

## **Submission to Public Inquiry by Michael Francis**

I am a resident of Farnborough living about half a mile from Queen Elizabeth Park. We use the park daily, walking our dog along with many others. The park is a special area providing peace and closeness to nature in the urban environment. It is a unique public space in Farnborough. The large trees provide shade and natural beauty. It is a fantastic area for dog walking and children's recreation. This is a greatly valued public park in the local community. We will be impacted significantly personally and as a community by the proposed pipeline.

Esso's plans to cut down trees in a 30m wide strip to allow installation of the pipeline as presented in their application will impact almost all of the park. The occupation of the park for pipeline installation with associated construction noise will destroy the peace of the park and severely restrict access for the large number of people who use it. Destruction of the many large trees will be an irreplaceable loss to the environment. After constructing the pipeline Esso's demand that trees should not be replaced in a 6m wide strip means that it will never be possible to recapture the character of the park. If Esso are given permission to proceed as they propose there will be a huge cost to the community.

Writing as a professional engineer, a Fellow of the Institution of Civil Engineers, with more than 40 years' experience designing and building tunnels and utility projects, I am astounded at the engineering planning of Esso's pipeline. The approach has been to define the scheme in such a way as to provide the maximum amount of choice to the contractor. There has apparently been very little consideration of different options, no considerations of value apart from cost to Esso in the area of Queen Elizabeth Park. I say this because there are a few changes to the scheme which would reduce the impact on the park. Some may increase project costs, but compared with the loss of amenity and damage to the environment, they would be insignificant; and some changes could bring cost and programme changes.

### **A. Width of corridor for construction**

The proposed 30m wide corridor for the pipeline construction (or even the 15m wide corridor also mentioned in the documents) is completely out of proportion for installation of the 300mm diameter pipe.

- this width of corridor was not utilised when the original pipeline was installed;
- elsewhere on the project the width of corridor is much smaller than this;
- 300mm diameter pipes are installed safely within highways of width 6-7m wide all over UK
- the destruction of large trees within the wide corridor is a high unnecessary cost.

Before proceeding any further with the project Esso must be required to carry out a detailed analysis of construction of the project in order to minimise the width of corridor used. This should include a detailed method statement and investigating the use of smaller plant than that proposed which is more appropriate for the environment of the park and the suburban streets.

### **B. Duration for occupation of the park**

The proposed duration of occupation of the park for the construction of the pipeline in Esso's proposals is one year. This seems completely out of proportion to the work to be done. You may need to allow a month for vegetation clearance and a month at the end for testing and making good. The pipeline laying should be able to progress at a rate of at least 24m a day or 120m a week (3 welds per day if 6m pipes are used) which means 4 weeks for laying the 500m pipeline through the park. 3 months would be a maximum duration for occupation of the park. If a whole year was

allowed for (as Esso's current programme) then we must assume that a rate of progress of 2.5m a day is assumed (One 6m pipe and one weld a week!). This is surprisingly slow for a 300mm pipe even allowing for welding. There may be an argument that the contractor needs to have some flexibility in his programme, but I cannot see a reason why the duration of occupation cannot be designed based on realistic construction methods.

Esso need to produce a detailed construction method statement which provides a basis for their duration of occupation of the park, because the long occupation proposed is costly to the community, unrealistic and unacceptable.

### C. Consideration of trenchless methods

Esso in their recent response to queries about use of trenchless methods have apparently dismissed the possibility of trenchless methods after somewhat cursory analysis.

It is my opinion that there is a very feasible and attractive option to install the pipeline across the park by directional drilling. The drilling machine would be installed at the west end of the park, and the pipe string assembled on the Farnborough Hill School playing field before it is pulled through the bore. The directional drill would stretch from the west end of the park and across the A325 into Farnborough Hill School playing fields. This length is quite feasible with curvatures of 600m and is similar to other lengths of HDD bore elsewhere on the project. See Figure 1 below.

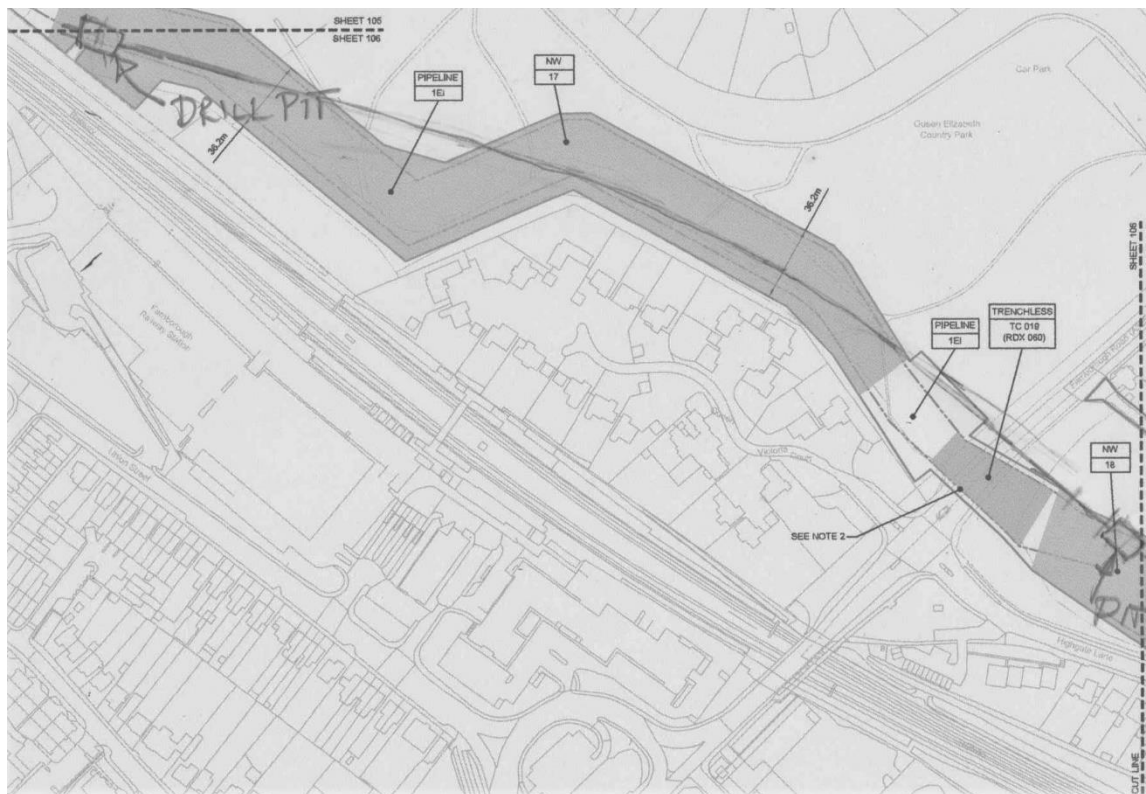


Figure 1

This option has huge advantages:

- There is no need to destroy large numbers of trees
- There will be no need for construction traffic to cross the park
- The amount of spoil to be removed is minimised
- Programme for the work is minimised – maybe as little as 6 weeks

- No need of the auger bore at a larger size to install pipe across the A325 saving huge cost and programme
- Reduced number of bends
- Utilises HDD plant used elsewhere on the project with reduced mobilisation cost
- Carbon cost is minimised
- Capital cost when considering all the site clearance and programme may actually be less than the construction method currently proposed.

Esso must be required to carry out detailed feasibility of this or other trenchless methods that minimise impact on the park and present these studies to inform option selection.

Considering the huge social and environmental cost of destroying trees and the park environment Esso should be required to employ trenchless methods to cross the park.

#### D. Environmental Risk Management

Esso states that *'New developments are typically subject to an Environmental, Socioeconomic and Health Impact Assessment process. Environmental, Socioeconomic and Health Management Plans are then developed to define the set of measures that will be employed during development and operations to avoid environmental and social risks, reduce them to acceptable levels or remedy the impacts.'*

<https://www.exxonmobil.co.uk/community-engagement/sustainability-report/environmental-performance/environmental-management>

They state that the preferred approach is to **Avoid** environmental risks. The obvious way of avoiding environmental risks on the pipeline through Queen Elizabeth Park is to employ trenchless technology. It should be pointed out that the environmental risks are high impact and certain to occur.

Esso must be required to produce their environmental risk assessment (as they claim to do) which justifies their choice of the option for selected construction method.

Michael Francis

2<sup>nd</sup> December 2019