

**Notes of a meeting to discuss piling works at Peters Works - 9.30 a.m. Wednesday  
14 January 2015 at Bam Nuttall's site office**

**Attendees:**

Cllr Roger Dalton (CRD), TMBC Ward Councillor/Chair, Burham Parish Council (BPC)  
Cllr Dave Davis (CDD), TMBC Ward Councillor  
Cllr Richard Stone - Chair, Wouldham Parish Council (WPC)  
Cllr Ken Savage (CKS) - Vice Chair, WPC  
Cllr Jenny Head (CJH) - WPC  
Cllr Bill Stead - Vice Chair, BPC  
Cllr B Frost - BPC  
Rex Burgess (RB), Project Manager, Bam Nuttall  
Lloyd Wickens (LW), River Works Agent, Bam Nuttall  
Adele Dodgson (AD), Project Environmental Manager  
Peter Thomason (PT), Environmental Protection, TMBC  
Shirley Boards (SB), Trenport Investments Ltd.  
Steve Loader, as above

**1. Project overview:**

SB welcomed all to the meeting, introductions were made followed by an update on Peters Village (PV) progress by RB. He stated that overall, the programme is going very well and that the only delays currently incurred are by statutory undertakers, such as the gas main works in Church Road. Phase 1 Housing application has been submitted to TMBC with a planned start on the first housing by summer 2015. Court Road is due to be asphalted in February 2015. Bam recognises that piling is currently the biggest issue/concern with local residents.

CDD: will these delays by statutory undertakes cause the project programme to fall behind?

RB: No, the project will be completed on time.

CDD: will off site works be completed this summer?

RB: all roadworks will be completed this year and quarry works in Peters Pit will resume again in April when the weather and its impact on the chalk has improved.

**2. Piling works overview:**

LW advised that temporary piling works into the river would start in the next two weeks. There are four elements to the piling programme:

1. stabilising and supporting the western approach with anchor-piled wall.
2. sheet piling on the east riverside walk with 600m of sheet piling. Initial 150m has been completed and will continue in a southerly direction away from the village of Wouldham.

3. temporary works for the river bridge. Bam is not coffer damming the whole river. Pile bents - i.e. steel tubes with a steel frame on top are constructed in the river to give access to the middle of the river. A 20m navigational channel will remain in the river.
4. Two coffer dams will be constructed from the access jetties to enable the bridge foundation piles to be installed. This will have no adverse flooding affect on local residents. The coffer dams comprise steel frames/beams surrounded by sheet piles and are installed using vibration hammers.

The piling programme is due for completion in August 2016.

CJH: She has received positive feedback from villagers following Bam's provision of information on the piling works' operations.

RB: confirmed that piling works to the river wall is continuous, but piling works in the river will be intermittent.

CKS: pointed out that the PV riverside works would be very similar to those at the Esplanade in Rochester.

### **3. Piling works explained in detail by Lloyd Wickens:**

The river piling works will not be continuous but will be built linearly every other day by driving two piles. On driving days the work will continue for approximately two hours in a 10/11 hour shift. The coffer dam work will involve intermittent piling that will increase in intensity for short periods of time. The work to the east river wall will be continuous and use a leaderig pile vibrating hammer followed by an intermittent impact hammer.

Noise and vibration levels from piling works is influenced by weather, including fog, and tides.

CJH: asked for confirmation of Bam's working hours?

RB: confirmed that the site's working hours are between 7.30 a.m. and 6.30 p.m. but that piling works at present are taking place between the hours of 08.00am and 05.00pm due to daylight restrictions. This will be extended to 06.00pm when light permits.

CDD: enquired as to the duration of: a. east bank river works and b. coffer dams?

RB: anticipated completion will be: a. mid-March and b. from end March to mid April. in 2016 work to extract the piles will be undertaken with an extraction hammer.

LW explained that Bam is building a bridge in situ to support the new bridge by way of a scaffold system which sits on piles with beams across. The design element is completed. The works will see intermittent vibrations in 4/5 minute intervals using the same type of hammer that is currently being used. These works are anticipated to be completed in 2015 mid April on the west bank and mid May on the east bank.

CDD: asked how the extraction of piles would be undertaken?

RB: explained that temporary piles may be cut off at river level and LW added that a few schemes are being considered for their removal. These include the placing of a plate over a pile and the use of water pressure to lift out the pile. Or the pile could be cut off 1m below river bed level but Bam would rather retrieve the piles if possible.

#### **4. Piling noise and vibration:**

LW: stated that the noise and vibration levels are well within the legislative limits.

RB: stated that one week's regular monitoring of these levels is being undertaken using independent specialist equipment from Environmental Services Group. The equipment provides data logs of levels.

CJH: asked where the monitoring stations were situated; if these were on the construction site or within the village itself? The village pub had suffered some of the worst effects of the piling.

LW: explained that base levels were taken within the village.

AD: confirmed that the vibration monitor was at four locations: opposite the entrance to the greenway, the Hall Road bungalows, a layby/hardstanding in Knowle Road and at the Ferry Lane car park at the bottom of that lane.

CJH: suggested that monitoring should also take place near the church and near the shop and not just at the outskirts of the village.

AD: confirmed that although there were some limitations as to where the kit could be used, she would arrange for the monitoring equipment to be sited at differing locations.

CRD: asked if it was only vibration monitoring that was being undertaken?

AD: confirmed that a separate noise meter was also being used.

CJH: asked if the vibration levels were being monitored through the air and not the ground?

PT: explained that the effects of vibration and noise was a very subjective issue, that some people were more sensitive to these effects than others. A noise nuisance to one person would be of no issue to another and he gave some examples (e.g. noise from motorways, railway lines). The legislation adopts the viewpoint of the average person and all assessments are made from that perspective. It does not consider an individual's particular sensitivity to noise and/or vibration.

SB: added that complaints received direct by Trenport were solely on vibration and not noise.

CRD: advised that in discussions with two separate Wouldham households he had opposing reports. One household had reported a big noise nuisance and one just 20 yards away had heard virtually nothing. He asked if TMBC is happy with the works' noise and vibration levels?

PT: confirmed that TMBC Environmental Protection was working in very close and regular liaison with Bam Nuttall and was satisfied with the levels of noise and vibration.

CDD: asked if there was a variation to the base level monitoring (when piling was not taking place) at different times of the day such as during rush hour as opposed to quieter times of the day?

AD: advised that the noise monitoring results are monitored at peaks during non-piling periods and that bus movements, for instance would vary the base level conditions.

CJH: stated that whilst at this meeting she could feel the vibrational effects of the piling, that she knew of instances where the vibrations would make vases move in residents' homes and this was unacceptable.

The other attendees stated that they could not feel these effects and there was further discussion and examples given on how individuals feel these effects to a greater or lesser degree.

CRD: advised that TMBC is continuing to work with Bam and is awaiting details from individual residents on what effects they are experiencing. **He asked that the data collection and results of the monitoring be provided to Wouldham and Burham Parish Councils. This was agreed by Bam.**

LW: explained that no data was available yet but that initial spot checks indicated that noise and vibration levels fall well within British Standards.

CDD: stated that it's important villagers are made aware that Bam's aim is to get the works completed as soon as possible, within legislative constraints, and with as minimal disruption as possible so that the project doesn't suffer delays.

## **5. Contaminated materials**

CJH: asked if she could raise the issue of contamination at the former Peters Works. She stated that there had been complaints about odours emanating from this site. Having lived in the vicinity for many years she was well aware of the history of the site and the chemicals that would have remained post industry. The Parish Council and residents wished to be reassured that contaminated land was being dealt with by strict and correct procedures.

AD: explained that there had been a far greater volume of concrete than expected at the former Peters Works site. She gave a thorough explanation of Bam's ground investigations and remediation methods, all of which had been approved by TMBC's Environmental Protection Team. She advised that she is constantly on site and that all contaminated material is being fully analysed to assess the level of hazard, and the results of that analysis would form the basis of how such contaminated material would be dealt with. For example, some contaminants would simply safely vaporise into the atmosphere once exposed. Other materials would be quarantined and safely sealed and stored pending further analysis. Soil samples were taken and tested in a laboratory under controlled conditions. Results of that analysis

determines what remediation is undertaken. Movement of materials off site is strictly controlled.

CJH: asked if vaporising of materials was safe to humans.

AD: confirmed that this had no impact on human health as it was a natural process.

CDD: asked if the findings are abnormal for a hundred year old industrial site?

PT: TMBC has read the reports and there are varying degrees of pollutants normal for a site of this type. The levels are not unexpected and exist in isolated pockets. The issue of contamination and its treatment is subject to a planning condition.

CRD: asked about the extent of the volume of contaminated material that had to be removed from the site?

AD: in the region of two dumper truck loads full.

CJH: advised that she had several photographs of the former chemical works and could provide them to Adele.

CDD: told the meeting that Peters Works had been the first factory in the world producing Portland type cement.

CJH: enquired what the distance was between the two upright bridge supports as there were local concerns about flooding.

LW: advised that the distance will be 60m from pier to pier with a 20m navigational channel during the works. There was no flooding issue.