

Traditional solar trackers require **mass grading**, which **destroys** topsoil and natural vegetation, **increasing** runoff and **damaging** watersheds.

The Nevados TRACE All Terrain Tracker® uses **articulating couplers** to follow the land’s natural contours, **eliminating** site grading, and **protecting** both the **ecosystem** and your **project economics**.

**Proactive stormwater management:  
Protecting existing vegetation by  
eliminating site grading**



The 170 MWdc Bartonsville Energy Facility solar project was awarded the gold medal as a model of environmental stewardship and innovation by Virginia’s Department of Environmental Quality.

**Goal**

Project developers sought to reduce environmental impacts and costs by avoiding the extensive grading of solar sites.

**Methods**

Articulating couplers and non-continuous torque tubes were used in the Nevados TRACE All Terrain Tracker® to handle slopes of up to 37% without grading. These improvements also avoid having to drive steel pilings to variable reveal heights for the foundations.

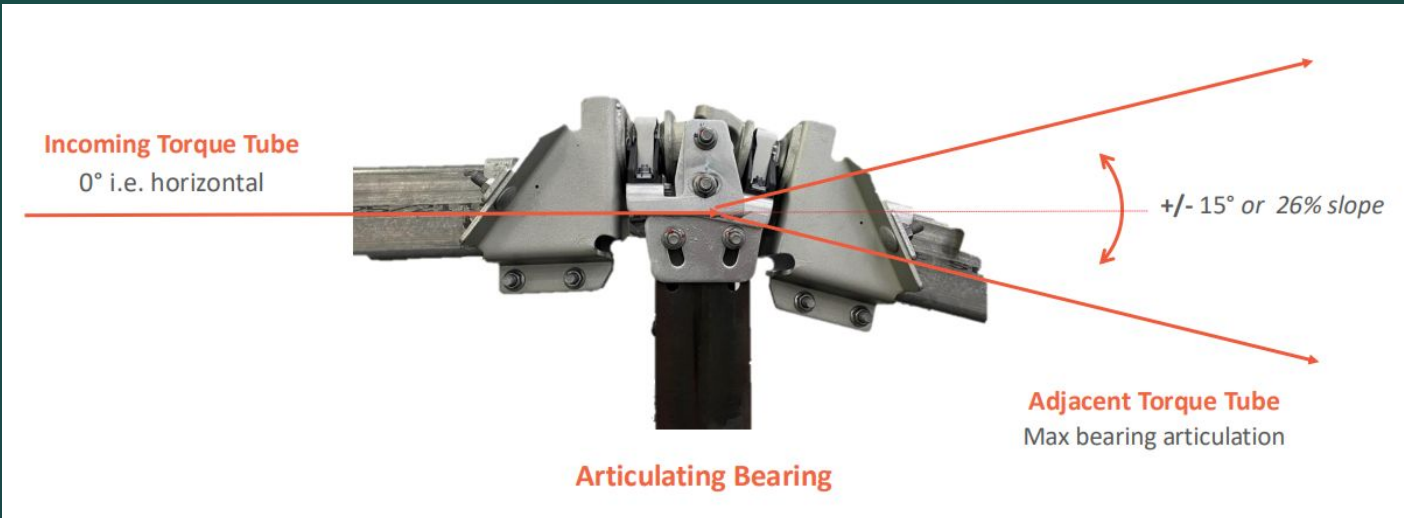
**Results**

- A 170MWdc project in Virginia reduced graded soil by more than 400,000 cubic yards.
- It also saved 230,000 linear feet of steel and was faster to install.
- Virginia Gov. Glenn Youngkin awarded the project a gold medal for watershed protection.

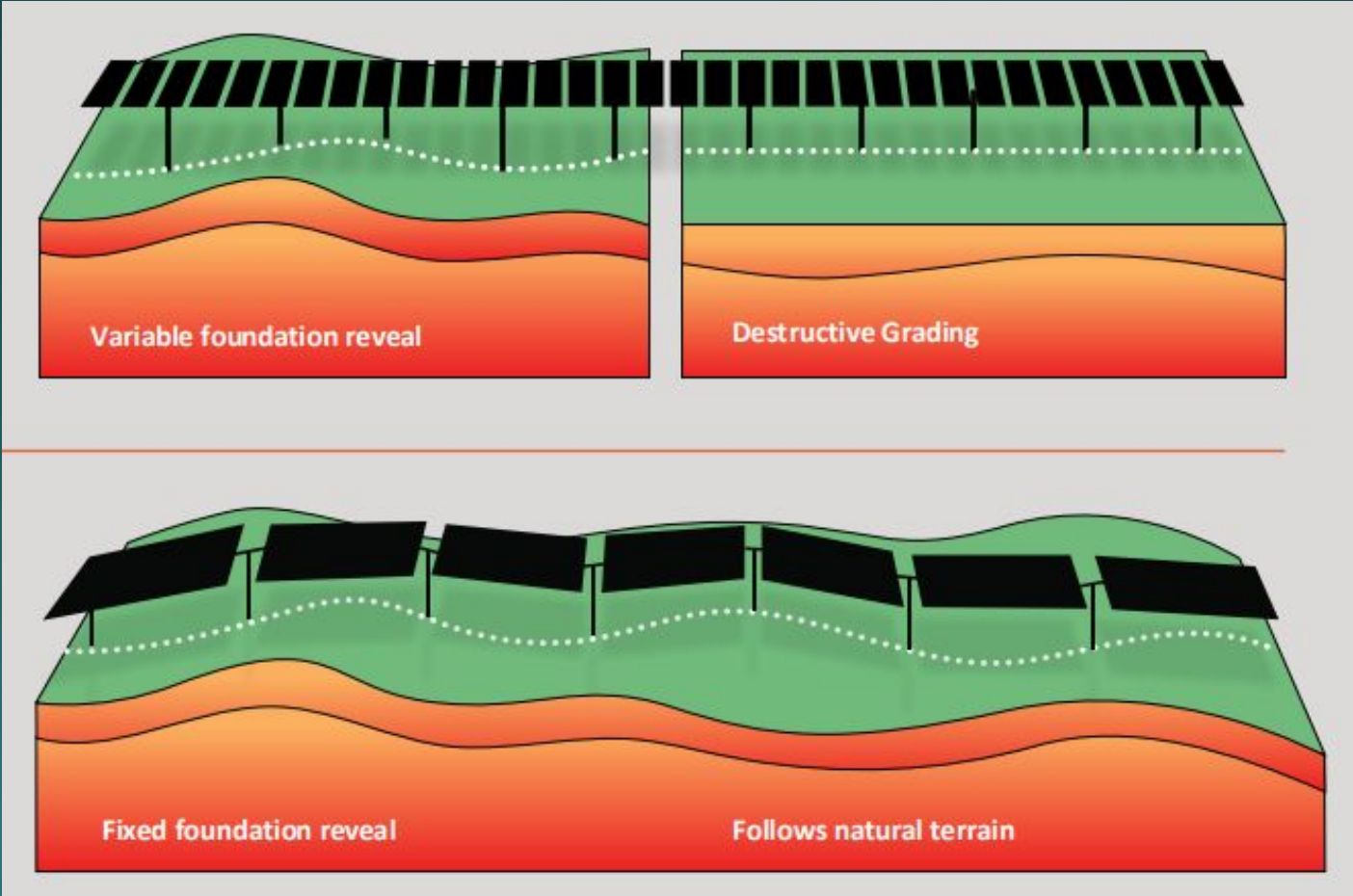
**Conclusion**

Developers can protect watersheds from erosion, flooding, and muddy runoff without costly mitigation, if they choose trackers that minimize topsoil disturbance and preserve vegetation during construction,

**Innovative terrain  
tech lowers cost,  
speeds installation**



Articulating couplers in the TRACE All Terrain Tracker® allow slope adjustment at each post.



This contrasts with traditional trackers, which require variable foundation heights and/or destructive grading to flatten the array.

**\$7,500**

avoided cost per megawatt

Average avoided cost of meeting stormwater prevention plan requirements for graded projects across all topographies. Avoided costs are higher for hilly sites. Source: Primoris

**Acknowledgements**

- Sierra Overhead Analytics
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- Eclipse-M report: *Constructability & Logistics Support*, 2024

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