

## BAT (Best Available Technology)

It was very interesting to be given a BAT Analysis from a UK contractor for a recent RoadCem soil stabilisation project.

The sustainable advantages of RoadCem technology is well researched and documented and we have many reports to substantiate this. The Summary however for an 8,000 m<sup>2</sup> working platform to be used for a two-year construction project, explains them so much better. We have left out the contractor's details and individual cost calculations.

	<b>Traditional Stone</b>	<b>With RoadCem</b>
<b>Options:</b>	Excavate and remove existing top soils and import Type 1 Capping layer	RoadCem In-Situ stabilisation of existing soils
<b>Environment:</b>	Volume of waste 3750 m <sup>3</sup> + 15% additional import of replacement stone until 2019 <b>Total 4312 m<sup>3</sup></b>	Increase surface water run-off in to swale/trap with weekly monitoring and capture if necessary.
<b>H &amp; S:</b>	Increased vehicle movements to and from site	Specialist contractor needed for installation.
<b>Resource &amp; Carbon:</b>	Import of quarried stone for capping, deliveries to and from site and Excavator/ Vibrating Roller	Cement and specialist plant for stabilisation.
<b>Nuisance:</b>	215 vehicle movements of stone to site and 239 movements off site with contaminated stone waste through local village. (end of project) Dust and road damage/cleaning due to nature of compacted stone, disruption to neighbours.	Limited nuisance after few trucks with specialist plant and binder.
<b>Maintenance:</b>	Ongoing during the life of the working compound especially after rain.	None anticipated.
<b>Programme:</b>	1 week to strip site 2 weeks to import stone 1 week to lay and compact stone 3 weeks to remediate at contract completion	2 weeks total to install 1 week to remediate on contract completion
<b>Total Costs:</b>	<b>£274,000.00</b>	<b>£160,000.00</b>
<b>Scoring for BAT comparison exercise is based on 1 being the most beneficial and 5 being the least</b>		
	<b>Traditional Stone</b>	<b>With RoadCem</b>
<b>Environment:</b>	4	2
<b>H &amp; S:</b>	3	3
<b>Resource &amp; Carbon:</b>	5	1
<b>Nuisance:</b>	5	1
<b>Maintenance:</b>	4	1
<b>Programme:</b>	4	2
<b>Costs:</b>	4	3
<b>Total Scores:</b>	<b>32</b>	<b>15</b>