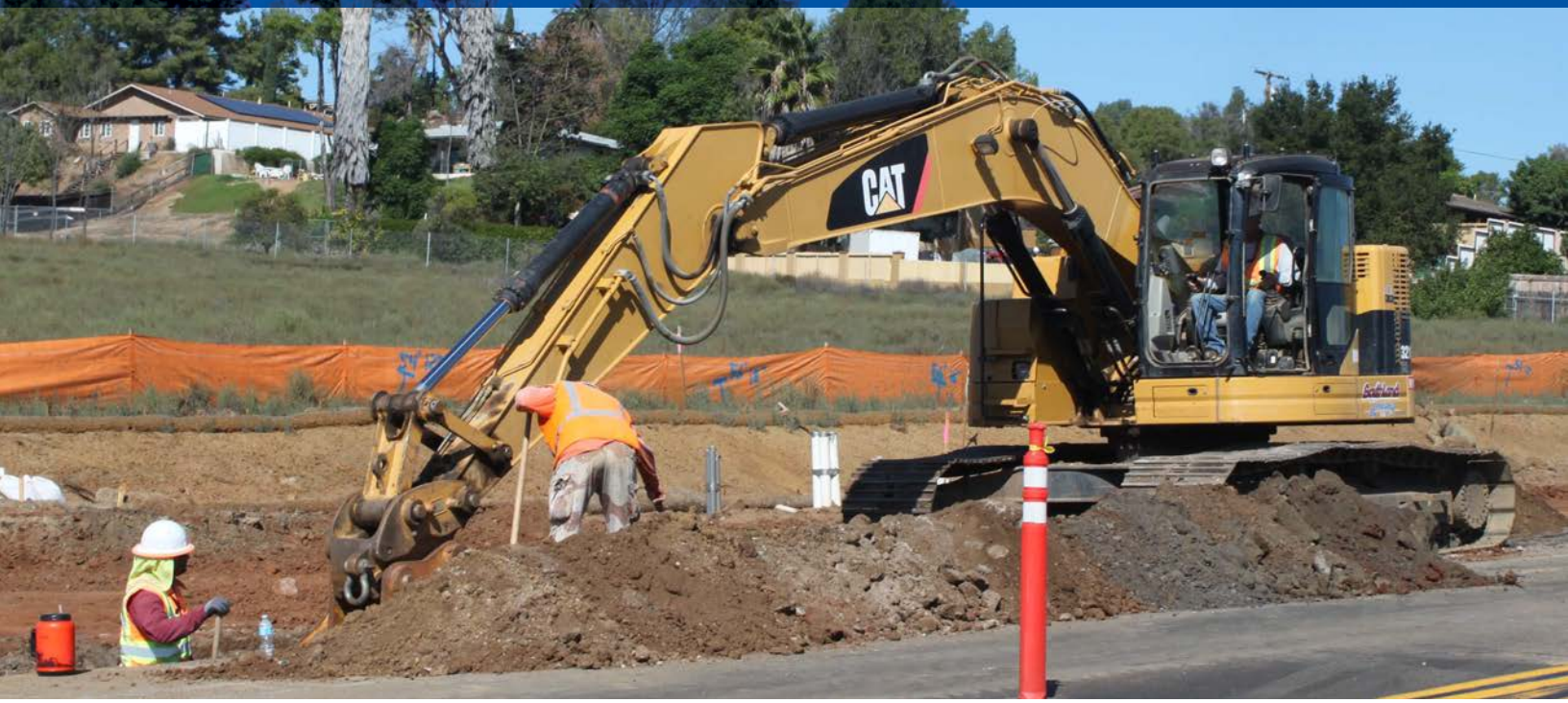
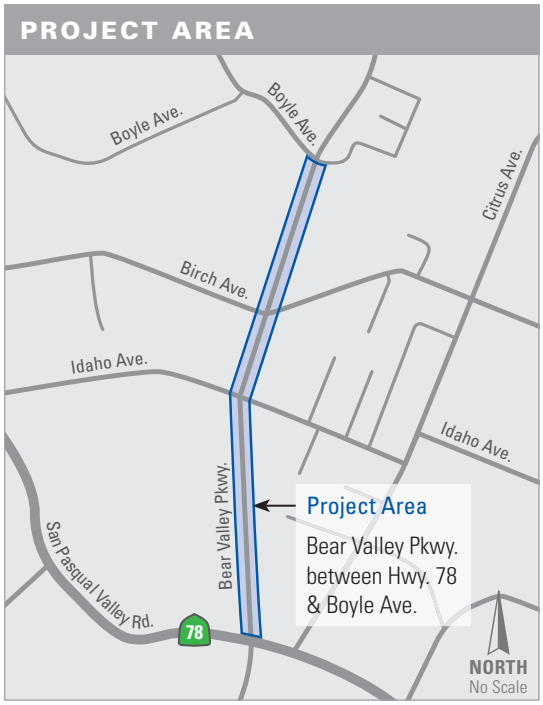
Bear Valley Parkway North Widening Project

November 2015 Project Update



Quality All Around



The County has completed building the roadway on the east side of Bear Valley Parkway and traffic is flowing on the freshly paved road. Construction is now on the west side of the roadway, to create new and improved curbs, gutters, landscaping, and roadway.

In the last two newsletters, we introduced the project's quality assurance and quality control teams, and their roles to ensure quality on all aspects the job. This issue we focus on the County quality assurance team - engineering technicians in the Materials Lab who test the quality of the materials being used to build the sidewalks and storm drains that line Bear Valley Parkway. In the 'Meet the Team' section, you'll meet an engineering technician who tests everything from concrete for storm drains to compaction of substrate aggregate (foundational roadway material) to ensure the construction meets all standards.

Materials tested by engineering technicians in the lab include:

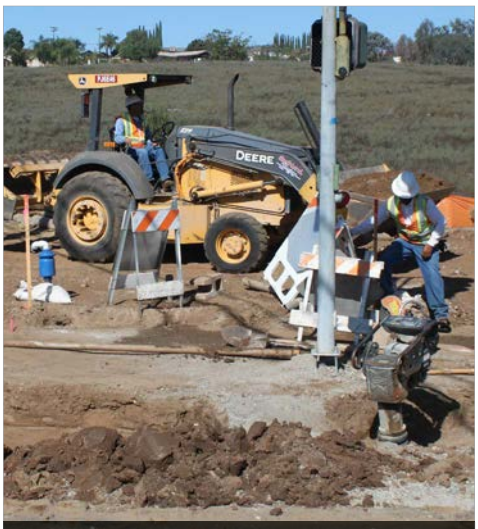
- **Roadway Grading and Paving Materials:** Crews will grade and pave the road in three phases – (1) rough grading lays the foundation, (2) fine grading flattens the roadway and fills-in patches, and (3) surfacing paves the roadway in a top layer of asphalt. Inspectors test all three of these material types, which have different standards of quality.
- **Curb and Sidewalk Materials:** Inspectors test the quality and durability of the concrete that crews will use to frame and build curbs and sidewalks.
- **Storm Drain Concrete:** Inspectors test concrete that crews will use to build and install storm drains along the west side of Bear Valley Parkway.

By certifying the structural strength, durability, and composition of materials used on the project, engineering technicians ensure that the streets, sidewalks, and 5-foot bicycle lanes the County builds on Bear Valley Parkway can be safely used by the public for years to come.

Project Update: Current Construction Activities

In addition to traffic switching to the east side of the roadway and demolishing the west side of Bear Valley Parkway, crews will work on the following in November:

- **Sidewalk from SR 78 to Suburban Drive:** Crews will frame and pour concrete to build the sidewalk on the east side of Bear Valley Parkway to create this new pedestrian walkway.
- **Curb and gutter installation:** Crews will install improved curbs and gutters on the west side of Bear Valley Parkway from SR 78 to Suburban Avenue. This process includes demolishing the old curbs and gutters, base-grading (flattening the roadway), and fine-grading (precise leveling) to ensure quality curbs and gutters.
- **Storm drain construction on west side of Bear Valley Parkway:** Crews are assembling and installing the storm drain on the west side of Bear Valley Parkway.
- **Utility undergrounding:** Crews are continuing to install water and gas pipelines under the roadway.



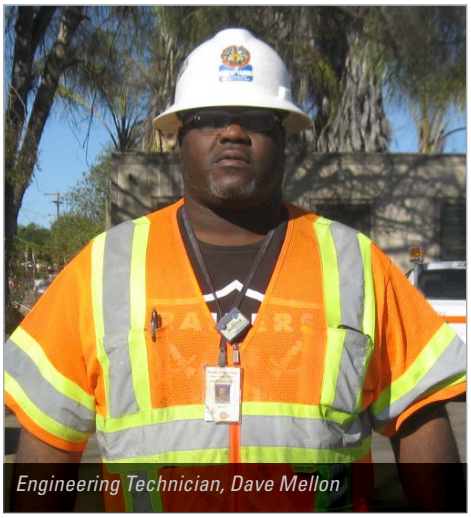
Crews frame a corner of a sidewalk at SR 78

Meet the Team

David Mellon, Engineering Technician, County of San Diego Materials Lab

Q What are your responsibilities?

A I am responsible for testing the quality of materials that are used to build the roadway on Bear Valley Parkway.


Engineering Technician, Dave Mellon

Q What past projects have you worked on with the County of San Diego?

A I've worked on a range of projects with the County, including Black Canyon Bridge, Live Oak Park, Woods Valley Development, and the South Santa Fe Road Improvements. Each project has had its own needs for materials testing.

Q What sorts of materials do you test on the project?

A I test the quality of concrete, asphalt pavement, crushed rock, grout mortar, and native soils. Each material has different standards for pressure, durability, and chemical composition.

Q Please briefly walk us through how you conduct material testing.

A As an example, I test concrete by acquiring a sample from the project site or the manufacturer. I use compression machinery and computer analyses to verify the consistency and workability (called "slump"), temperature, cement content, and unit weight. I also inspect moisture content and inspect the concrete mix design before it is placed to ensure it meets County of San Diego Specified Standards.

Q What is something unique about this project people might not know?

A The completed project will feature an extensive underground system of various utilities that will not be visible to the traveling public. This is the purpose of our work to underground dry utility lines and remove telephone poles from the roadway.

Q What do you do in your spare time?

A In my spare time, I like to compose music and play the bass guitar.

Did You Know

Crews have reached the halfway point with the traffic switch to the east side of Bear Valley Parkway. To prepare the east side of the roadway for this switch, crews poured 6,200 tons of asphalt pavement to-date to build the roadway. The average commercial asphalt truck has a 20-ton capacity, which means to pour all this asphalt at once, 310 asphalt trucks would be needed. Crews also poured 1,000 cubic yards of concrete to-date to build sidewalks, curbs, and gutters. The average pick-up truck bed holds about 2 cubic yards, so 500 pick-up trucks would be needed if this concrete was poured at one time.