[SQUEAKING]

[RUSTLING]

[CLICKING]

RICHARD DE NEUFVILLE: Hello, again. I would now like to present the garage case. The objective here is to provide a practical example of flexibility in design based upon a real situation. The value of this case, which I'll be showing in the next presentation, is that it shows how the proactive design avoids downside effects, takes advantage of the upside possibilities, and at the same time, reducing the initial costs.

The case is a prototype example-- that is, the mechanics of it or the design aspects of it is a model for a whole range of applications. So it is based upon, in this case, an Excel spreadsheet where you can relabel the columns and the rows, and look at quite different situations. So it's useful as a model, as a template, for further analysis.

The technology in this case is simple enough so that when you see the results eventually, you can understand how they occur because the technology is very easy to understand. It's trivial to understand. That's one of the values of this particular case.

And the specific value is, the case it illustrates the different ways that the flexibility in design can increase the value to it by reducing the cost, increasing the opportunities, getting rid of the downsides. The case is based upon an actual example that I had the privilege of looking at in England. It is the Bluewater Shopping Center near London in the United Kingdom.

And it was built deliberately for the possible future addition of extra floors on this. It was done by in a precast concrete kind of way so that the columns, and the platforms, and the floors, could be created offsite, and then brought to the garage and added on fairly quickly, if that was the desired action to be taken, so that it was easily expandable. It had been built for the flexibility, should you wish to use it.

Here is the image of the actual site, a narrow view. You may see that there is a wall behind here because this was built in an old quarry. So when it was stopped needing as a quarry, they created a shopping center. Up here is where the shopping area itself is, and the garage spaces are right along here.