

**WRITTEN QUESTION TO THE MINISTER FOR INFRASTRUCTURE
BY DEPUTY M.R. HIGGINS OF ST. HELIER
ANSWER TO BE TABLED ON TUESDAY 23RD MAY 2017**

Question

Further to his answer to oral question 1(266) on 2nd May 2017, will the Minister confirm for members what odour-control systems will be fitted to the new sewage treatment works to be built at Bellozanne and state the extent to which they will eliminate all odours discernible by nearby residents; and will he also inform members of the cost of any such odour-control systems, and the overall estimated cost of the total sewage treatment works?

Answer

Most of the answers to this question can be found on the Planning website using the following link;

<https://www.mygov.je/Planning/Pages/PlanningApplicationDocuments.aspx?s=1&r=P/2017/0309>

The section on Odour can be found under 'Other Documents', 'Environmental Impact Statement Pt 9', pages 13.1 to 13.19.

However, in summary, Odour Control Units (OCUs) will be fitted to the new inlet works and Tanker Import Facility (TIF). These will supplement the OCUs that currently treat odour from the existing sludge tanks.

The inlet works OCU will include the following:

- Initial discharge collection chamber
- Screens
- Grit Removal
- Storm overflow chamber
- Primary Settlement Tanks distribution chamber
- All channels connecting the above
- Skip building (screenings and grit handling).

The TIF OCU will include the following:

- Tanker discharge enclosure
- Tanker discharge reception hopper
- Liquor balancing tank.

These units will treat the odour generated at the points where raw sewage and imports from septic tanks and other sources arrive at the STW site. These are the most odorous processes of the STW and the odour from these parts of the site will be reduced by over 90% compared with leaving the same structures open to the atmosphere.

Across the new STW site as a whole, odour will be reduced by 18% compared with the current site. Odour modelling has predicted the impact on nearby residents using the following levels of odour concentration to define the number of properties affected.

Exposure criteria	Description
$\geq 1.5 \text{ ou}_E/\text{m}^3$	Virtually undetectable
$\geq 3 \text{ ou}_E/\text{m}^3$	Arbitrary split between the two limits

$\geq 5 \text{ ou}_E/\text{m}^3$	Often used in UK planning conditions as a boundary standard. Generally not noticeable and unlikely to cause complaint. Complaints typically start at levels of $10 \text{ ou}_E/\text{m}^3$
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The attached two maps show the results of the modelling for the '2016 existing site' and for the '2016 proposed site' with the properties covered by the $5 \text{ ou}_E/\text{m}^3$ boundary condition in both cases indicated.

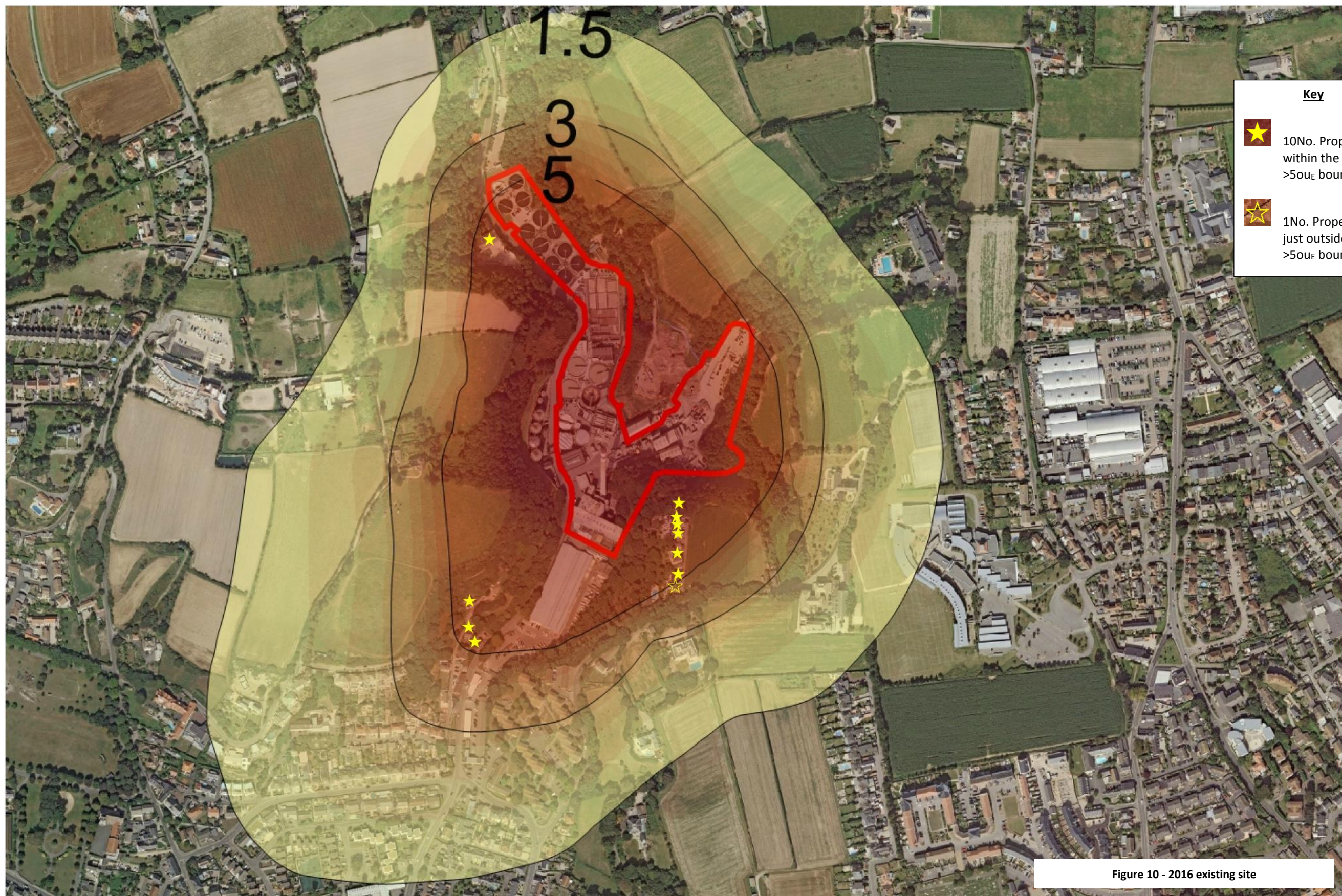
The type of odour control plant to be used will only be confirmed during the initial detailed design phase (November 2017 to March 2018) but is likely to be either a biological or carbon based media.

The current estimate for the proposed odour control installations is £2.75m with the overall cost of the total sewage treatment works budgeted at £75m. This includes all enabling works such as hillside removal and clinical waste incinerator re-location, but doesn't include covering and odour controlling primary settlement tanks which is estimated at a further £4.12m.

Attachments:

Large Scale Odour Plan – 2016 Existing Site

Large Scale Odour Plan – 2016 Proposed Site



Key



-  10No. Properties within the >50µg boundary.
-  1No. Property just outside the >50µg boundary.

Figure 10 - 2016 existing site

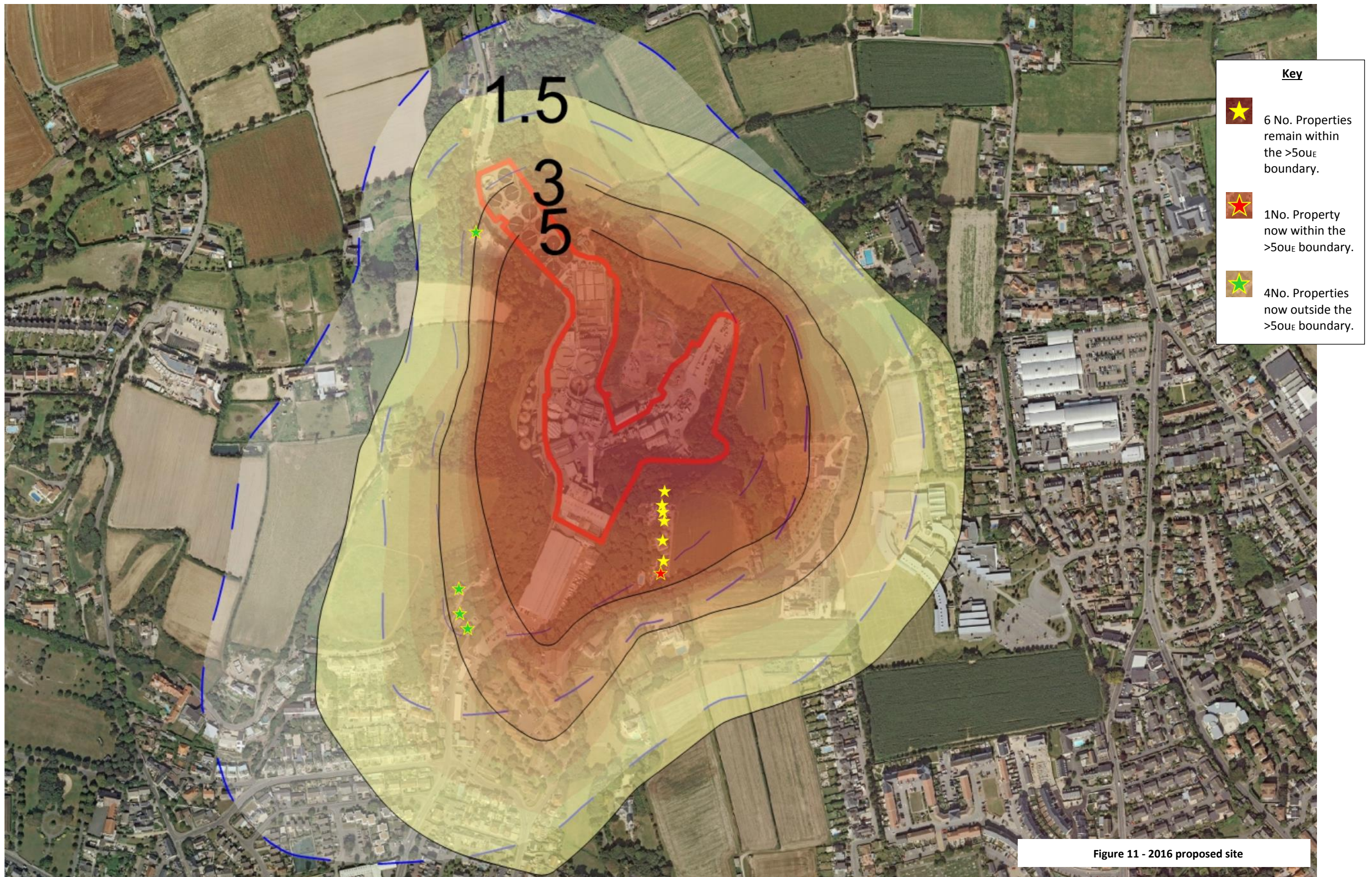


Figure 11 - 2016 proposed site