

# District 1 News

*Kershaw, Lee, Lexington, Richland and Sumter counties*

*District Engineer: Robert Dickinson (803) 737-6660  
FAX: (803) 737-6401*

## D1 crews are repairing bridges...

**By Alan Kozusko,  
Assistant District 1  
Maintenance Engineer**

Last issue, District 1 showed the transition of the D1 Bridge Crew from strictly bridge construction to both construction and deficiency repair.

Under Foreman **William Bailey's** leadership, the Crew continues to progress and adapt to changing work environments and move forward with their newly-adopted mission. Several high-level deficiencies have been corrected throughout the District, most especially under Interstate 20 in Lee and Kershaw counties.

"Walking slabs" are prevalent on several I-20 bridges in Kershaw County: although VERY slow, the



**Harold Ballard is in a tight spot under I-20 in Kershaw County making room for the crew to work on repairs of a bridge slab that moves under traffic loads.**

movement is accumulative over time and neglecting the repair would be catastrophic. The repair

is to pin one end of the slab against the bridge pile cap and support the other end of the slab, while con-

## Got news?

Contact Alan Kozusko at: 803-737-6420 or email him at [KozuskoAR@scdot.org](mailto:KozuskoAR@scdot.org)

**Alan  
Kozusko**



**Each section of angle iron pinning the bridge slab to the bridge cap weighs in excess of 275 pounds. They are fastened to the bridge slab with many epoxy-set bolts in a designed pattern.**



**A further insurance to the slab-pinning, the opposite end of the "walking slab" has saddles epoxy-anchored to support any additional movement that should not occur after the repair is completed.**

tinuing the strict monitoring of the bridge through the inspection program.

## ...and replacing pipes

Sumter Maintenance does not shy away from large projects. Spencer Road (S-43-1221) was built in 1981 and had a crossing made up of three lines of 36-inch galvanized pipe each 40-feet long.

In 2018-2019, Sumter Resident Maintenance Engineer (RME) **Sandra Riley** learned there was an issue with beavers building dams in the branch as well as in all three lines of pipes. The pipe ends were damaged from years of cleaning attempts and there was no safe or easy way to remove the debris from the pipes, so RME Riley moved forward with replacement.

Sumter Maintenance closed the road, detoured traffic and began working around March 6, 2020. One utility issue with a 6-inch water main on the downstream pipe ends required partnership with



**BEFORE: The failure is shown here on Spencer Road in Sumter County.**

High Hills Rural Water Co. who made adjustments immediately. Then the three 40-foot long lines of 36-inch high-density polyethylene pipe were installed to replace the old galvanized pipes, backfilled, and riprap was placed on the ends



**Sumter Safety Officer Hugh Hood checking work in the trench as two workers from High Hills Rural Water assist with relocating their utility line around the new pipes.**

of the pipes for stabilization. This allowed for widening of the shoulders and repaving the roadway—all with in-house forces. Sumter's plan included adding a cage built from rebar and old sign posts in hopes to prevent the beavers from entering the pipes.



**AFTER: The finished project replaced pipes, moved utilities and put up barriers to prevent beaver damage.**



**Hayward Wilson Sr.**

Sumter Maintenance Bridge Foreman **Hayward Wilson Sr.** passed away on March 3, 2021. He was one month away from 30 years serving SCDOT and the citizens of Sumter County.

He was Sumter Maintenance Employee of the Year in 1999 and inspired his crew.

Wilson was a good man and a great employee. He will be missed by many inside and outside SCDOT.