

M40 Photovoltaic Noise Barrier Project

Stakeholder Q&A - August 2016

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What is the project about?

Highways England has been working in partnership with the M40 Chiltern Environmental Group, (M40 CEG) Wycombe District Council and South Oxfordshire District Council, to develop a range of barriers to reduce noise on the M40 between junction 3 (Loudwater) and junction 8 (Wheatley).

So far, work has focused gauging the feasibility of piloting solar powered barriers, which have the potential to offset the the barrier installation, operation and maintenance costs through generating electricity. They can also bring added benefits such as reducing the carbon footprint of the barriers.

Why are you now not going to provide solar panelled noise barriers to selected sites along the M40?

Highways England carried out an assessment to establish suitable sites for a trial but the outcome of this work has concluded that none of the sites along the section of the M40 between junction 3 (Loudwater) and junction 8 (Wheatley) are suitable for an effective trial of solar panelled noise barriers.

What next for the communities in the area then? They still have a noise problem. Are you going to install normal noise barriers for them?

Highways England is committed to reducing our impact on the environment and improving the quality of life for local communities living in close proximity to the strategic road network. They acknowledge that traffic levels on the M40 have an impact on the quality of life of the communities living along this route and have been working closely with the M40 Chilterns Environmental Group, which represents 13 communities between junction 3 (Loudwater) and junction 8 (Wheatley), together with Wycombe and South Oxfordshire District Councils, to identify noise reduction solutions.

The outcome of Highways England's assessment of solar powered barriers has concluded that a trial would not be suitable at these locations and so we will be progressing the detailed design of conventional noise barriers at up to eight sites between junction 3 and junction 5 of the M40.

There is also a resurfacing scheme planned this year between Adwell (between junction 6 and 7) and junction 8 (Wheatley) as the surface of the road on this stretch of road is nearing the end of its serviceable life. This scheme will lay quieter surfacing material which will help to reduce traffic noise for residents near the motorway.

What sites are going to receive noise barriers?

Traditional noise barriers are being considered at up to eight sites between J3 (Loudwater) and J5 (Stokenchurch) in Buckinghamshire.

Highways England's early work has identified that the majority of residents living within areas exposed to high noise levels from the M40 are likely to benefit, including the communities of Lane End, Stokenchurch, Chepping Wycombe and High Wycombe.

Sites being taken forward into detailed design are: Stokenchurch, Wheeler End / Lane End, Booker Cressex, Daws Lea, Flackwell Heath, Loudwater, Wooburn Moor (North) and Wooburn Moor (South).

Confirmation of the final locations and further details on the proposed nature and locations of barriers will be announced as design progresses.

Why aren't the other sites on the M40 going to get any barriers, you had 21 to start with?

Highways England's assessment has identified that eight of the sites meet the criteria of our national noise programme so design will progress for these sites.

The assessment was carried out to determine which sites would be progressed taking into consideration both the level of noise reduction achievable and the number of people affected in each location against the cost of installing the barriers. Each site was assessed individually and only the locations with a positive cost-to-benefit ratio will be progressed.

Those sites which fall within a designated noise important area but are not part of this project will continue to be considered by Highways England under the National Noise Programme.

What about people in Oxfordshire?

Local communities in South Oxfordshire between junction 6 (surfacing starts near Adwell) and 8 of the M40 will benefit from a maintenance scheme being carried out by UK Highways, who is responsible for the safe operation and maintenance of the M40 (junction 1 – junction 15) on behalf of Highways England. The scheme will start in September 2016. The scheme will resurface the existing road with quieter surfacing material, as the surface at this location is nearing the end of its serviceable life and will reduce the noise residents are exposed to.

What are the reasons why solar noise barriers won't work?

The energy generated by solar noise barriers can either be used by Highways England to power the technology it uses on its road network or it can be fed back into the national grid.;

There isn't a lot of technology currently on the M40 between junction 3 and 8 and unfortunately the rate set by government for electricity fed back into the national grid was reduced by approximately 60% in January 2016, after the trial had begun. As a result the value of the electricity generated would not pay for the installation of the solar panels.

Why can't the energy generated be sold on to local communities / businesses?

Highways England cannot sell any energy to third parties as this would be outside the terms of their operating licence.

The whole reason that the M40 CEG group started campaigning for energy producing noise barriers was because they were told that resurfacing was not possible and they did not qualify for conventional noise barriers, or that they were too expensive . What's changed?

Highways England has committed in their delivery plan, launched in 2015, to mitigate 1,150 noise important areas by 2020. It is thought that approximately 10% of these areas will be treated with methods other than resurfacing the road with quieter surfacing material. This work is being delivered by Highways England's National Noise Programme and the identified sites on the M40 have been assessed as meeting the criteria for this programme. This is why work is now being progressed to provide traditional noise barriers at up to eight locations.

Was it all a waste of time, including the competition Highways England ran last year?

None of the work that has been undertaken so far will go to waste. The knowledge Highways England has gained from the detailed assessment of design options and practicality for installation on the M40 will be useful going forward to inform the development of the scheme to install traditional noise barriers on the M40. Without this work, it would take a lot longer before work to install noise barriers could start. The work undertaken on evaluating the benefits of combining solar panels with noise barriers is also useful in aiding potential future use of photovoltaic noise barriers in more appropriate locations.

Is the idea of solar panelled noise barriers likely to ever be used somewhere else and what would Highways England need to do to make it possible?

Yes. Given the knowledge gained from the development of options and detailed assessment carried out on the M40 Highways England is already considering other sites where a trial of solar panelled noise barriers could be undertaken. It is too early to say more but we will keep people informed in due course.

When will the traditional noise barriers be installed on the M40?

Our current construction timings are still indicative at this stage. Highways England will now start detailed design on the noise barriers and the start of installation of the barriers is anticipated for summer 2017.

Who is funding this project?

The development of the scheme is entirely funded by Highways England.

Funding for construction will be allocated when the scheme is further developed.

Are you anticipating any setbacks?

We are about to progress to detailed design, which will be subject to geotechnical work, further noise modelling and environmental assessment, so our current construction timings are still indicative at this stage.

We will keep road users informed as the work on the noise barriers progresses.