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Photographs by Fred R. Conrad/The New York Times

A 70-foot-long steel cage was lifted by cranes yesterday and then lowered into a trench at the World Trade Center site. In all, 63 cages will reinforce a concrete wall that wraps around a foundation at the site. At right, a carbide-tipped drill was used to cut down to bedrock.

One Steel Cage Goes Up, And More Are to Follow

By DAVID W. DUNLAP

It was hard to believe that the 70-foot-long steel cage lying rigidly on the ground yesterday at the World Trade Center site was about to become a "50-ton Slinky," in the words of Steven Plate, the director of priority capital programs at the Port Authority of New York and New Jersey.

But as cranes lifted the imposing structure, drawing neighbors to windows along Liberty Street, sure enough: it bent into a gentle S shape and then a shallow U shape, straightening out again when it was hoisted to its full height.

This remarkable three-hour display was a textbook illustration of the slurry wall construction technique that was used 40 years ago to build the original trade center foundations (known as the west bathtub) and is being used again for the new east bathtub.

To build the wall, workers for the joint venture of Kiewit and Trevilcos, the corporate descendant of the original slurry

wall contractor first excavate a four-foot-wide trench more than 70 feet down to bedrock. They fill the trench with a substance called slurry, a mixture of water and bentonite clay.

The slurry prevents the trench walls from closing in while the cage of steel reinforcing bars, or rebar, is lowered into the trench. The vertical bars are 1 3/8 inches in diameter, about as wide as the "The" in "The Metro Section" on Page B1.

The cage, which will reinforce the concrete foundation wall, was assembled on its side nearby. In yesterday's operation, it was lifted, shifted to a position over the slurry-filled trench and lowered into the soupy substance. The last step is to pump concrete into the trench. That displaces the slurry, which will be reused.

Each cage represents one panel in the wall that wraps around the foundation. With the lifting successfully completed yesterday, Mr. Plate could say, "Only 62 to go."

