

# Construction update: Smart-sensor facility shaping up in Osceola

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Osceola's [Florida Advanced Manufacturing Research Center](#) has changed a lot since it started vertical construction a little more than a month ago.

What began from just moving dirt around last year on the site near U.S. 192 and Florida's Turnpike in Kissimmee is now noticeably a large building that will be built with lots of steel and concrete to house very expensive equipment to manufacture tiny smart sensors.



Here's a look at the back of the FAMRC. Vertical work has been taking place for 34 days.  
Matthew Richardson

"The vertical phase has been in development for 34 days," said Pete Pace, Osceola County's construction and asset management director.

And right now, all hands are on deck as development ramps up. Pace said about 100 workers were on-site during the Orlando Business Journal tour of the building under construction. Pace said at their peak, there will be between 200 to 300 workers in place.

The smart-sensor facility is an important project for Osceola County, as it will help bring in thousands of high-wage jobs in technology and an entry in a market that will have a global impact of \$154 billion by 2020. And while the project has a completion date of March 15, 2017, organizations are already anxious to put it to use.

For instance, a [University of Central Florida scientist is part of \\$317 million project to revolutionize textiles](#). UCF will partner with MIT to create smart sensor-connected clothing, and much of the research will be done at the Florida Advanced Manufacturing Research Center.

The two-story, 54-foot-tall, 100,000-square-foot building will be the anchor for the major 500-acre tech campus Osceola is building. While more details on the tech campus are still developing, take a look at the pictures to see how the smart-sensor facility is coming along.

From the Orlando Business Journal:

<http://www.bizjournals.com/orlando/news/2016/04/06/construction-update-smartsensor-facility-shaping.html>



Plenty of cranes and bulldozers were on-site.  
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Here's the concrete casting bed. Cement is laid to dry and later broken up to create the walls for the building.  
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This is a different process than usual for buildings. This process is used for the FAMRC because of the need for tall, solid concrete walls.  
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See all the concrete pillars? Those were formed using a casting method instead.  
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Here's a closer look at the casting method for the concrete pillars. Cement is poured in,  
dried and then the cast is removed.  
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This vehicle funnels cement into a casting tower to form large concrete beams.  
Matthew Richardson



See the area with the green steel pipes? That is where the electromagnetic microscope will be held. Special attention is given to that area because that particular room has to be ultra stable to prevent shaking.  
Matthew Richardson



Here at the top of the building, we have an overview of the Class 10,000 clean room area  
The different number classes are based on the amount of particles in the room.  
Matthew Richardson



Here's an overview of the Class 1,000 clean room.  
Matthew Richardson



The waffle design is what helps better circulate clean airflow to the clean rooms.  
Matthew Richardson



And there are hundred of them to be laid.  
Matthew Richardson



And there are hundred of them to be laid.  
Matthew Richardson



The waffle design is tied together using steel pipe before being lifted in the air.  
Matthew Richardson





Rows and rows of steel pipes. This is the second level of the center.  
Matthew Richardson



They sort of look like monkey bars, huh?  
Matthew Richardson



I guess I'm not the only one that notices the steel pipes are climbable.  
Matthew Richardson



Hundreds of tons of rock is used to prevent slips and falls from workers and to help machinery move uphill.  
Matthew Richardson



And here's the front of the FAMRC.  
Matthew Richardson



See the power lines in the far back? That is only half of the 500-acre property that Osceola hopes to develop into a tech campus.  
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