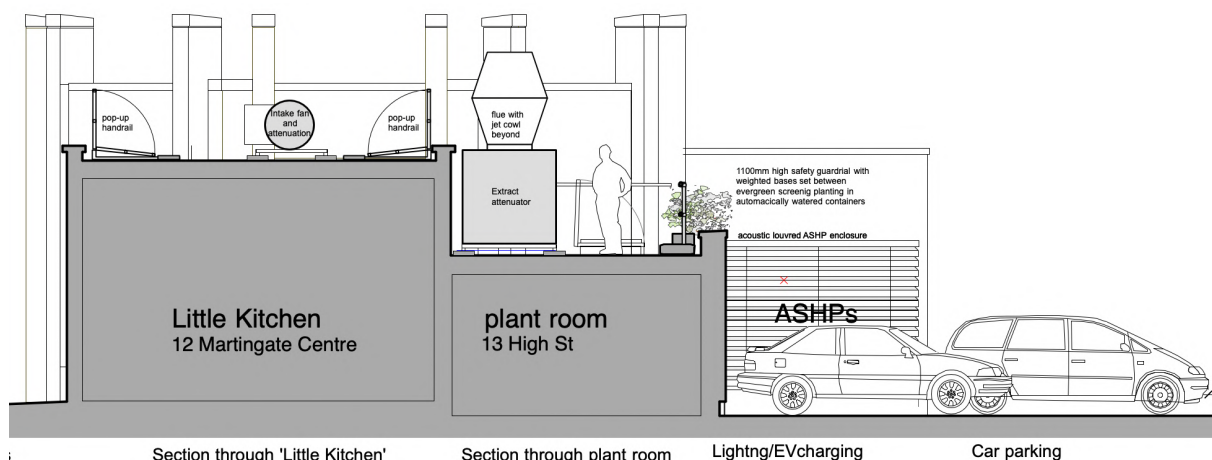


Same view as above, taken in the summer with dense foliage of the mature Chestnut tree screening views of the Little Kitchen rooftop.

Access for Maintenance

Access to the flat roof was envisaged as by external ladder at planning stage but with the internal plant room layout now finalised, we have now been able to provide a safer and more secure method of ladder access via a rooflight in the flat roof above the plant room which will ensure there is no unauthorised access to the roof. An extendable hand-hold pole provides safe access from the ladder onto the roof and perimeter handrails ensure safety whilst on the roof.

To meet Health and Safety requirements a handrail /guarding to 1100mm above roof level is necessary for the safety of maintenance staff servicing the roof top ventilation equipment. We had hoped to be able to use fold down safety rails, but the increased size of the extract ventilation plant now prevents this for much of the roof area and a permanent black finished handrail to 1100mm with a single knee-height rail below has been chosen to be used throughout for consistency and to be sure of protection from falling.



Ducts/attenuators are located set back from parapets and with pop-up or permanent handrails for safe maintenance access.

The fresh air intake equipment on the higher flat roof over the 'Little Kitchen' also needs safe maintenance access. The development is well away from vehicular traffic so the air passing through the intake fan and attenuators is considerably cleaner than the extracted air, requiring no filtration and therefore much less frequent access and a pop-up/ drop-down handrail system has been chosen for this area. The handrail will be lifted into place only while staff are carrying out maintenance. At other times it will be folded down and invisible from ground level or surrounding buildings.

Maintenance access doors to the ASHP enclosure are located to allow pedestrian access for regular / annual maintenance while cars are parked, but major repairs or replacement of whole ASHP units will be planned in advance and spaces roped off as necessary.

Visual screening of rooftop extract ventilation equipment

Although set back from the roof edge as far as possible the large attenuator and fan will still be visible from the hotel approach route through the car park as will the safety handrail running along the roof edge. Visual screening will therefore be introduced set just behind the plant room roof parapet to screen the ducts/ attenuators and handrails from ground level views.

Various types of screening have been discussed with the Conservation Officer and it was agreed that a screen of living plants would be most appropriate, combining well with natural stone and timber cladding and with ivy and other climbing plants being a common and attractive addition to other buildings in Corsham constructed using similar materials.

To screen the large attenuator and exhaust flue we propose using several modular automatically watered planters set between the safety rail supports behind the parapets at roof level and flowering evergreen planting will be encouraged to grow for the full length of the plant room roof taking attention away from and screening the set-back ventilation plant. Troughs with wicking reservoirs providing several weeks water and / or Wi-Fi enabled remote soil sensors communicating via a mobile phone app and motorised valves will keep the planting suitably watered without manual intervention for several weeks. The planting can be pruned/ trimmed from the safe location behind the handrails along the roof edge and using long handled tools from ground level.



Self-watering Large Garden Planter Trough Size. L1295mm x H440mm x W 420mm and Cuboid Self Watering Planter sizes H30cm L30cm W30cm, H40cm L40cm W40cm, and H50cm L50cm W50cm Colour black. Each trough contains a series of connected wicking reservoirs at the base, as shown in diagrammatic view with rainwater overflow function to avoid overwatering. Note: This example shows the principle, other similar sized troughs may be used.



The reservoirs in the planters hold several weeks supply of water and can automatically be topped up from mains or water butts using wifi enabled remote soil sensors and mobile phone app operating motorised valves on the supply. Optionally a remote soil sensor operating automatic watering system may be used on its own.

Plant selection

The plants selected for screening will be suitable for growing in containers, to provide dense evergreen foliage all year round to conceal the elements of the kitchen ventilation system beyond and to provide seasonal colour variation and pleasant summer fragrance. They will also add to both the ecology and biodiversity of the area by including native wildlife-friendly species.

Evergreen flowering climbers suitable for coping level troughs include :

Trachelospermum Jasminoides, -'Chinese Jasmine', a woody evergreen twining climber with fragrant white flowers from June to August and a shrublike structure giving body to the container-based planting.

Lonicera Periclymenum, - European Honeysuckle, a native vigorous twining climber with fragrant creamy white or yellowish flowers, flushed with pink or red on the outside and in bud from January to September and although deciduous, likely to keep its leaves over winter in the sheltered microclimate of the hotel car park providing pollen rich flowers attracting bees, and butterflies/moths etc ,nest sites for birds and attracts prey for bats .

Clematis Cirrhosa, is an evergreen climber that flowers between mid-winter and late spring. It has glossy, dark green foliage, creamy white or pink flowers and can reach up to 5m in height. Prized for its delicate blooms that add early colour to the garden, it is also tolerant of shaded locations. *Clematis cirrhosa* 'Jingle Bells' is the first winter-flowering clematis to bloom, flowering from December right through until March, providing food for winter-active insects and able to climb to an eventual height of 5m. The creamy-coloured, bell-shaped, nodding heads have a delicate citrus scent.



Left, *Trachelospermum Jasminoides*, Centre, *Lonicera Periclymenum*, Right, *Clematis Cirrhosa* Jingle Bells.

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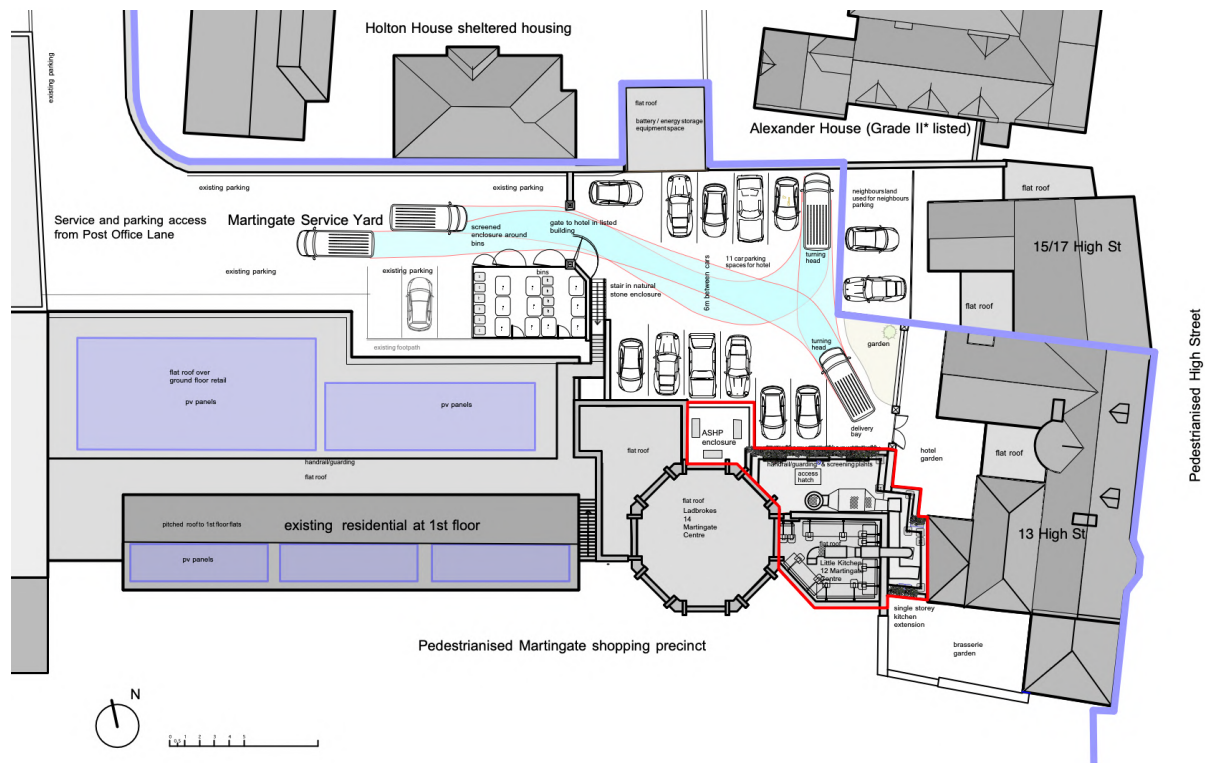
NB. minor changes to light fittings and EV chargers etc shown are covered under AOD applications PL/2025/07133, PL/2025/08928 submitted to satisfy various planning conditions of PL/2022/09459 and PL/2022/09717 LBC.



Existing view across hotel car park. Black clad plantroom and ASHP enclosure will sit at ground level in front of the boundary stone wall of 'Little Kitchen' and 'Ladbrokes' at left, with ducts set back on flat roofs. The exhaust flue will rise close to the vertical fins of the Ladbrokes unit, well away from the listed building.

Parking layout

The 11 approved parking spaces for the hotel are easily re arranged to provide an area at ground level sufficient to accommodate the new ASHP enclosure whilst still allowing the recommended minimum of 6m between opposing rows of cars and suitable access for 'white van' deliveries.



2 parking spaces move forward to accommodate the new ASHP enclosure whilst still providing 11 spaces with 6m between opposing parking rows and clear of the 3-point turn path of typical Sprinter delivery van overlaid in light blue.

For additional information please see following attachments.

- Heritage Impact Statement
- Biodiversity statement
- SA133 01 Site location plan. Scale 1.1250
- SA133 02 PL Existing approved site block plan. Scale 1.100 @ A1, 1.200@A3
- SA133 03 PL Site layout plan at ground floor, proposed. Scale 1.100 @ A1, 1.200@A3
- SA133 04 PL Existing roof plan. Scale 1.50 @ A1, 1.100@A3
- SA133 05 PL Proposed roof plan. Scale 1.50 @ A1, [1.100@A3](#)
- SA133 06 PL Existing approved ground floor plan
- SA133 07 PL Proposed Ground floor plan
- SA133 08 PL Existing approved N (shopping precinct) and S (car park) elevations. Scale 1.50 @ A1, [1.100@A3](#)
- SA133 09 PL Proposed N (shopping precinct) and S (car park) elevations. Scale 1.50 @ A1, [1.100@A3](#)
- SA133 10 PL Existing approved sections 6-6, 7-7, 8-8. Scale 1.50 @ A1, 1.100@A3
- SA133 11 PL Proposed sections 6-6, 7-7, 8-8 Scale 1.50. Scale 1.50 @ A1, 1.100@A3

Related Conditions of planning approval PL/2022/09459

Two planning conditions relate to aspects of the kitchen extract ventilation system. Condition 6 relates to the appearance/layout and technical details of the equipment dealing with extraction and odour elimination of the air, and Condition 12 dealing with the noise reduction of the system. The attenuation equipment necessary for the kitchen ventilation to satisfy the noise reduction requirements of Condition 12 requires the ventilation

system to extend beyond the site boundary of the application XXXX so the Conditions 6 and 12 cannot be satisfied as written. This application is submitted with site outline extended beyond the original site outline to satisfy the requirements set out in those conditions and to supercede and replace them. A separate application will be submitted to vary or omit those conditions on the basis that approval of this application satisfies their requirements.

Requirements of PL/2022/09459 Condition 6

No part of the development shall be brought into use until a scheme containing full details of arrangements for internal air extraction, odour control and discharge to atmosphere from cooking operations, including the location and appearance of any external ducting and flues has been submitted and approved by the Local Planning Authority. The scheme must include full technical details and a risk assessment in accordance with Appendix 2 and 3 respectively of the EMAQ 'Control of odour and noise from commercial kitchen exhaust systems' Guidance (Gibson, 2018). It is recommended that the ventilation system is designed to discharge vertically at a height of at least 1m above the height of any nearby sensitive buildings or uses and not less than 1m above the eaves.

Reason: To ensure the retention of appropriate living conditions for occupiers of nearby residential properties.

For compliance with the requirements of this condition the ventilation extract system includes ozone injection via UV in the cooker hood and separately to remove cooking odours and electrostatic air cleaners for collection of dry and wet particulates like dust, oil mist, and cooking fumes. Attenuators will be installed pre and post the exhaust and intake fans and the breakout noise from the fans will be mitigated with acoustic lagging, all in accordance with the agreed requirements.

Safe means of access to the various access panel locations required for system maintenance is provided using fixed and pull-down ladders with extendable centre handholds, together with lift up / fold down temporary handrails where they can be accommodated and permanent handrails on weighted bases where there is not enough space to install the fold down type, or where the support legs might cause a trip hazard

A risk assessment in accordance with *Appendix 2 and 3 respectively of the EMAQ 'Control of odour and noise from commercial kitchen exhaust systems' Guidance (Gibson, 2018)* has been provided by Roundstone kitchen and ventilation suppliers and submitted as part of this application. See

- Corsham House Supplementary Information September 2025

We are showing the exhaust flue from the extract system discharging at 1m above the adjacent flat roofed 'Little Kitchen' unit of the Martingate shopping precinct, however we are advised that the jet flue proposed will propel the exhaust air 15 to 20m vertically before dispersal and query whether the installed height of the flue could be lowered to reduce its visual impact in the environs of the listed building.

The location and appearance of all external ducting and flues are provided on the following drawings submitted as part of this application.

- SA133 05 PL Proposed roof plan. Scale 1.50 @ A1, [1.100@A3](#)
- SA133 09 PL Proposed N (shopping precinct) and S (car park) elevations. Scale 1.50 @ A1, [1.100@A3](#)
- SA133 11 PL Proposed sections 6-6, 7-7, 8-8 Scale 1.50. Scale 1.50 @ A1, [1.100@A3](#)
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and the following technical specifications / data sheets for each part of the system are also provided.

- RY2500B (Electrostatic and UV Air Cleaner)
- Extechnology - Ozone Filter
- KP80293 Fresh Air fan
- Acoustic Jacket for fresh air fan supplied by fan manufacturer
- Splitter Fresh Air post fan silencer
- Systemair MUB_T 062 630D4 Extract fan (in acoustic insulated box)
- Silencer spec sheet extract (extract post fan silencer)
- Acoustic lagging (AG-Lag)
- Corsham House Kitchen plan September 2025

Requirements of PL/2022/09459 Condition 12

The development shall be carried out in strict accordance with the approved Noise Impact Assessment (31 October 2023) and associated Supplement (dated 14 March 2024). The details as approved shall be implemented prior to occupation of the development and thereafter be permanently retained

For compliance with the requirements of this condition

- The proposed layout of roof plant in this application has been extended onto the flat roof of the 'Little Kitchen' at 12 Martingate Centre to allow for the greater degree of in-duct attenuation required to stay within the agreed noise limits. See proposed drawings
- A mitigation strategy has been developed for breakout noise from the intake and exhaust fans.
- The previously roof mounted Air Source Heat Pumps have been relocated from the roof of the plant room to an acoustically attenuated enclosure at ground level in the rear car park.

The NIA has been revised with noise impacts recalculated for the revised plant and new layout to demonstrate compliance of the revised proposal, see the following attachment submitted as part of this application.

- Corsham House Hotel - Noise Impact Assessment - Rev02

Conclusion

This proposal allows the noise limits set in Condition 12 of planning approval PL/2022/09459 together with the requirements of Condition 6 relating to the appearance/layout and technical details of the equipment dealing with extraction and odour elimination of the air, to be complied with by installing part of the kitchen ventilation system out of sight on the rooftop of the Little Kitchen at 12 Martingate Centre .

This proposal relocates the exhaust flue with jet cowl which was previously visible to pedestrians in views of the listed building when walking up from the pedestrianised High St into the shopping precinct, to a new location at the rear where it is no longer visible in any views of the listed building from the public realm, resulting in an improvement to the setting of the listed building.

In views from the north, evergreen screening planting will conceal much of the required acoustic attenuation, and extract ductwork, reduce the visibility of the safety handrail and together with the louvred enclosure for the ASHPs at ground level will reduce the dominance of the intrusive 5m high boundary wall to the Martingate shopping precinct in the setting of the listed building thus providing a modest enhancement to the setting.

The relocation of stone roof tiles from the abutment detail of the flat roof of the kitchen extension and hipped roof of the listed building to make good the missing tiles of the much more visible south elevation of the hipped roof will improve the view from the public realm of the shopping precinct to the South.

Synthesis Architecture. Nov 2025.