THORP ARCH TRADING ESTATE ACTION GROUP

# OBJECTION TO PLANNING APPLICATION 13/03061

**2,000 HOUSES ON THORP ARCH TRADING ESTATE**

## Volume 3 Addendum 2– Contamination Issues

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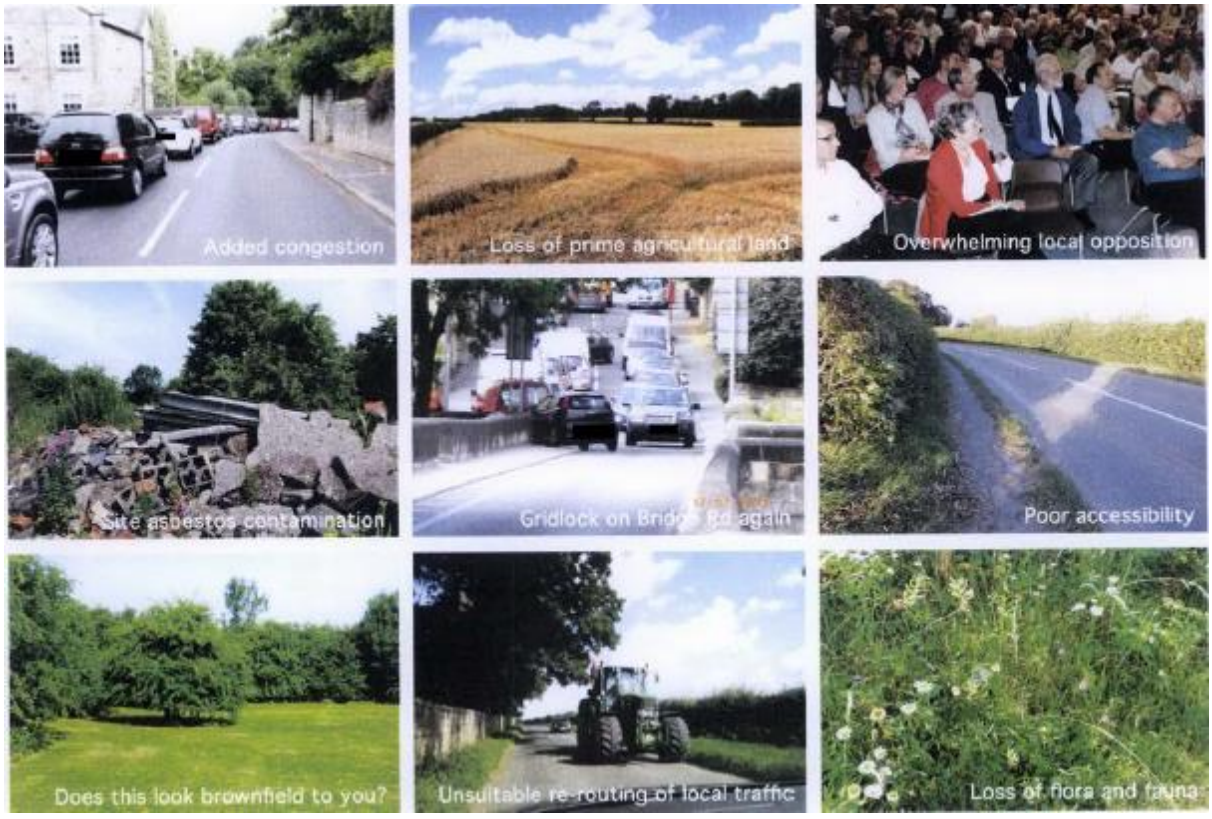


**Planning application 13/03061. 2000 houses on Thorp Arch Trading Estate.**

**Objection on the grounds of potential loose asbestos fibre on site.**

Volume 3 Addendum 2– Contamination Issues.

**Contamination with loose asbestos fibres**.

In a recent telephone conversation with George Moore (who initially developed the Trading Estate) he indicated that when he purchased the Estate around 1960, all the (approx 600) buildings were connected to a steam supply coming from boilers at either end of the site. At that period such steam lines were insulated with loose asbestos fibre, held in place by a wrap and hard set coat of plaster or similar material. The steam lines can clearly be seen in photographs from the period, below.
Mr Moore arranged for the lines to be removed and sold for scrap. However the asbestos coating would have had no scrap value. It would have become even more friable because of extended exposure to high temperatures. There are strong local views that some or all of the asbestos material was buried on site at, or in the vicinity of, zone 3 and Westminster Yard. We are currently trying to find more information, and to see if there is anyone still living who knows more about the disposal of the asbestos. A rough calculation, assuming 10 kms run length of 6" steam line, insulated with asbestos 3" thick, with an asbestos density of 150kgs/cubic metre, would yield a total quantity of asbestos of over 50 tonnes.
Given the potential hazards to health if such asbestos is on site, this issue really must be 'bottomed' before the application is decided. Given that in 1960 the risks to health from asbestos were not well known, and the standards of care in removal and handling of the material were nowhere near today's, the potential hazards both where the material is buried (if it is) and at any location where the stripping of the insulation took place, are obvious.

Some of the buildings in Group 5, looking south with 5 B 11 in the centre. By the time this photo was taken in the mid 1950's, the cleanways between the buildings were no longer maintained in the spotless condition which was such a feature of the 1939-45 war. Where they crossed, the lagged pipes carrying steam around the factory, and also the pipes of the compressed air ring, were carried above the cleanways. At the end of 5 B 11 can be seen an air reservoir tank.

firing, the striker detonates the cap, which ignites the gunpowder which in turn ignites the cordite in the cartridge. The pressure developed by the burning cordite forces the shell up the barrel of the gun. The burning cordite also ignites the tracer (if fitted) to leave a visible trace of the track of the shell through the air.

When the shell strikes its target, a needle in the fuze pierces the detonator, starting the sequence in which the detonator sets off the high explosive magazine in the fuze, which detonates the exploder pellet immediately below and which in turn detonates the main high explosive filling in the shell.

Not all shell is designed to explode on impact. Fuzes can be used which will detonate the shell either after the elapse of a set period of time, or at a predetermined height (a barometric fuze). Nor do all shells have an integral cartridge case containing the propellant. The propellant may be placed in the breech after the shell (without cartridge case) has been loaded. The propellant would typically be contained in cloth bags, the number of bags deployed being used to control the range of the shot. Separate loading of the propellant only marginally slows the rate of loading and fire. A good gun crew could have five shells in the air at one time, even using separate propellant bags.

**The layout of a filling factory.**

The primary design requirements were:

1. That all reasonable steps be taken to prevent any risk of accident.
2. That should an explosion occur the effect would be as localised as possible.
3. That when these two demands have been met, the best possible output should be achieved.

The factory was fundamentally divided into 'clean' and 'dirty' areas. A 'clean' area was one where loose explosive might be encountered, and thus was one from which were excluded all items which ignite explosives. A 'dirty' area was where no explosive could be exposed, and where the risks were consequently less. Within the factory the groups where loose explosive might be encountered were kept separate and enclosed within fences through which access was be controlled so that the area could be kept 'clean'.

Since the filling of ammunition required a variety of operations, from the filling of the cap with very sensitive explosive to the filling of the main charge of comparatively insensitive explosive, the operations were classified into eight categories. Each was allocated to its own 'clean' area, or 'Group' within the factory.

Typically a factory would consist of:

*Group 1*

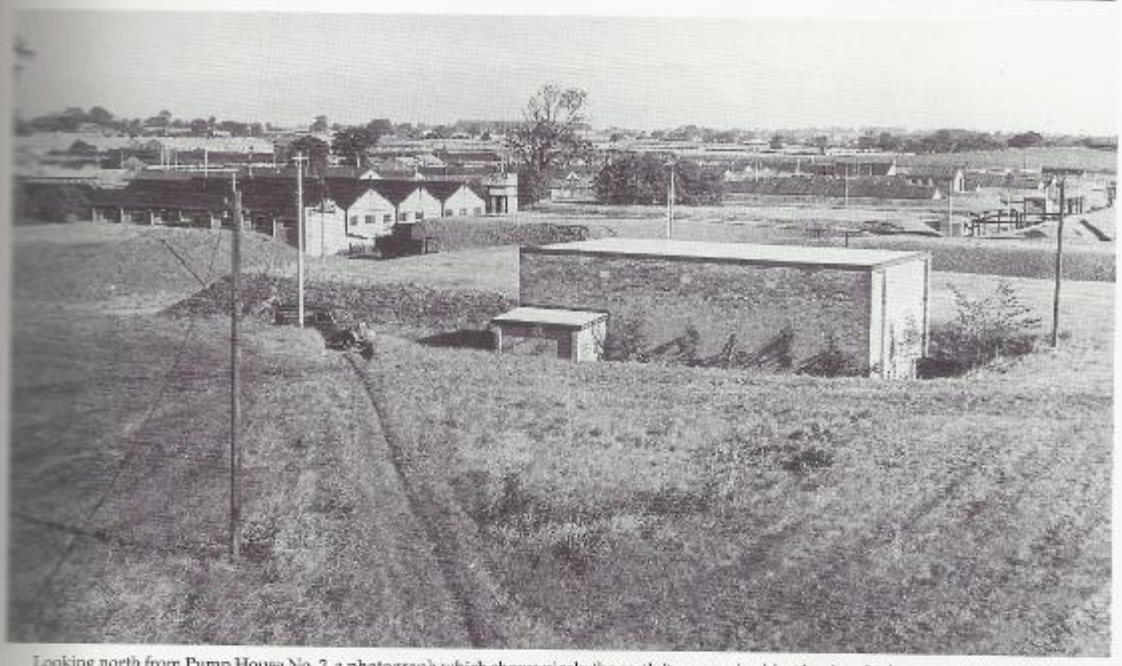
This was the Initiator Group, which handled the most sensitive explosives, and manufactured those too sensitive to be transported from outside the factory. The main work of the Group was the filling of caps and detonators required for primers and fuzes. A subsidiary section of the Group dealt with the filling of primers (and also of tracers if there was no separate section for tracer filling).

*Group 2*

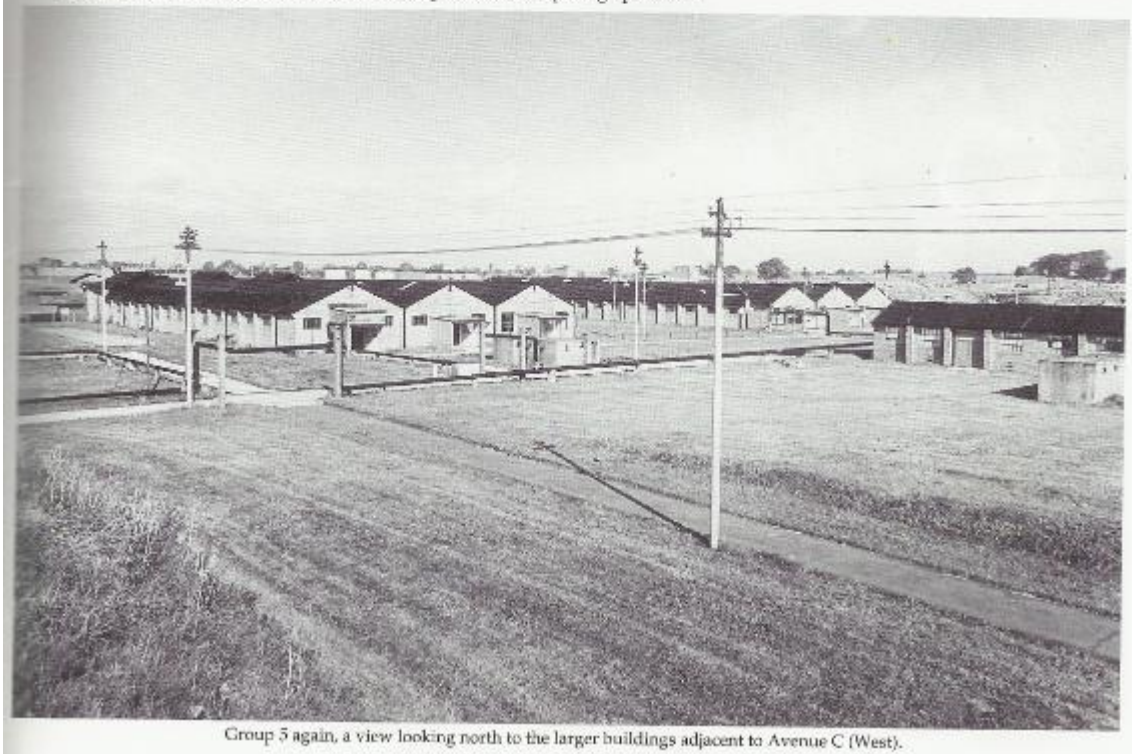
This Group was occupied solely with the production of fuze magazine pellets, exploder pellets and exploder bags. The explosives handled were powdered T.N.T. and an explosive known variously as Tetryl, Composition Exploding or C.E.

*Group 3*

Was the Group that carried out all the filling of fuzes, involving the assembly of detonators produced on Group 1 and fuze magazine pellets from Group 2 into the bodies of fuzes.



Looking north from Pump House No. 2, a photograph which shows nicely the earth 'traverses' or blast banks which separated the buildings within the factory. The idea was that in the event of an accident in one building, the blast would be diverted upwards and should not affect adjacent buildings. The vehicle in the middle foreground was the photographer's van.



Group 5 again, a view looking north to the larger buildings adjacent to Avenue C (West).