

## TRILOGY AT MONARCH DUNES, CALIFORNIA

# Providing long term stabilization for drainage channel



<b>Industry:</b>	Water
<b>Application:</b>	Channels
<b>Location:</b>	Nipomo, California
<b>Product:</b>	<b>PROPEX®</b> Pyramattress®

## Overview

Monarch Dunes is a resort community that offers residents golf, recreation, and a community vineyard. During construction, a drainage channel was installed in the vineyard to convey surface runoff from the housing development to detention storage basins. Due to the steepness of the slope, the amount of flow, and the erodible sandy soils, the channel severely eroded and failed. The developer needed a solution to provide long-term stabilization of the channel.

## Challenge

Initially hard armoring solutions were considered, but the developer wanted a more natural aesthetic. A combination of **PROPEX** Armormax® and **PROPEX** Pyramattress, an engineered mattress system that uses **PROPEX** Pyramat® 75 HPTRM to construct a geosynthetic/soil/rock composite for protection of channels, slopes, and spillways, was selected.

**Due to the steepness of the slope, the amount of flow, and the erodible sandy soils, the channel severely eroded and failed.**



## CASE STUDY

Providing long term stabilization for drainage channel

The combined system was designed to provide erosion control on the side slopes and scour resistance in the channel bottom caused by the constant flow of water.

Unlike hard armoring technologies, **PROPEX** Pyramattress components are corrosion resistant and promote vegetation, allowing for an increased design life that is environmentally friendly.



## Solution

The installation of this project was quick and easy because **PROPEX** Pyramattress and **PROPEX** Armormax are more easily transported than hard armoring solutions. The systems also install faster than conventional methods, saving time and money.



Solmax is not a design or engineering professional and has not performed any such design services to determine if Solmax's goods comply with any project plans or specifications, or with the application or use of Solmax's goods to any particular system, project, purpose, installation, or specification.

Products mentioned are registered trademarks of Solmax in many countries of the world.