

Armada of heavy machines amassing on Interstate 4



Work crews are assembling \$80 million worth of heavy equipment and machinery up and down the 21-mile stretch of Interstate 4 that is going to be rebuilt.

By **Dan Tracy** Orlando Sentinel *contact the reporter*

Contractors spending more than \$80 million on machinery for I-4 makeover
The cranes for the I-4 makeover can lift up to 200 tons

An armada of heavy equipment ranging from massive German-built cranes to American pickups is being assembled along Interstate 4 as work slowly ramps up on the largest public-works project in Central Florida history.

In all, some 800 machines costing more than \$80 million eventually will patrol the 21-mile stretch of the region's busiest interstate as it is rebuilt during the next six years.



CAPTION
Red Huber, Orlando Sentinel
Work crews for the I-4 Ultimate Project drive steel pilings Tuesday, June 9, 2015 at Interstate 4 and New Hampshire St. Crews assembled \$80 million worth of heavy equipment and machinery up and down the 21-mile stretch of Interstate 4 that is going to be rebuilt. Included in the armada: : 250+ pickups, 30+ cranes, 40+ Front end loaders, 30+ Dozers, 30+ Rollers, 30+ excavators and 9 massive German-made Liebherr Crawler cranes with up to 200-ton lifting capacities. (Red Huber/Staff Photographer)

CAPTION
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Already, seven cranes are spread along the highway, one of their main duties lifting H-shaped steel girders as high as 200 feet in the air, then pounding them as much as 120 feet deep into the soil. The girders are set to become pillars that hold up expanded overpasses stretching above other roads running beneath I-4.

The process, called pile driving, is one of the most intricate of the more than 11,000 tasks being undertaken by as many as 2,000 workers during the \$2.3 billion overhaul. Placement of the girders cannot be more than 3 inches off their planned mark.

At New Hampshire Street just north of downtown Orlando, for example, a crane has mashed 14 girders into the ground at 6-foot intervals to the west of the interstate. That translates into 78 more feet of pavement.

"The entire project has all types of complicated things," said Bill Reed, safety manager for SGL, the construction arm of I-4 Mobility Partners, the consortium picked by the state to redo the highway.

The most prominent feature of the so-called Ultimate makeover will be the addition of four toll lanes down the middle of the interstate, although 15 major interchanges also will be rebuilt, along with the replacement of 140 bridges, many in downtown.



CAPTION I-4 Ultimate: I-4 and Kirkman Rd.

Courtesy of I4Ultimate.com

CAPTION I-4 Ultimate: I-4 and Orange Blossom Trail

Courtesy of I4Ultimate.com

The existing general-use lanes, plus lanes for getting on and off the highway, will get more asphalt, while the new toll lanes will be concrete from Kirkman Road to the south to State Road 434 in the north.

State officials picked the name "Ultimate" because they contend no more improvements can be made to the interstate after this work — which is the region's most costly ever, easily beating the \$1.66 billion Wekiva Parkway now under construction in north Orange, south Lake and west Seminole counties.

Besides heavy lifting — the cranes can pick up as much as 200 tons at one time — the machines will dig up and move prodigious amounts of dirt.

Near the Maitland interchange, for instance, they are scooping out a new drainage pond and creating a large mound with the soil. The dirt will be reused as fill or in creating earthen walls that reinforce the overpasses and ramps.



Two eastbound I-4 exit ramps closing in downtown Orlando

When the SGL fleet is completed and on site sometime within the next 18 months, it will include more than 250 pickups and 30 cranes large and small, including the nine shipped in pieces from Germany into the port of Jacksonville. The components of one crane were then driven to Orlando on as many as 10 flatbed trucks.

There also will be more than 40 front-end loaders, more than 30 bulldozers, more than 30 rollers to smooth out the roadbed and more than 30 excavators.

Much of the equipment will be Tier 4 emission-compliant, SGL officials said, which means they emit fewer pollutants than their predecessors.

SGL will track all the equipment by computer, said Phil Picone, SGL project equipment manager.

He likened keeping up with the fleet to that of a car owner following the maintenance schedule for a new Chevy by changing the oil regularly and going in for a periodic tuneup.

Yet Picone concedes his various machines will have problems over time, especially considering the harsh elements in which they are operating.

"Everything is going to break down sooner or later," he said.

Most of the vehicles are owned by SGL or subcontractors, but some are leased. Much of the fleet will be sold once the work is complete in 2021, Picone said.

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