

Statement & Volume Calculation

Proposed Hip to Gable roof extension and rear dormer at:
136 King Charles Road, Surbiton KT5 8QL

4th January 2021



Fig 1. No 136 King Charles Road at junction to King Charles Crescent

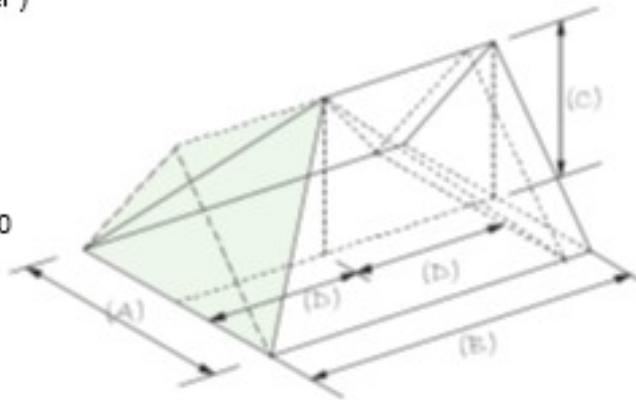
STATEMENT

- 1.1 This Supporting Statement has been prepared by Architect Christopher Cassar, on behalf of the applicants who are my daughter Michaela Cassar Smith and her husband Matthew Smith. It confirms that they are the joint Freehold owners of the application property.

ROOF VOLUME CALCULATION

CALCULATION FOR THE ROOF VOLUME
 (Half-Hip to gable with a rear dormer)

- A depth of the main roof 9.100
- B width of the main roof 9.850
- C height of the main roof 3.150
- D ridge to eaves in plan 4.550
- E Projection of the rear dormer 3.800
- F Height of the rear dormer 2.570
- G Width of the rear dormer 5.425



Volume of the triangular prism
 area of the triangle x its length
 $(A \times C / 2 \times D \times 2)$
130 cu M

Volume of the pyramid

base area x 1/3 height
 $(A \times D \times 2) \times 1/3 \times C$
87 cu M

Volume of the additional segment
 Hip to Gable
 Prism - Pyramid / 2
21.5 cu M

Volume of the additional rear dormer
 area of the triangle x its length
 $(E \times F / 2 \times G)$
26.5 cu M

TOTAL volume of development in the roof
= 48 cu M

