

Hi Jenni,

Please find below a further explanation of the drawings. I hope this will be suitable

Many thanks

Hi Simon,

The BRE suggest that the degree of change in sunlight availability (overshadowing) to determine if any reduction will be noticeable. Each individual section of the solar panel has been assessed, reference W1, W2...etc., as the change to any one panel may affect the performance of the overall system.

The sunlight availability test is undertaken both pre 'existing' and post 'proposed' development i.e. before and after the installation of the dormers to the roof.

For example, Panel W1 will receive 97.00 '*existing*' and 96.00 '*proposed*' Annual Probable Sunlight Hours, therefore the absolute sunlight available has reduced by 1.00. However, as we need to consider the reduction, the 'Existing' figure is divided by the 'Proposed' to determine the percentage change (Pr/Ex). In this example, the proposed is 0.989 (rounded to 0.99). This is undertaken both annually and in during the winter months in isolation, when sunlight is less available.

The BRE suggests that if existing sunlight availability is reduced by more than 10% i.e. below 0.90, the reduction maybe noticeable and further testing is required. If 0.90 or above is retained, the reduction will not be noticeable, no further testing required and should be considered acceptable.

By reference to both the Annual *Pr/Ex* and Winter *Pr/Ex* columns, all remain 0.94 and above. Therefore, no noticeable change will occur and therefore should be considered acceptable.

| Solar PV Ref.     | Attribute | Site Scenario | Orientation | Annual | Pr/Ex | Winter | Pr/Ex |
|-------------------|-----------|---------------|-------------|--------|-------|--------|-------|
| 32 DEVERELL PLACE |           |               |             |        |       |        |       |
| W1                | SolarPV   | Existing      | 190° Inc    | 97.00  | 0.99  | 30.00  | 0.97  |
|                   |           | Proposed      |             | 96.00  |       | 29.00  |       |
| W2                | SolarPV   | Existing      | 190° Inc    | 97.00  | 1.00  | 30.00  | 1.00  |
|                   |           | Proposed      |             | 97.00  |       | 30.00  |       |
| W3                | SolarPV   | Existing      | 190° Inc    | 97.00  | 0.96  | 30.00  | 1.00  |
|                   |           | Proposed      |             | 93.00  |       | 30.00  |       |
| W4                | SolarPV   | Existing      | 190° Inc    | 96.00  | 0.99  | 29.00  | 1.00  |
|                   |           | Proposed      |             | 95.00  |       | 29.00  |       |
| W5                | SolarPV   | Existing      | 190° Inc    | 96.00  | 0.94  | 29.00  | 1.00  |
|                   |           | Proposed      |             | 90.00  |       | 29.00  |       |
| W6                | SolarPV   | Existing      | 190° Inc    | 96.00  | 0.96  | 29.00  | 1.00  |
|                   |           | Proposed      |             | 92.00  |       | 29.00  |       |
| W7                | SolarPV   | Existing      | 190° Inc    | 96.00  | 0.98  | 29.00  | 1.00  |
|                   |           | Proposed      |             | 94.00  |       | 29.00  |       |
| W8                | SolarPV   | Existing      | 190° Inc    | 94.00  | 1.00  | 27.00  | 1.00  |
|                   |           | Proposed      |             | 94.00  |       | 27.00  |       |
| W9                | SolarPV   | Existing      | 190° Inc    | 95.00  | 0.99  | 28.00  | 1.00  |
|                   |           | Proposed      |             | 94.00  |       | 28.00  |       |
| W10               | SolarPV   | Existing      | 190° Inc    | 96.00  | 0.99  | 29.00  | 1.00  |
|                   |           | Proposed      |             | 95.00  |       | 29.00  |       |
| W11               | SolarPV   | Existing      | 190° Inc    | 96.00  | 0.99  | 29.00  | 1.00  |
|                   |           | Proposed      |             | 95.00  |       | 29.00  |       |
| W12               | SolarPV   | Existing      | 190° Inc    | 92.00  | 0.99  | 28.00  | 1.00  |
|                   |           | Proposed      |             | 91.00  |       | 28.00  |       |

Kind regards,

