Air Quality Statement

Sawbridgeworth Evangelical Congregational Church

London Road, Sawbridgeworth CM21 9EH

5 March 2024

3D visualization of proposed development

Executive Summary

This Air Quality Statement has been prepared with respect to the application for development of Sawbridgeworth Evangelical and Congregational Church (SECC).

The proposed alteration and extension to the existing Place of Worship is located within the AQMA on London Road, Sawbridgeworth CM21 9EH .

A detailed assessment has not been carried out as there is no expected increase in pollutants nor increase in number of people exposed to the pollutants due to attending activities on site as the development proposal is merely replacing existing life-expired facilities.

It is deemed that the proposals in this application may have the potential to cause air quality impacts as a result of dust emissions during construction and negligible potential to cause air quality impacts as a result of road traffic exhaust emissions associated with vehicles travelling to and from the site during operation.

Potential construction phase air quality impacts from dust emissions could be mitigated by good practice control measures for a development of this size and nature.

With reference to an existing traffic and parking survey and no proposed change of use of the buildings, it is expected that traffic exhaust emissions will not increase by any significant measure as a result of this development.

A number of positive Air Quality measures will be included in accordance with the East Herts Council Air Quality Action Plan.

Local Planning Policy

East Herts District Plan (the Local Plan) The council adopted its Local Plan, known locally as the District Plan, on the 23 October 2018. The District Plan sets out the planning framework for the district for the period of 2011-2033 and prioritises the delivery of sustainable development. Specific Air Quality policies are included within the plan, notably:

Policy EQ4 Air Quality

i. The effect of development upon air quality is a material consideration. All applications should take account of the Council's Air Quality Planning Guidance Document, which details when an air quality assessment is required.
ii. All development should take account of the Council's latest Air Quality Action Plan, local Air Quality Strategies, Local Transport Plans, as well as national air quality guidance.
iii. All developments should include measures to minimise air quality impact at the design stage and should incorporate best practice in the design, construction and operation of all developments.
iv. Where development (on its own or cumulatively) will have a negative impact on local air quality during either construction or operation, mitigation measures will be sought that will remove overriding impacts, such as an air quality neutral or negative development. Evidence of mitigation measures will be required upfront.
v. Where on-site mitigation is not sufficient, appropriate off-site mitigation measures may be required. Where adequate mitigation cannot be provided, development will not normally be permitted.
vi. Developments must not:
    - lead to a breach or worsening of a breach of UK or EU limit values;
    - lead to a breach or worsening of a breach of an Air Quality objective or cause the declaration of an Air Quality Management Area or;
    - prejudice the implementation of any Air Quality Action Plan or local air quality strategy

In addition to this, Sawbridgeworth has an Air Quality Management Area along London Road and Cambridge Road. Figure 1 shows the map of the AQMA from the East Herts Council website.

Figure 1 AQMA map of Sawbridgeworth from East Herts Council website

The NO_2 Source Apportionment from Vehicles in the Sawbridgeworth AQMA can be summarised in the table below:

Vehicle	NO_2 Contribution (µg/m³)
Diesel Cars	21.79
Diesel LGV	10.56
Buses	3.66
Rigid HGV	3.48
Petrol Cars	3.30
Articulated HGV	1.35
Full Hybrid Diesel Cars	0.12
Full Hybrid Petrol Cars	0.05
Motorcycle	0.04
Petrol LGV	0.01
Plug-in Hybrid Petrol Cars	0.01
Electric Cars	0.00

Figure 2: Pollutant contribution by vehicle type

The draft East Herts Council Air Quality Action Plan (2024-2029) published in October 2023 states :

"We and our partners have reviewed the local evidence, the policies available and best practice to identify four key priorities for action:

- Priority 1: Reduce the impact of traffic levels and congestion on air quality
- Priority 2: Mitigate the impact of future growth on air quality
- Priority 3: Support residents to make active travel choices
- Priority 4: Reduce East Herts Council's own impact on air quality."

Assessment of Air Quality

According to East Herts Planning Guidance note, this development falls under Non-Residential

Institutions (D1) - Places of worship <1,000m2 GFA and is therefore deemed a MINOR development.

Construction Phase

The undertaking of activities such as demolition, excavation, ground works, cutting, construction and storage of materials has the potential to result in dust emissions throughout the construction phase. Vehicle movements both on-site and on the local road network also have the potential to result in the re-suspension of dust from haul road and highway surfaces.

The potential for impacts at sensitive locations depends significantly on local meteorology during the undertaking of dust generating activities, with the most significant effects likely to occur during dry and windy conditions.

Demolition

The proposals involve the demolition of the existing school block and single storey annex buildings behind. The total building volume to be demolished is <20,000m^3. In accordance with the criteria outlined in Table 1, the magnitude of potential dust emissions from demolition is therefore **small**.

Earthworks

Earthworks will primarily involve excavating material, haulage, tipping and stockpiling, as well as site levelling and landscaping. The proposed development site is estimated to cover an area less than 2,500m2. In accordance with the criteria outlined in Table 1, the magnitude of potential dust emissions from earthworks is therefore **small**.

Construction

Due to the size of the development the total building volume is likely to be less than 25,000m3. In accordance with the criteria outlined in Table 1, the magnitude of potential dust emissions from earthworks is therefore **small**.

Trackout

Based on the site area, it is anticipated that the unpaved road length less than 50m. In accordance with the criteria outlined in Table 1, the magnitude of potential dust emissions from trackout is therefore **small**.

Mitigation

The IAQM guidance16 provides potential mitigation measures to reduce impacts as a result of dust emissions during the construction phase. These will be drafted into a Construction Environmental Management Plan in order to mitigate the impacts to neighbouring properties and roads.

Operational Phase Assessment

There is no intention to intensify use of the site as the development is merely replacing some life expired facilities. Therefore, vehicle movements associated with the operation of the proposed development are very unlikely to increase as a result and are not deemed to increase any pollutants within the AQMA. Please refer to the Transport Scoping Note included with this application.

The development will seek to fulfil the Local Plan by encouraging sustainable travel and active travel choices.

Additionally, existing pollutant emitting boilers will be replaced with Low Emission Sustainable heat sources.

A detailed assessment has not been carried out as there is no expected increase in pollutants nor increase in number of people exposed to the pollutants due to attending activities on site.

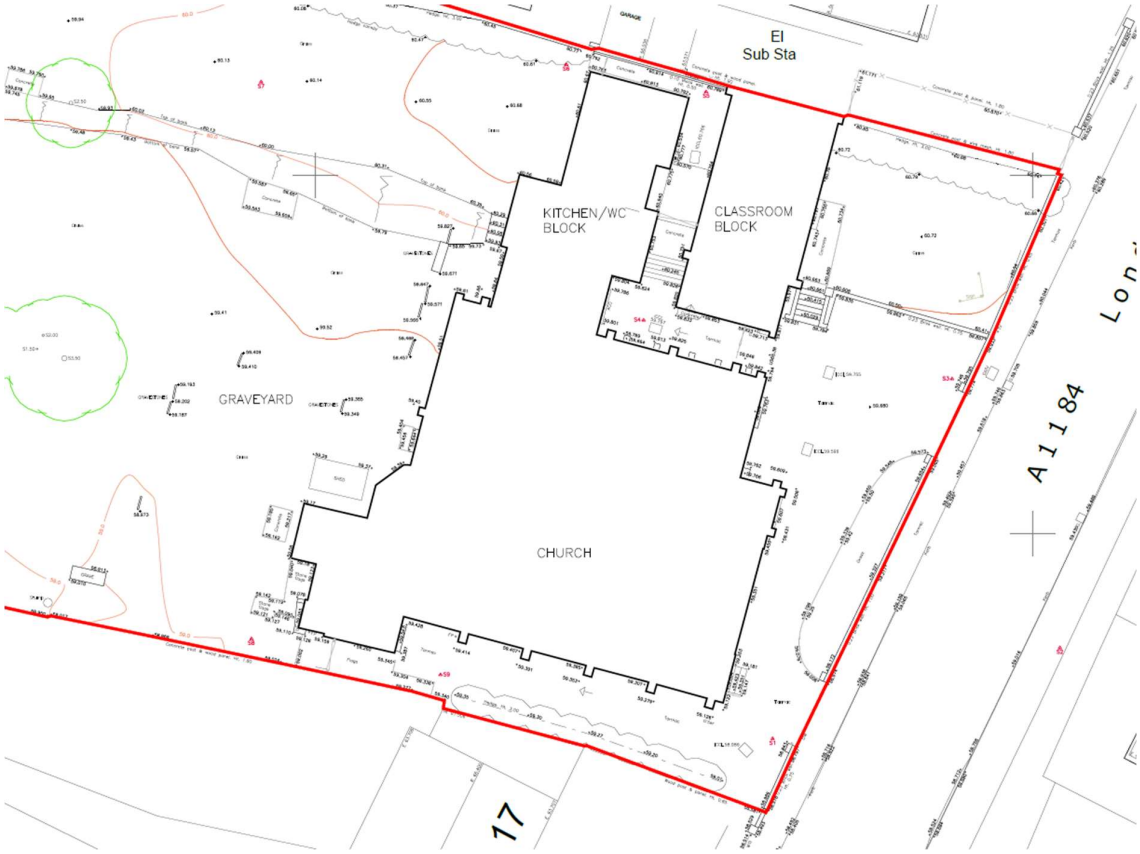

Figure 3: Existing site plan

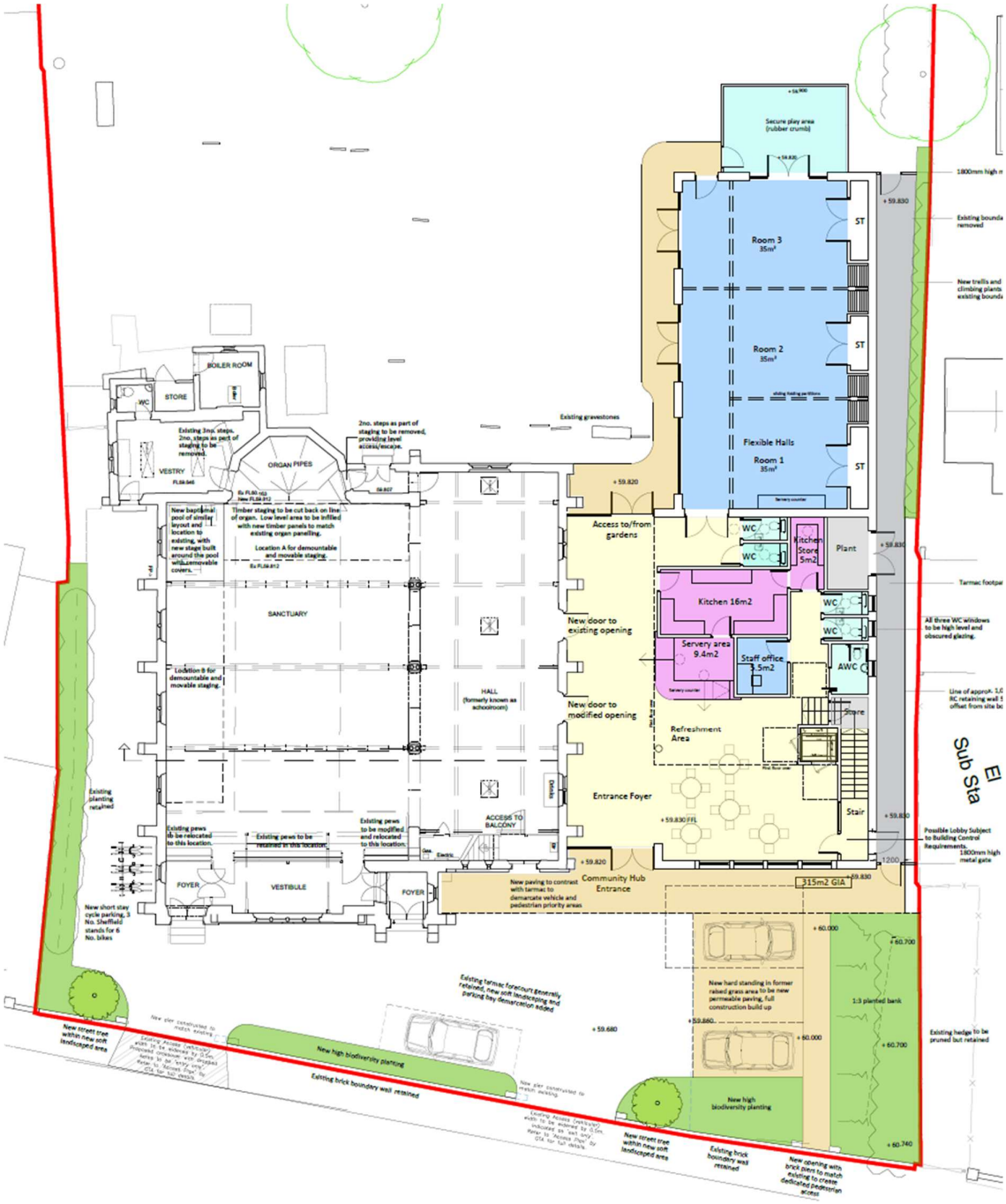

Figure 4: Proposed site plan