

11/20/19 Meeting update

Year to date maintenance

Crown and Gravel on 35, J.9, J.7 and hopefully soon J.8.

Treated 2 miles of 35.

Restored ditch drainage on J.8.

Filled deep ditches along J.7, 35, 36.7

Pumped flooded area on J.7 to prevent road from washing out.

Exposed buried culvert that led to flooding.

Repaired slough just above Easton residence.

Obtained free "rip-rap" fill to bolster some ditches, culvert exits, washers. Put three truckloads into DEEP ditch along 36.7. (Still needs more!!)

Lessons learned

"Roadbase" as locally referred is NOT driving surface material, it is base course material. It lacks proper plasticity and fines as compared to DOT spec driving surface material.

Earthbind is not ideal for roads that do not contain significant amounts of fines. It is also a bit overmatched by our traffic volume and the extremely dry summer that we had, with no real moisture for over 6 months. NO single apply road treatment would cover that span.

The roads committee constantly seeks the counsel of roads "experts". We have met several times with the county road superintendent, who has been helpful. We consulted with the gentleman who supplies Earthbind, and has a roads maintenance company and a civil engineering degree to back it up. The best source of information for us to date has been the numerous gravel road maintenance publications from DOT, NPS, and FS. We also recently found a very good document from Navajo DOT that has been hugely helpful with recent driving surface remediation, and has a much better guide to what treatments work best with certain aggregate types. To date, we have "wasted" ZERO dollars. All roadbase added is desperately needed, an treatment is the only way to keep it from blowing away in the wind...

Plan for next year

Hard surface about ½ mile of 35, as budget allows.

Treat remaining distance of 35 to K.3.

Eat Ramen and saltines, so to speak...

Long term plan

Hard surface 35 to K.3. Once completed, it will allow us to spend money remediating secondary roads.

Budget concerns

If we only look at roadbase thickness, we are about \$300k behind. If you consider our annual budget allows us to add 2" to a mile of road, and treat two miles of road, we will likely never have nice roads. We are replacing gravel about as fast as it is lost to dusting, so gaining ground is virtually impossible on our side roads. We're barely holding ground on 35 at this time.

The roads committee has been doing a LOT of work over the last three years to try to stretch the budget as far as possible, but it's just not going to cover if we continue to try to maintain gravel roads in a desert environment. It would be really nice to get an assessment through that would allow us to hard surface 35 to K.3. Any volunteers interested in fighting that fight? We would still need 2/3 of property owners to approve...

Equipment (Water and grader)

We would like to purchase an old Cat 12 motor grader with about \$4500 of next year's extremely tight budget. It would allow us to do much work to our roads on our own timeline, rather than paying someone and trying to schedule and oversee it all while generally missing out on a day's work. Please understand that most of the roads committee members are self-employed, and working on the roads during the day when our contractors are available takes income from their household.

Water is another issue. We still need to take advantage of Sanders' pond by trenching in piping and installing a pump and tank. Hopefully DOT will also come through on a ~10k gallon tank that we can put up by the fire barn next year. We are checking into renting a 10,000 gal tank in case the DOT doesn't have any available. This year, David Nigteagle has been kind enough to let us use water from an old cistern on his property.