

Innovation and Business Improvement at Balfour Beatty

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Idea owner:



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 Project: **A46**
 Client: **Highways Agency**

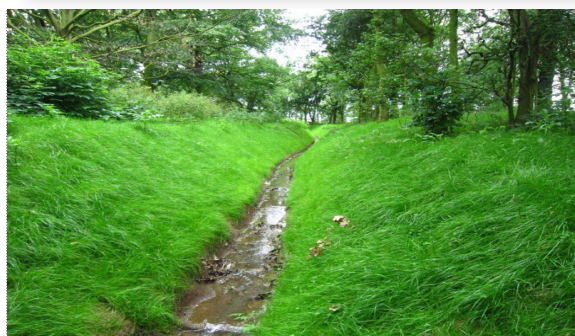
Who is involved:

Division: **Balfour Beatty CSUK**

Business Unit / Opco: **Major Projects**

Geography: **Nottingham**

Sector: **Civil Engineering**



Case study summary:

Name: **Salix C125 & C350 Erosion Control Matting**
(What is it called?)

Case study type: **Lean / Good Practice**
(Lean / Good practice / Innovation?)

Description:
(What is it and why was it needed? What does it do? How does it improve current practice?)

C125 and C350 are a non-permanent and permanent form of erosion control matting which are composed of a high-strength, three-dimensional matting structure, incorporated with a 100% coconut-fibre matrix that supplements the permanent matting structure's grass germination and erosion control capabilities for up to 36 months. The material protects seeding from being washed away and the earthworks outline of the ditch from erosion and damage during the interim period of growth whilst restricting weed establishment.

The material is staked into position using wooded pegs allowing for a completely biodegradable structure if this is required in a non-permanent function or adequate time for establishment of vegetation to hold permanent matting in place.

The material improves on current systems in use on Highways Projects as they either offer little in the way of seed protection during establishment or can result in weed growth dislodging the matting from beneath. These unique systems allow vegetation to be used in areas where forces exerted by water exceed the sheer limits of unreinforced vegetation allowing applications where rock rip-rap, articulated concrete blocks and hard lining were once the only suitable alternatives to erosion control.

Applications: *(How does it work? Ideas for application elsewhere i.e. if applicable to any other function or business unit)*

The product is designed to provide long-term, vegetated erosion protection and permanent turf reinforcement in applications that include critical-flow channels, spillways, stream banks, and shorelines.

Recognition and rewards: *(What prizes, awards grants or publicity has this received?)*

Benefits:

| | Zero Harm | Time | Reduce Cost | Quality | Sustainability | Increase Revenue |
|-----------------------|------------------------------------------|----------------------------------------------------|--------------------------------------|-------------------------------------------------|------------------------------------|------------------|
| To BB | Light weight easy to handle installation | 75% quicker to install than hard lining techniques | Alternative to expensive hard lining | Protects seeding and outline from erosion | Coir matting 100% biodegradable | |
| To client | | Faster construction - lower costs | Lower construction costs | Excellent seed success rate and permanent liner | A green alternative to hard lining | |
| To industry / society | | | | | Renewable source of materials | |
| Other benefits | | | | | | |