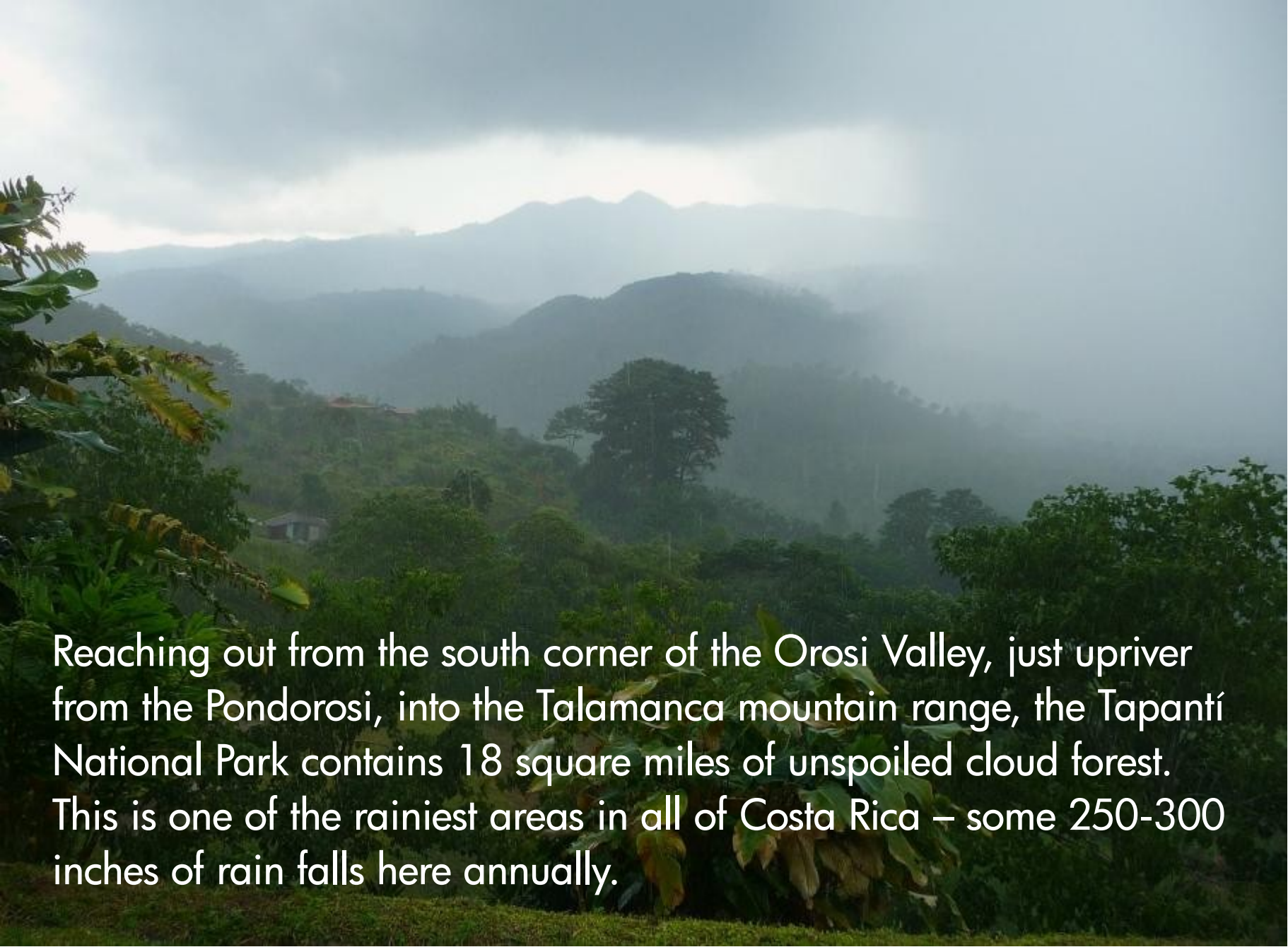


Drainage is my Life

A man with dark hair and a mustache, wearing a light blue button-down shirt, is smiling from inside a large, rectangular concrete drainage structure. He is leaning over the top edge of the structure with his right hand resting on it. The structure is made of grey concrete and has a circular opening at the bottom. The background is a lush green area with various plants and yellow flowers. A black metal grate is visible on the right side of the structure.

The
Pondorosi

Landscaping Plan

A photograph of a mountainous landscape in Costa Rica. The foreground is filled with lush green foliage, including large-leafed plants. In the middle ground, a small, simple house with a dark roof is nestled among the trees on a hillside. The background consists of several layers of misty, forested mountains, creating a sense of depth. The sky is overcast with heavy, grey clouds, and a faint rainbow is visible in the distance between the mountain ranges.

Reaching out from the south corner of the Orosi Valley, just upriver from the Ponderosi, into the Talamanca mountain range, the Tapantí National Park contains 18 square miles of unspoiled cloud forest. This is one of the rainiest areas in all of Costa Rica – some 250-300 inches of rain falls here annually.



When we returned to Costa Rica in August, we saw rain damage from a long lasting July rain storm wherever we looked. This is Calle Gavilán, the road up the hill to our house.



This mudslide at the bottom of our property blocked a little used road...



...and continued for at least 200 feet below the road and off our property.



It was time to get serious about rain drainage on our little piece of heaven



This device consists of two water collection boxes (cajas) connected by a string of cunetas, designed to deliver the water into a quebrada (creek).



This is the third of four new cajas we had constructed this trip.





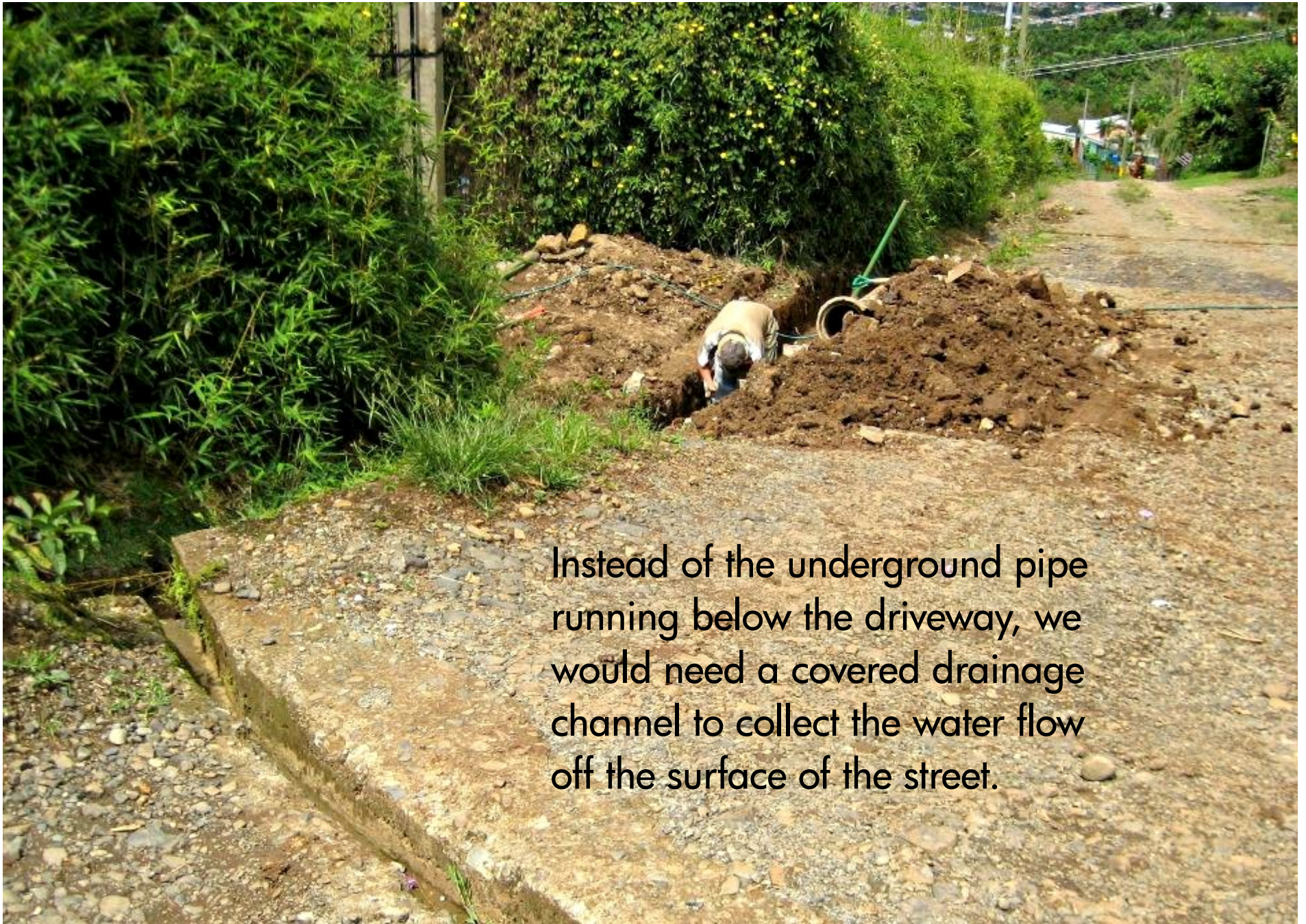
Tropical Storm Sandy hit us a week before it hit New York and was a good test of our systems. More improvements were needed.



One problem TS Sandy highlighted was that gravel was being washed into our channel drains and blocking them, causing overflow.



During a heavy rain, water rushed from the street above, down our driveway in sufficient force to overtax our drainage system.



Instead of the underground pipe running below the driveway, we would need a covered drainage channel to collect the water flow off the surface of the street.

This channel
would have
have to be
deep, wide
and sturdy.

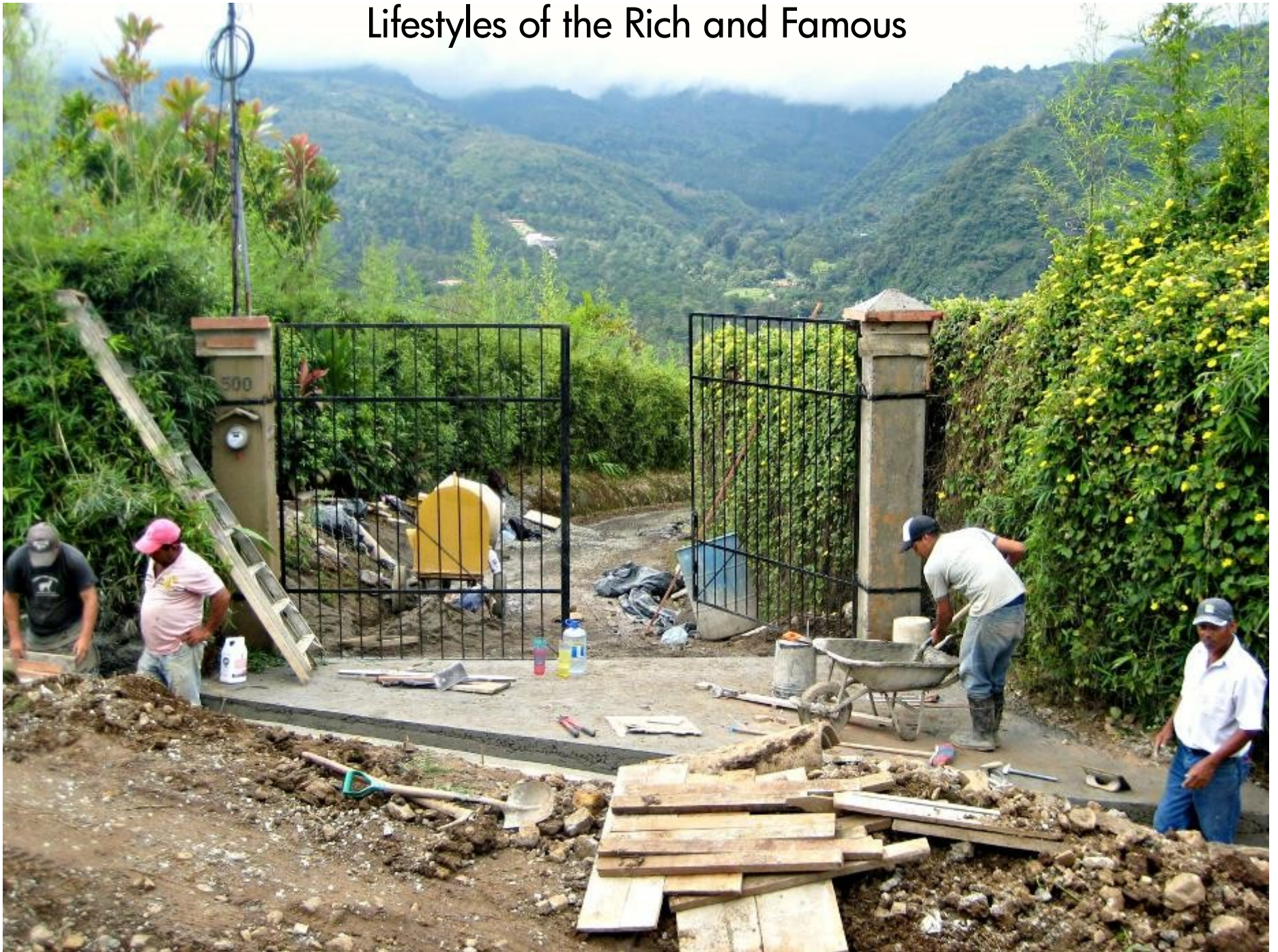




Another caja
to collect water
draining down
the hill along
the side of the
road...



Lifestyles of the Rich and Famous



Not exactly as planned, but pretty close.





This would stem the flow of rainwater draining into our driveway.





These grates are called parillas, the same word used for barbecue grills.



Just to be sure, we enhanced the drainage canal at the bottom of the driveway.





Drivers leaving the house were having trouble making it up this grade without spinning their wheels on the loose gravel. *Mas concreto!*



When your channel drain turns a corner, you need a backstop, or semi-caja.



The downspout of this new roof rain gutter system goes straight into the ground, under the motor court, beneath the bamboo hedge, out the other side, and is piped to a caja system, safely depositing the water 200 feet away in a quebrada.





Controlling drainage is the first step in landscaping

