Removing Tarmac Around Shallow Utility Services

1. Prior to any excavation or floor sawing, the area will be surveyed as usual using all available drawings and cable avoidance tools. (CAT4+ and Radiodetection Signal Generator as minimum standard).

2. Trial holes will be hand dug to determine the tarmac thickness and to also confirm utility depths where they have been identified.

3. Upon determining the depth of the Tarmac, the floor saw will be set to the actual depth of the tarmac and no deeper

4. When services have been identified as shallow or a risk of being shallow, these should be marked out with a red-zone (an area 50mm either side of the service).

5. Where red-zone services are identified in the trench route, the depth of the floor saw will be raised by 50% of the determined depth of the tarmac. The length of this shallow cut will only be required within the red-zone, the blade can be lowered to the original depth of the Tarmac once the service has been passed.

6. Once the trench is cut, the tarmac can be removed using suitable means. Red zones of tarmac cut down 50% of the tarmac depth should be broken out with one of the suitable means below. Priority should be given to the top of the list but this will be dependent on the ground and remaining depth of the Tarmac

- Lift and break tarmac using insulated tools **(most preferable)**
- Use the bucket of the excavator to lift and break the tarmac **(Suitable for any area that is too deep for insulated tools)**
- Using a pecker attachment to make small indents/impact about 2cm-3cm into the tarmac with the pecker at 45 degrees to the ground. **(only to be used in situations with particularly deep tarmac)**

7. Any Identified shallow services Identified using this process will be photographed and reported through the shallow utility report form on Fastfield.

If in any doubt, please seek advice from management or the Avonline SHEQ support team