

Northamptonshire Highways Case Study

Reference Number:

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Title: **Thermal Road Repairs**
www.thermalroadrepairs.com

Overview:

Northamptonshire County Council is always looking at new ways of repairing highways in a cost effective and safe way. Innovations are trialled throughout the year to see if they can be added to existing methods of repair.

Thermal Road Repairs - we have been trialling in Northamptonshire – a cost effective and quick way of repairing road surface.

We have two machines in the county with another on the way.

Patch repair that has been proven to last longer than normal patching.

The system is

- simple to operate and the environmental benefits are significant, including less waste to landfill, reuse and rejuvenation of existing materials and reduced carbon footprint.
- With trained teams targeting the right roads, we can repair more defects per shift than by the traditional patching method - at a significantly reduced cost.
- We minimise disruption to traffic – which is good for drivers – and these repairs can be driven over again almost immediately they are finished.
- Solar panels on the unit and also on the transportation vehicle captures energy to reduce the fuel required.

Apart from a significant cost saving, the biggest advantages the new technique has over traditional methods are:

- Productivity - a typical one square metre repair can be completed in just 6 minutes
- Once one area heated the team can start the repair. Whilst this is happening the unit has moved on and is heating the next area for repair. A fast, rolling programme of work.
- Joints typically fail on conventional pothole repairs; with the Thermal Road Repair process, it superheats the joints creating a much better bond and seal.
- Currently, the same job takes considerably longer
- Environmentally friendly recycling existing material and reducing emissions and waste

Benefits:

Health & Safety improvements

- Reduced risk of Hand Arm Vibration Syndrome, exposure to dust and live services.
- There is no breaking out or saw cutting, which limits the opportunity for service strike damage and ensures reduced noise, vibration, dust and manual handling.

Jointless Repair

Elimination of any formed edge, negating future maintenance issues

Sustainable Method

Utilise 80% – 90% Recycled Materials

Cost Effective

Value for money against other existing systems

Made in The UK



Types of repair

Three categories:

Permanent is the most robust repair that includes removing debris from a pothole, saw cutting edges and sealing using a hot material that is then mechanically compacted.

Semi-permanent is a repair that includes removing debris from a pothole and repairing the pothole using a cold applied

material mechanically compacted.

Temporary repair involves minimal preparation of the defect and is repaired using a cold applied material and manually compacted.