

*On the Costa del Sol of southern Spain...*

# ***ROCKWOOD Retaining Walls and the Santa Clara Project!***



***The Largest Use of Retaining Wall Units in the World!***





**On the Costa del Sol...**

# ***The Largest SRW Project in the World...with ROCKWOOD!***

## ***In southern Spain...***

The world's largest known usage of segmental retaining wall units is now taking shape between the Mediterranean Sea and the Sierra Blanca mountain range on the Costa del Sol of southern Spain. In this historic locale, where castles dot the landscape and architecture has been influenced by conquest and occupation by Romans and Moors, ROCKWOOD Retaining Wall units are utilized as an integral component of the Santa Clara development project.



The architect wanted a striking appearance while creating a unique design solution to the topographical challenges presented by the steep hillsides. To match the color of a type of rock found in the area, a custom color was developed by Herrera, the ROCKWOOD manufacturer.



## ***The Santa Clara project...***

Begun in 1999, the Santa Clara project consists of luxury villas and apartments constructed on steep hillsides and encompassing an 18 hole golf course. The first phase of a several phase development is outlined above and enlarged on the next page. Successive phases are shown in yellow; the estimated completion date for all phases is 2005.



## ***A natural design solution...***

The use of ROCKWOOD retaining wall units was selected by the architect and the developer to compliment and enhance the natural beauty of the surrounding landscape.



# Santa Clara

## Phase One of Several Phases Now Under Construction



### Section 1:

With a wall length of 622 feet (63', 41', 421' and 97'), this section has multiple tiers with steps to access the tiered levels.

## Phase One



### Section 3:

The terrain dictates the wall configuration: here 214' of wall is separated by an access path.



### Section 2:

A straight wall of 272', this section steps down to follow the rugged terrain.



### Section 4:

With segments of 137', 58', 94' and 38', Section 4 with a length of 327' varies in height as it follows the hillside.



### Section 5:

A straight segment of 283', Section 5 is a "classic" example of ROCKWOOD's construction and design flexibility, demonstrating tiers, patios and walkways.



### Section 6:

Five hundred twenty seven feet long, Section 6 is the fourth longest section of the 3,741' exterior retaining wall. Multiple walls will be used within the complex—between homes, along the streets, for terraces and patios.





#### **Section 9:**

With segments of 208', 31' and 377', the 616' long Section 9 steps with the terrain and includes patios and walkways.



#### **Section 8:**

Section 8, measuring 659 feet, is the longest section and is placed on the top of a 35° to 40° slope.



#### **Section 7:**

Measuring 222' in length, Section 7 is a straight wall with a height of 12'.

## **Golf View Villas**

Six luxury villas will be constructed on the landscaped surface of this three sided retaining wall.

The segments measure 163', 438' and 169' for a total of 770'; additional walls will be constructed between and within the villas.



## **Golf Course Wall**

The golf course retaining wall consists of four tiers each about 325 feet long. Designed to enhance beauty of the course, the wall is located on the south edge of the Santa Clara project.



### **Santa Clara Project    Marbella, Spain**

#### ***Project Manager***

Antonio Luis Castana Bermudez  
Grupo Santa Clara  
Seville, Spain

#### ***Industrial Engineer***

Cristobal Maza Olivera  
Badajoz, Spain

#### ***Architect***

Juan Jose Perex  
Ojeda  
Seville, Spain

#### ***ROCKWOOD units manufactured by:***

Herrera  
06490 Puebla de la Calzada  
Badajaz, Spain  
Member NCMA



### *The architect's choice...*

ROCKWOOD Retaining Walls offers the flexibility in design and the naturally attractive appearance sought by the architect of the Santa Clara project. Combining the project's design goals with functionality and visual appeal, ROCKWOOD's retaining wall units were chosen over other methods because of their design flexibility, their appearance and their ability to be integrated in all components of the project.



### *All elements in the design feature ROCKWOOD...*

The Santa Clara project integrates retaining wall units in all facets of the project: from massive walls to steps, from straight walls to curved sections, from tiered sections to acute angles. Because swimming pools, fences and utilities are to be installed immediately next to the walls and because the subsoil is rock, geogrid is used very sparingly within the project.



### *The segmental wall system...*

All segmental units within the project are straight split face, 18" wide and 8" high. Reinforced concrete is placed behind most wall segments with the walls set on a concrete base. To preserve as much space as possible, there is no setback applied to any of the walls.





### *Constructing the segmental retaining walls...*

Twenty five construction workers are assigned to assemble the wall each day. The highest section of the wall is 25 feet; the longest section is 659 feet. Some wall sections have tiers along the wall which form private patio areas accessed by retaining wall steps. A fence is built into the top of each retaining wall. An estimated 1,500,000 units will be used in Santa Clara.



### *Santa Clara – the next phases...*

While the first phase of Santa Clara is under construction, preparations are being made for additional villas and apartments in future phases. Site preparation is now being done on future phases of the Santa Clara project.



### **ROCKWOOD Retaining Walls, Inc.**

325 Alliance Place NE Rochester, MN 55906 USA  
www.rockwoodretainingwalls.com email: info@rockwoodretainingwalls.com  
1-888-288-4045