Staying ahead of the Curve

The three-year Interstate 10 Broadway Curve Improvement Project in metro Phoenix—the Arizona Department of Transportation (ADOT)'s largest urban freeway reconstruction project—runs along 11 miles of I-10 between the Loop 202 (Santan/South Mountain) Freeway and I-17 near Phoenix Sky Harbor International Airport, with additional work on about a mile of US 60 between I-10 and Hardy Drive and on about a mile of State Route 143 between I-10 and the south end of its bridge over the Salt River.

If you drive through the project area on I-10, you have no doubt seen increased construction activity—especially near 48th Street, State Route 143 and Broadway Road; near Tempe Diablo Stadium; at Guadalupe Road; and south of Baseline Road.

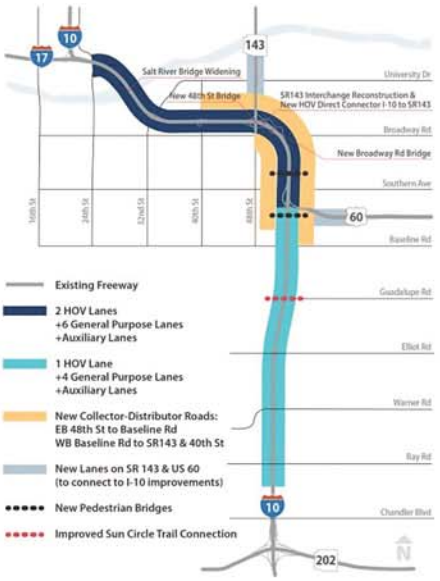
First opened in 1968, this stretch of roadway is being newly upgraded in many ways:

- Widening I-10 to six general purpose lanes and two high-occupancy vehicle (HOV) lanes in each direction between US 60 (Superstition Freeway) and I-17, plus a fourth general purpose lane in each direction between Ray Road and US 60
- Adding Collector-Distributor roads parallel to I-10 between Baseline Road and 40th Street to separate through-traffic on I-10 from local traffic entering or exiting the highway
- Rebuilding the I-10 interchange with SR 143 to improve traffic flow and create direct connections between SR 143 and I-10 HOV lanes
- Replacing the Broadway Road bridge over I-10
- Replacing the 48th Street bridges over I-10
- Widening the I-10 bridges over the Salt River
- Building two bridges for pedestrians and bicyclists over I-10 between Baseline and Broadway Roads (at Alameda Drive and the Western Canal) and improving the Sun Circle Trail crossing at Guadalupe Road
- Building sound and retaining walls where warranted.

Work on a new Broadway Road bridge over I-10 is progressing with excavation for a second abutment, the supporting structure that carries the load of the bridge, followed by installation of rebar and forming the abutment foundation and wall.

In the median near Broadway Road, workers have been removing the concrete barrier and preparing to construct the center supporting column.

Since late December, workers have been installing drilled-shaft foundations to support the columns and abutments for the new 48th Street



bridges over I-10. There are five drilled shafts per bridge, each about 50 to 60 feet deep and ranging in diameter from 72 to 120 inches. Crews first tie rebar into steel cages that are then lifted with a crane, lowered into a drilled shaft and filled with concrete. In the I-10 median near Tempe Diablo Stadium (Alameda Drive), crews are installing a drilled-shaft foundation that will support a pedestrian and bicyclist bridge over I-10. As the drilled-shaft foundations pass integrity testing, crews begin constructing the supporting columns.

Existing light poles will be transplanted to new foundations between 24th and 40th Streets. The full area will receive new energy-efficient lighting.

The team strives to keep the roadway surface as smooth as possible, while also limiting such impacts as ramp, lane and highway closures.

A Public-Private Partnership (P3) and Design-Build (DB) project, projects are delivered by teams with one ADOT contract for design and construction services. Known as the Developer, the DB team for this project, known as Broadway Curve Constructors, is a joint venture of Pulice Construction Inc., FNF Construction Inc. and Flatiron Constructors, Inc. Project designers are T.Y. Lin International Group, Stanley Consultants and Aztec Engineering. You can follow the project at this dedicated website: i10broadwaycurve.com. ■