

REGULAR MEETING

PALOMINO VALLEY GENERAL IMPROVEMENT DISTRICT
9732 Pyramid Hwy #407, Sparks, NV 89441

Thursday, July 15, 2021

MINUTES

Trustee Greg Dennis called the regular meeting of the Palomino Valley General Improvement District (PVGID or GID) to order at 6:00 p.m. Thursday, July 15, 2021 at 21555 Pyramid Highway, Reno, Nevada.

1. **Roll Call:** Trustees present were Greg Dennis, Larry Johnson, Don Otto, John Patterson, and Dan Helton. Also present were Shawn Kelly, Operations Manager; Cathy Glatthar, Assistant to the Board, and Louie Test, Legal Counsel (by phone).

2. **Public Comment:**

Pam Roberts commented on the following matters:

- a. The tall weeds growing along Whiskey Springs Road were a safety issue and needed to be addressed.
- b. Now that the County had repealed the Specific Plan Area special fund for infrastructure, had or would the GID consider asking that a special impact fee be imposed on new buildings being built on Broken Spur, Sharrock and parts of Amy Road?
- c. The GID intended on installing a new culvert at the intersection of Broken Spur and Whiskey Springs (south side) and the mailbox cluster would have to be moved. She asked that the GID properly notify and talk to the United States Postal Service and give notice to the people who used those boxes.
- d. If notices for requests for bids were only published in the Sparks Tribune (Battle Born Media), that was not a thorough enough way to advertise requests for bids. She said she was aware of a couple of people in the Palomino Valley area that did some of the work that the GID had put bids out for.
- e. The transaction report for tonight listed a \$450 reimbursement from Larry Johnson for aggregate placed on Quaking Aspen Road. She felt that was inappropriate for the GID to provide aggregate to other people in the valley. If Mr. Johnson benefitted from \$5.50 per ton, she thought everybody in the valley should have that opportunity.

Trustee Dennis asked if there were any further public comments? Hearing no requests, he moved to the next agenda item.

3. **Approval of Minutes - June 17, 2021 Closed & Open Sessions:**

Trustee Johnson made a motion to approve both of the June 17, 2021 closed session minutes as written. Trustee Patterson seconded the motion. Hearing no opposition, the motion passed.

Trustee Johnson made a motion to approve the June 17, 2021 open session minutes as written. Trustee Patterson seconded the motion. Hearing no opposition, the motion passed.

4. Payment of Bills and Other Financial Matters:

a. Transaction Report and Payment of Bills:

Cathy Glatthar reviewed the transaction report (see attached). The total cash in all accounts was \$405,151.43. Income for the month was Consolidated Tax (CTX) \$41,987.53, and LGTA (Fair Share) \$3,726.12.

Cathy reviewed several of the payments: 1) Sierra Rental and Transport for \$2,072.00 for trucking of Class E to Bacon Rind south, 18.5 hours at \$112 per hour. That was a partial billing. Additional invoices would be coming in and the balance due should be \$5,572.00. Cathy asked for pre-approval of up to \$6,000.00 to pay those invoices before the next meeting if we had to do so to avoid late fees. 2) Sierra Nevada Construction was paid \$180,000.00 for the chip seal done on Whiskey Springs and Ironwood. 3) Teichert/Pyramid Materials in the amount of \$10,177.80 for 1,869.17 tons of Class E for Bacon Rind south. She said that was the total amount paid for the aggregate for Bacon Rind south.

In response to Trustee Dennis' questions, Cathy explained we had not received the bill for the edge paving, and SNC said they would wait until our August meeting to get paid. The trucking and aggregate costs for Bacon Rind south would be approximately \$17,000. The length of the road section, including the road split, was approximately 1.35 miles.

Trustee Otto asked why the first quarter mile section of Bacon Rind was done; when it looked to him that the washboarding didn't start until farther down the road?

Shawn explained the back end and just before the split, tend to fall apart first, but shortly after that, the entire road falls apart.

Trustee Johnson added that it was all decomposed granite; it washboards badly.

Trustee Dennis said we would see how the Class E holds up.

In response to Trustee Johnson's comment, Shawn said some sections could be thickened, but the trucks he had dumping the material were horrific.

Jim Currivan, in the audience, said he drove down Bacon Rind south after the Class E was put down, and he thought the road was great; that it was the best he's ever seen it.

Trustee Johnson made a motion to approve the transaction report and pay the bills, including pre-approval of up to \$6,000 for Sierra Rental and Transport. Trustee Patterson seconded the motion, and hearing no opposition, the motion passed.

b. Estimated Operating Funds Report:

Cathy Glatthar reiterated that this report (see attached) went through August 31, 2021. It overlapped two fiscal years, because we did most of the roadwork projects during the summer and we had to watch our money during the summer.

Trustee Dennis added because we did not carry any debt, we had to set funds aside to pay our upcoming bills; we paid our bills with cash.

Cathy continued and reviewed the estimated, additional revenue expected and the estimated expenses and reserves, and stated the estimated net operating funds for road improvements as of August 31, 2021 was \$150,723.

Trustee Johnson stated the SNC bill for the edge paving would probably come in less than the bid amount because they did not place the total tonnage that he had allotted for that contract.

Shawn, Trustee Dennis, and others, thanked Trustee Johnson for his time on the two contracts (chip seal and edge paving).

Trustee Johnson explained that he thought the chip seal done on Ironwood and Whiskey Springs would not have to be done again until 2025.

5. Road Maintenance Reports:

a. Road Reports:

Trustee Dennis stated they had a Road Committee meeting in which they discussed what roads needed Class E base and why. He said Shawn had put together a list of roads that we would discuss later. He said we had not talked much about gathering data, but Cathy had done some good work putting things into records, so we had a decent record of when things were done.

In response to Trustee Otto's question, Cathy explained she had not put the report together yet, but she said she would be reviewing the old operations reports. She gave the example of Wild Horse Road: In 2020, Wild Horse was graded three times, and then in October or November the Class E was put down and Wild Horse had not been graded since; that's eight to nine months without having to grade that road. She explained that was the type of information we would get from the report, once she got a chance to work on that report.

Trustee Dennis said we could see considerable value in the new reporting method and how it would help with decision making.

Trustee Otto asked Shawn if the determination on Wild Horse was that by putting down the Class E, they saved at least one grading?

Shawn said he thought they saved two gradings, at a minimum. He explained that they were watering the Class E, but right now with 100-degree temperatures, watering was not doing much good; they could not go very far with water right now.

Trustee Patterson stated the Road Committee had discussed the weeds growing along Whiskey Springs Road.

Trustee Dennis said that was an excellent point to bring up, and they were thinking about talking to the person who already cut down some of those weeds. He then asked Trustee Johnson to comment on the matter.

Trustee Johnson stated that he thought if they just contacted Tom Pratt, that Mr. Pratt would mow those weeds.

Shawn said he would contact Mr. Pratt.

b. Operations Manager's Report:

Shawn reviewed the Operations Report (see attached) and stated they graded some roads and they had some equipment issues. He said we had not had a lot of [road maintenance] requests. He explained we had hot, dry conditions and asked that people slow down so we could make sure we could keep the roads together for as long as we could.

Trustee Dennis said he was informed that it took more water than normal to currently grade the roads. He said an example was Grey Van; that he watched that road being graded and the crew initially put down four or five truckloads of water for a road that's about a mile long. To grade the road, it took significant amounts of water and the transportation of the water took time, and also noted that summer's here and the roads would not hold up as well as we would like. He asked everyone to please be patient; road grading with the amount of water required to adequately compact soils almost doubles the time needed to grade them due to the hauling time required.

In response to Trustee Johnson's question about whether or not the Wayside well was holding up, Shawn said he was in the process of checking the depth of the pump.

Trustee Johnson explained that well was in a questionable aquifer. In dry years, the well had been pumped dry and we had to abandon the Wayside well and use the Ironwood well.

Shawn said it takes longer to fill the water trucks at the Ironwood well because they did not have an elevated storage tank at the Ironwood well. He said he was considering and looking into getting an elevated tank for the Ironwood well site.

Trustee Helton stated one of the most important things was water; once you lose that "E" (Class E aggregate) you would have a hard time putting it back.

Shawn said that was a nice thing about using the mag-chloride; it holds the fines in place. He stated the test section of mag-chloride on Range Land was holding up fairly well. He explained the north side had a double application and the south side only had one pass. He said the mag-chloride on the north side was still visible, but the south side was spotty. He said an application of water would probably bind it up a little bit more.

Trustee Helton asked Shawn if he had to re-grade any of the mag-chloride yet?

Shawn said no.

Trustee Helton said he had to use carbide teeth on his grader just to make a mark in mag-chloride.

Shawn asked if that was a "fully-magged" road?

Trustee Helton said it was.

Shawn said we were not "full mag"; we were only at a half ... He said Teichert (formerly Martin Marietta) had done their roads in mag-chloride and they kept it watered.

Trustee Helton said if Shawn goes to grade that thin layer of mag-chloride-treated Class E, it would probably slide out into pieces/chunks. He opined that they would be better off scarifying the subsurface before they applied the mag-chloride.

Trustee Dennis asked Trustee Helton his opinion of the alternative of wetting the existing surface and putting a couple more tenths of Class E on top of it?

Trustee Helton said that would be a must; that would be a good idea and it would pay off big time.

Trustee Otto asked if the mag-chloride would come up through that additional Class E?

Trustee Dennis said the mag-chloride generally would come up through if it was wetted. He said if it did not, they could possibly put another application of mag-chloride on it.

Trustee Dennis said after the rain events, he drove around and the mag-chloride test areas held up very well and they did not cause issues with vehicles.

Trustee Helton said if the crew was able to keep a lot of water on all of the Class E, that would be the trick to saving all of it. He said he realized time made it tough to do that.

Shawn said they were trying to keep the moisture on the Class E, and with the mag-chloride ... He said the tank for the mag-chloride was in [Winnemucca]. He informed Trustee Helton that they were getting 21,000 gallons of mag-chloride and they would be learning how to apply it using the existing water truck until they got the new water truck with the "bars." He explained the 21,000 gallons should cover [10.5] miles. He said he was ecstatic with Wilcox Ranch Road from Amy Road all the way to Mid Road. He said even though it had some little spots, it was still holding up well. He said he would like to spray mag-chloride on some of those areas as is, and yes, some areas needed to be topped off with some Class E before being sprayed with mag-chloride.

Trustee Dennis said he heard Trustee Johnson ask why were we wasting time at one well site, when we could put an elevated storage tank there and that would save ten minutes per fill and then doing the Class E the way they discussed and thirdly if we needed that much water ... how big of water trucks are there?

Shawn said that was why he had mentioned previously about getting an 8,000-gallon water trailer.

Trustee Helton agreed that an 8,000-gallon water trailer would work well.

Shawn said such a trailer could be turned around on about 80% of our roads.

Shawn explained to Trustee Helton that his plan for high-traffic intersections was to put down Class E for the first 100 yards and treat it with mag-chloride.

Trustee Otto asked to have the road maintenance requests reviewed at the monthly meetings in the future.

c. Discussion of General Road Grading Requirements:

Trustee Dennis stated Trustee Otto submitted a list (see attached) of general road grading requirements.

Trustee Otto said whatever the Board decided on, that everybody would see this now and in the future; future operations managers and employees, future Board members, future residents. He felt that this list or what the Board came up with, should be the directives for the employees.

Trustee Dennis said from his experience, he had learned that everybody had their own abilities and thoughts on how to approach things. Also, he liked what Trustee Otto had done, but it was very hard to tie down the specificity of what Trustee Otto had listed, and then apply it to all the roads out here. He said as Trustee Johnson stated, you could go 500 feet and the road changed, and you go another 500 feet and the road changed again. He stated one of the problems this gets into was making it black and white; maybe they needed to drive the roads and decide what

needed to be done where to make the roads better. He said we had to consider the economies of scale in doing this work so we could do a better job, have better roads, spend less money, and spend money on things we needed to rather than say, "this was the way it had to be" because sometimes when you cast things in stone, they cost you a whole bunch more and more time to implement. He said he could look at this and go through and figure out numerous places where he would think it was a good idea here, but not a good idea in other areas. He said he would like to do things a different way; if it was a problem in roadwork, when you're driving a road and you see an issue, one of the things everybody and anybody could do was send in a road maintenance request.

Trustee Otto said for example, he wrote, "wherever possible," and "minimize," "put consideration," "periodically;" that he didn't try to set things all in stone. He said they were dealing with hard things like culverts and where they should end up at; at the ends of them (invert elevations and proper location placement). He said he realized there were a lot of points in here, but he did try to say in places where he thought it should be needed; not that this was the "law," except items 6, 7, 8 and 9. He said that was four out of 15 that he really tried to be really, really tough on. He said always pulling material in from the edges (#7) sounded like a great thing to him. Don't all of those make sense?

Trustee Johnson said unless you're in a rock pile.

Trustee Helton said they were all good ideas, but you didn't need to follow them exactly. They were safe and good ideas.

Trustee Johnson agreed and said they were guidelines.

Trustee Dennis asked if we weren't already doing that?

Trustee Otto said no; there were times when we hadn't, and there were times in the last 15 years, this hadn't been done.

Trustee Dennis said you could go back 40 years; we had canals for roads, we didn't have roads.

Trustee Otto asked if they wanted to change that?

Trustee Dennis said yes, we wanted to change that.

Trustee Johnson said we had been changing that for the past decade, and we were chipping away at it, road-by-road, and it was getting done. As far as were these good ideas and were they reasonable guidelines, he said yes, they were. However, he read item 7, "ALWAYS pull material in from edges." and said we had a lot of rocky roads that you didn't want to pull material in from the edges, so don't tell him "always." He read item 8, "DO NOT remove any material from roadway!" and explained we rolled rocks off of these roads all the time.

Trustee Otto said rocks were not "material" to him; and he thought somebody like Trustee Johnson would bring up that point.

Trustee Johnson said wasn't that material? Wasn't that word-for-word? Were these general guidelines, were they reasonable ideas, he said yes they were.

Trustee Dennis said he could come up with a bunch of ideas that said, yes. He read item 1, "Maintain 5% crown wherever possible, unless full slope to one side is needed."

Trustee Helton interjected that that was terrific.

Trustee Dennis said it was, and we do it, and then the drivers drive *only* down the center of the road. He said really most of those roads are one-way roads, so you get a rut right down the center instead of somebody driving on half of the road most of the time and driving half on the other time. He said that then takes the roadway down quicker. He said maybe we should adjust the crown to 3.5% and see where the balance was so that we were still getting good drainage off the roads.

Trustee Otto said he had that right in front of his house and it worked perfect.

Trustee Dennis said there were places where it worked and places where it wouldn't.

Trustee Helton agreed.

Trustee Otto said he was mostly concerned about bigger roads, but there were smaller ones that were 15 feet wide that could be done that way; we could put a crown on those roads.

Trustee Dennis read part of item 2, "No purposely cut high volume ditches unless escapes cannot be constructed there." He said we already had high-volume ditches along roads because we needed to mitigate large flood flows. He said he was really confused about that.

Trustee Otto said he did name some of those roads, "Excluding Range Land, Wilcox ..."

Trustee Dennis said he thought they were trying to make something perfect by writing it in black and white, when nothing was ever perfect.

Trustee Helton interjected and said he thought Trustee Otto was trying to set a very general guideline for grading.

Trustee Otto said he wrote in there, "...and the uphill side of any other roads of which the ditch acts as a high-water detention." He said he tried to elaborate, but Trustee Dennis was just hitting on the first sentence and then blasting.

Trustee Johnson asked what was meant by, "No tiny V ditches"; what was a "tiny ditch"?

Trustee Otto said let's correct that then, and asked what Trustee Johnson thought it should be; what did Trustee Johnson think it should say?

Trustee Johnson said he thought it should be stricken.

Trustee Otto asked why?

Trustee Johnson said he thought roadside swales, roadside V-ditches were appropriate where necessary. They were not appropriate or necessary on the downhill side. They should be sized on the uphill side accordingly with how much drainage area they collect. He explained that was a field-fit and a level of experience of knowing, for example: a whole bunch of water comes down this road in major storms, so our ditch had to be bigger; it was different throughout the valley. He said if Trustee Otto wanted to reword that, and say, "Drainage swales and V-ditches should be sized appropriately for anticipated and historic flows." He thought that was a more appropriate description of that. He said the roads that run across contour, like Wilcox Ranch and unfortunately, Ironwood (he wished he had done Ironwood years ago), that receive sheet flow from upslope, should have a major drainage

channel on the uphill side. He said Wilcox does now, that they built a couple of years ago; unfortunately Ironwood doesn't, but they still had enough culverts under it to where it was barely adequate.

Trustee Otto drew a diagram on the white board of how some of the roads out here were graded, recently and in the past. He explained with his diagram, that this method of grading, if someone was to go off the road when it was wet, they would go down into this little wettened place where all of the silt sat in and they were going to have trouble getting out.

Trustee Dennis said he saw two roads that were graded today, and none of what Trustee Otto just described was done. He said the roads were depressed and were canals and all you could do was both sides. He said if we could do rehab sometime, we could build up the roads and have drainage on both sides. We don't do that all the time.

Trustee Otto said it was done like that on Quaking Aspen.

Shawn asked to explain why he might do something like that. He said, to him, he would pull that ditch to bring that material that was off to the side, back onto the road. He said he would go down pulling that ditch then he would spread that material while he was cutting the corrugation and put that in and use that material for the road.

Trustee Otto referred back to his diagram and said "this" was kicked out.

Shawn said that could sometimes get pushed, and then Trustee Otto was right.

Trustee Otto said no, it was deliberately done.

Shawn said he didn't know about "deliberately." He said he did go in deep if he was going to bring in a lot of material onto the road. He said, for example, take Grass Valley Road from Whiskey Springs towards Pyramid; it's a major rock pile. He said he pulled that and the rocks in that road were unbelievable, but he brought them on. He said it was the same with Pasture View north [of Whiskey Springs]; where you'd see those ditches, and they pulled that material back on the road and tried to build those roads back up; you'd see a lot of big rocks with some dirt going back in, because he could not filter out those big rocks good enough without dirt. He said once they did all those passes, to go over there and take that material and push it and spread it out so it didn't fluff back in, took the time. He said that was what Trustee Otto was seeing if they did leave that there. He said he was not purposefully going that way, cutting a ditch.

Trustee Otto said somebody did.

Shawn said that was not happening now.

Trustee Dennis said he had not seen it.

Trustee Otto said this was not a one-time thing. He said he was talking about in the future, could they avoid doing these things because they took time; another lap around took time, and when you hack that in another six or eight inches deep, any escape also had to be lower than that flow line, so consequently, your escape had to be dug deeper.

Trustee Dennis said the escape had to be dug deeper out of the road because the existing, ungraded sides sat way above the roadway and the real road was down much lower, more like a canal. He said so the grades for all the dirt around these

roads was way high and that was a normal condition we had everywhere because all we'd done (in the past) was grade the roads instead of going in and doing rehab projects to adequately raise roadways for proper drainage. He said (for the future) that was why we were trying to do things correctly (rehab the roadways) and create economies of scale with the Class E base. Then the crews could go in and start rehabilitating the roadways (essentially raising the roadways to drain properly) and putting things back the way they were supposed to be. He said that all took time and money, but it wasn't going to happen overnight; we had at least 10 years or better of fixing roads out here before we got back to square one.

Trustee Johnson went to the white board and said he wanted to give the classic example on all of this, and that was the middle sections of Range Land Road. He explained if we had a crown, fine, it had been graded for 40 years to a point where they had a drainage swale and they had a huge mound of material, on both sides, that came off that roadway. He said our past personnel, every time they graded the road, pushed material into that berm. He said what they did [in 2018] was remove the material from the sides, built swales, and raised the road at least a foot. He explained that the longitudinal direction was flatter than a board and it was tough to get any water out of this, so they built large storage areas that had a minimal slope and it forced the water out longitudinally to where they only had culverts every half mile. He said it was ugly, but in that section, that used to flood and have standing water on it in every major storm, had not seen a drop of water on it since.

Trustee Dennis said it used to have a foot-to-18 inches of standing water on the newer, reconstructed part of Range Land Road.

Trustee Helton said that was the way they used to do all of them, just like Trustee Johnson was showing; they'd pull from the sides and build the road up.

Trustee Johnson continued and said they brought in a leveling course of gravel over the top and it was pretty darn good.

Trustee Helton said we needed that done from the beginning [of Range Land Road]; that he would probably scarify that old asphalt up and use it, then pile up that material with it and mix it.

Trustee Johnson said he wouldn't scarify the asphalt, he would just build on top of it. He said he would use the material piled up on the shoulders of Range Land from Peak Road to Winnemucca Ranch Road on top of the asphalt to build it up. He said he would be meeting with a contractor and get a cost or hours (this would probably be done on an hourly rate) of picking that material up, putting it in belly dumps, and filling the first half mile from the highway in and raise that section a foot.

In answer to Trustee Helton's question, Trustee Johnson said he was not concerned that the material might turn fluid if they didn't rip that asphalt first.

Trustee Dennis suggested using a sheep's foot to break up the asphalt and then mix that material in.

Trustee Johnson said that would not be necessary, because they have raised streets and built on top of existing highways. He said they have to build huge storage areas because there were sheet flows from south to north and it needed to go down to the 36-inch culvert.

Trustee Dennis addressed Trustee Otto and said there was nothing that was perfect. He said they were just trying to make it work, and he didn't want to load up criteria that crews needed to follow when there were so many different ways of doing things.

Trustee Otto said then [throw away] the whole thing?

Trustee Dennis said he was saying they were good ideas, but they needed to be considered in light of where we were doing the work.

Trustee Johnson suggested this list be entered into the record as recommended guidelines submitted by Trustee Otto with a notation of "where appropriate, these guidelines be followed."

Trustee Patterson said he was okay with that and asked if they could change some of the "do not" and the "always?"

Trustee Otto said if that's what they wanted to do.

Trustee Patterson asked Trustee Otto if it would be okay if he made the changes and then sent it back to Trustee Otto?

Trustee Otto said that would be okay.

Several Trustees thanked Trustee Otto for putting the list together.

Trustee Johnson addressed Trustee Otto and said the idea behind the list was appropriate and some of it needed significant wordsmithing, and if they were presented as guidelines to be utilized *where appropriate*, he would thank Trustee Otto for his effort.

Trustee Dennis said certainly where we had a road above the floodplains, we didn't want the V-ditches, we just wanted it to drain off the natural slopes.

d. Road Improvement Projects:

i. Status of Pavement Edge Reinforcement Project:

Trustee Johnson stated the project was completed. He clarified that a contract was let out for this project. The project required very specialized equipment and certainly, nobody in this valley had that ability to do that work. Sierra Nevada Construction (SNC), the contractor, rented the shoulder paver from out of state to do this project. We did not receive a single bid from any of the other major paving contractors in Northern Nevada. He said he liked the finished product and he would like it even better next year when we cover it up with a chip seal like we did the first sections of Whiskey Springs and Ironwood.

ii. Range Land Road Project:

Trustee Dennis said we had already discussed this matter.

Shawn mentioned that when Range Land was raised, they would be replacing the cattleguard and making sure there was a smooth transition.

Trustee Johnson stated he was going to meet with a contractor, and even though most contractors are too busy to do this project, he had enough favors with people in Reno where he could get this done. He reiterated that it would probably be done on an hourly rate for belly dumps and a large loader. He said he would have the contractor out to the site and have the contractor decide if a loader was enough to extract the material [from the shoulders on the west end of Range

Land]; he did not believe the material would need to be ripped. He explained it would only take about four days to do it, and he wanted to see our crews, our blade, our water truck, our compactor place and finish grade the material as it was belly-dumped on the roadway. He said we could probably contract the whole project, but it wouldn't get done anytime soon because everybody was so extremely busy. He asked if this could get done for less than \$20,000, was this something the Board wanted to proceed with in this next month?

In answer to Trustee Dennis' question, Cathy looked back at last month's minutes and reported that the Board had not previously approved this project.

Trustee Otto said this would also be capped off with base and that would cost money, too.

Shawn said he had that figure if they wanted it.

Trustee Otto then said he didn't know if they actually needed to cap that off with base.

Trustee Johnson said they would need to cap it with base because that material was fairly fine sand.

Trustee Otto said there were a couple of roads off of Range Land - Rebel Cause and Grey Van - that had DG down the sides of them that could be moved down there for part of the buildup.

Trustee Dennis said the problem with that was when they wanted to rehab those two roads (Rebel Cause and Grey Van), they wouldn't have any soil there.

Trustee Otto asked if there were any more places along the north side of Range Land that they could escape water from another culvert going across?

Trustee Dennis said he would have to carefully approach the property owner.

Trustee Otto drew another diagram on the board and stated if we had more than one 36" culvert along Range Land it would help.

Trustee Dennis said they would give that significant thought and look at the drainageway. He thanked Trustee Otto and said he thought it was a good idea.

Trustee Johnson suggested two alternate approaches: 1) Come back to the Board next month with a better cost estimate and a schedule from a contractor and have it fairly well lined up; he had to write up some contract documents; or 2) The Board could give him authorization and he would get it built in the next 30 days.

Trustee Dennis said they discussed that they would limit the contract value at \$25,000 and we discussed we had ample Class E base at the yard or if we had used the Class E base stockpile for something else, we would still need to schedule trucking and get a sufficient depth of base so that it would bind. He said what they did for the other part of Range Land was take the Wayside [pit] material to build up the road and topped that with about 4/10ths of base. He said he would give Shawn the ability to say what would be the most convenient way to do it because Shawn would be working with a contractor to get this done.

Shawn said he would probably get shot down, but in his opinion, by making those ditches a little bit deeper than they were now, he could get adequate flow going to

that big culvert. He said he could take our cattleguard, raise it up and then put four inches of our Class E from the cattleguard to Easy Jet, with the proper crown, and get that raised up, that would cost, with trucking and three workers, \$8,150. That would give them four inches over the existing surface.

Trustee Johnson said he did not believe that was enough; we needed to raise the road a good foot. We also needed to broaden the swale on the south side.

Trustee Helton said the alkali that works up from that road, made those talcum-powder white pits.

Trustee Johnson said that alkali was why the Cape seal didn't work there.

Trustee Dennis asked if the Trustees would consider, if we could get this done sooner than later, allowing Trustee Johnson to have a maximum contract amount to get the material moved [by a contractor] and have our crew finish the job?

Shawn mentioned there might be a need to put in some driveway culverts at the west end of Range Land because of the excavation of material.

Trustee Johnson said they would watch for that, and agreed they might have to put in a few driveway culverts.

Trustee Helton stated that type of construction, since they were already lacking water, would do a lot better if they waited until September.

Trustee Johnson said it would be better in December.

Trustee Patterson said he was leaning towards option 1, to have this brought back at the August meeting.

Trustee Dennis said then that was what they would do.

Trustee Otto said they should have three water trucks available for this project.

iii. Status of Surfacing Roads with Special Class E, Including a List of Priority Roads:

Trustee Dennis said the Road Committee looked at the roads and the philosophy was to minimize hours worked on the roads that were very, very difficult to maintain by importing material and covering those roads. He said there are a number of roads, Wild Horse being one, that we cannot grade anymore because the subgrade underneath was all rock; fine grading the road just uncovered more rock - and there were no fines. For many of the roads we have, you cannot blade the road back from the sides because all you were doing was picking up more rocks. He explained we needed to import material, Class E, to cover those roads. That would save huge amounts of time during the rest of the year, not having to go back and try to fix those rocky sections. Yellow Tail was an example of a road where people got lots of flat tires because of the rocks.

Trustee Dennis said another deciding factor are roads that had sufficient traffic, like Wild Horse and Amy, that were just prime for getting Class E (putting down Class E base would eliminate return times to regrade the roads).

Shawn explained with Amy (between Whiskey Springs and James Ranch), they used that road a lot for hauling water, and our own water trucks were tearing it up. He said if they covered that road and sprayed it with mag-chloride, it would hold up.

Trustee Dennis said there were opportunities like that, where we then wouldn't have to go back and spend more time ... we were grading Wild Horse three times a year and maybe we could cutback the maintenance; same for Bacon Rind. We were then able to create more hours of available time for the crew to go out and work on other roads; it just made sense to the Road Committee. He said they were now presenting to the Board a list of roads that they gave a first shot at and asked the Board what they thought.

Trustee Otto stated the mag-chloride on Amy was starting to "dust" a bit, but not nearly like it was before.

Trustee Johnson said the mag-chloride had been down for three months.

Trustee Dennis said that wasn't bad for that high-volume traffic area.

Trustee Helton said that was an area you put a load of water on once a week if you got a chance.

Trustee Johnson asked what the list of roads was?

Shawn referred to the list (see attached) and said the roads were not in any particular order; they were the roads he felt needed Class E.

Trustee Johnson said he would have liked to have seen a list of priorities.

Shawn said he would bring it to the next meeting. He started listing his priority roads: Amy (Whiskey Springs to James Ranch); finishing Crazy Horse; Yellow Tail (Crazy Horse to Chantry); Twin Springs (Crossover to the cul-de-sac); Bootstrap; Broken Spur (Whiskey Springs to Tumbleweed); finishing Right Hand Canyon (Wrangler to Raptor); and Grass Valley (Whiskey Springs to Wayside).

Trustee Johnson said there were some roads he agreed with and some he did not.

Pam Roberts said she would appreciate when this document was introduced that it stated who prepared the document.

Trustee Dennis said this document was prepared by the Operations Manager and discussed with the Road Committee.

Ms. Roberts said she would also like the Road Committee and the Board, when they were considering the priorities, to think about not just the degree of need in terms of the actual road, but also the number of homes that might be serviced by that road. She said Bootstrap stood out, and wasn't that a really short road with only two or three people living on that road?

Trustee Dennis said he wasn't willing to figure out all the houses served, but he could look at the level of maintenance (LOM) for a road and whether it was a 1, 2, or a 3.

Trustee Johnson said we had a table that showed the number of residences served by each road. He asked Cathy to get Trustee Dennis a copy of that list.

Shawn explained that one of the reasons why Bootstrap was on the list was because it served about eight residences and it was pure rock; it was difficult to grade and difficult to pull fines out of that rock. It would be way easier and it would be done, and they wouldn't have to touch it again for years.

Trustee Johnson commented that he would not prioritize Amy from Whiskey Springs to James Ranch. He thought that road was gradable and it was staying in pretty good shape.

Shawn said the road was gradable, but that it just wasn't lasting anymore.

Trustee Johnson said the other road he would probably take exception to was Broken Spur from Whiskey Springs to Tumbleweed. He said the reason why was because the drainage was a mess; that road needed to be raised a foot in the air before we ever surfaced it.

Trustee Dennis said that came back to Trustee Otto's point of don't put Class E on a road until you know the road would be usable the way it was in perpetuity.

Shawn said they had been working on that road and it was not quite ready yet for the Class E.

Trustee Johnson said all of the lots on the east side were higher than the road, and all the driveways drained right down onto the roadway; that road needed to be elevated just like sections of Range Land Road. He said he would suggest, number one, that that road should be a priority for a future year, and we would probably need to import material, but he would not surface it until it was raised to an elevation that worked.

Shawn said one of the things they did when the horses trampled through and changed the [storm] water flows (they had water flowing straight across Broken Spur), they added a culvert at Tumbleweed and they directed and re-ditched (with the homeowner's cooperation) and they had all that water going into that field now. He said he was proposing to put a culvert in on the south side of Whiskey Springs at Broken Spur and continue the drainage down along Whiskey Springs.

Trustee Johnson addressed Shawn and said the culvert was badly needed, however, the whole road needed to come up in the air. He said that road was one of these victims of 40 years of grading to where it was depressed. He said that road should have been improved when those houses were developed. The developer should have improved that road and was supposed to improve that road and did not; we were stuck with it and we, as a District, needed to fix it. He didn't think we could get to it this year, but he thought it should be a priority for possibly next year.

Trustee Helton asked if we were still screening material from the Wayside pit?

Shawn said they had a screen.

Trustee Helton said that material would work really well on Broken Spur.

Shawn said they probably had 400 tons of screened material at the pit.

Trustee Johnson explained standard Class E was too variable, and that he told Martin Marietta what he wanted to see in Class E, and they submitted test results for what they had stockpiled for our use. He said we had to continue that and ask for a quality-controlled, test result of the gradation of that material or there was no telling what we were going to get. He said they had to ask for those test results before they started importing for any of these projects.

Shawn said it was Teichert now and they were producing material more for base, but there was still some there for us. He said there would still be some “miscellaneous” product.

Trustee Johnson agreed and said that was why we were only paying \$5.50 per ton.

Trustee Dennis summarized that for the Class E base we needed to watch the specifications, that we had the beginnings of a list of roads, and that he wanted all to come back to the next meeting with ideas on what roads should be priority for Class E.

Trustee Johnson recommended that Prairie be added to the list of priority roads.

Shawn explained when they do a group of roads such as Prairie, Jackrabbit, and Big Dog, they do Prairie last because it was the road they had to travel over to do the other roads and if they graded Prairie first, they would destroy it.

iv. Status of Use of Dust Palliative/Road Stabilization Product Mag-chloride:

Shawn said after the last meeting when the purchase of the mag-chloride was approved, he called the company and they looked for a tank and found one that was now in Winnemucca waiting to be delivered to us. He said the 21,000 gallons should cover 10.5 miles of roadway.

Shawn said the roads to be sprayed with mag-chloride were the ones we had already surfaced with Class E and the roadway segments that didn't need to be touched up with Class E, such as Wilcox Ranch after the S-curve past Quaking Aspen up to Goodher.

Trustee Otto said he wanted to see at least three inches of base down wherever the mag-chloride would be sprayed.

Shawn said he didn't think we had even three inches of Class E on Amy short; that the beginning of Amy short (at Ironwood) was a bit thicker because there was some asphalt there that was covered up, so it looked thicker.

Trustee Otto said we had only three months into this; that two meetings back, we discussed giving this test a year before we got ...

Trustee Dennis said that was correct, but he came back after the two significant rains that we had (two-to-three inches of rain total), and the Class E held up remarkably well because we had adequate drainage and we put at least the 2/10ths on it. He said for the sake of saving dollars and spreading the wealth around a little bit, he would recommend that we don't put anything less than 2/10ths on any of these roads that we planned to treat with mag-chloride.

Trustee Patterson said Wild Horse was laid with 2/10ths and he drove it about a month ago and there were only a few spots where the dirt was coming through, but ...

Trustee Otto interjected that that was what he was afraid of.

Shawn said he would not put the mag-chloride on dirt.

Trustee Otto said if they put three inches down to build a crown, then it would taper out to almost nothing on the edges. He said he was hoping to see a yearlong test of the mag-chloride.

Trustee Dennis said maybe on those S-curves where they got velocity and momentum changes in the curves, maybe putting a slightly larger amount on those would make sense.

Trustee Johnson said we had a test section of Class E on Wild Horse, that had not been graded in seven or eight months now, without mag-chloride. He said we know from past experience that placing mag-chloride would make this very difficult to grade if we needed to in the future. For that reason, he said he would prefer to see the mag-chloride restricted or prioritized to the major roadways where we had so much traffic that we had to grade it continually, and the mag-chloride would glue and hold that material together. If we had to fight regrading our major roadways, he thought that was fine. He said he was not sure ... Wild Horse for example, if it had been done for eight months and we hadn't had to grade it ...

Shawn interjected and said they had watered it a lot.

Trustee Johnson said he wasn't sure those lesser roads needed mag-chloride.

Trustee Dennis said the point was, do we put the mag-chloride down specific to higher-volume traffic areas; he thought that was what Trustee Johnson was saying.

Shawn stated Wild Horse was a high-volume road.

Trustee Dennis stated Wilcox Ranch was, too.

Shawn said roads like Bootstrap, just cover with Class E; don't put any mag-chloride on it.

Trustee Johnson stated the other thing as far as sweetening some of these roads with Class E, such as Quaking Aspen, that [Type II base] had been down for almost two years now and we were starting to see patches of the red clay beneath the base. However, even in the highest rain storms, those patches did not get sloppy, did not rut, did not deteriorate, simply because they had mashed enough gravel down into those areas. Simply because we see a little bit of color from the native soil showing through, did not mean what we had done was no longer effective; quite frankly, it had worked magnificently.

Shawn stated that he was unaware that a Trustee had submitted [reimbursement]. He said he did sections of Quaking Aspen Road because it was desperately needed; it was not for anybody in particular. It was 100% where the road had nothing but big rocks showing through and it was unable to be graded there, so he covered up the rocks.

Trustee Johnson said he would cover that a little bit more under Board Member Items.

Trustee Dennis gave some past history, and explained that his dad had built the house Trustee Otto currently lived in on Quaking Aspen Road. He said it used to take him an hour to get to his dad's house because the road was terrible. The GID had made significant improvements to that road since.

Trustee Johnson said four fire trucks got stuck on that road.

v. Future Road Improvement Projects:

Trustee Johnson stated next year we needed to chip seal the remainder of Ironwood to Amy, Amy from Ironwood to Sharrock, and Whiskey Springs from Amy to Right Hand Canyon. The following year we needed to chip seal Axe Handle from Pyramid Highway to, possibly, the top of the hill (end of the Cape seal). He said he did not think they would have to do the first part of Whiskey Springs or Ironwood again until 2025. If we did the remainder of Ironwood and Whiskey Springs and the section on Amy in 2022, and did Axe Handle in 2023, we'd have a year (2024) without any asphalt project needs.

Trustee Dennis said along with the future road improvements there needed to be some rehabilitation of roads where we had roadway canals; we would keep working on those.

6. Old Business: None

7. New Business:

a. Possible Establishment of a Subcommittee to Explore Changing PVGID Roads from Easements to Owned Right-of-Ways:

Trustee Dennis stated he didn't know why he wanted this item on the agenda because he just knew how much work it would take to make this happen.

Louie Test said this would involve all kinds of surveying, and possible changes in tax requirements if the easements were owned by the GID ...

Trustee Johnson interjected and said he thought this would involve a ballot issue.

Louie continued and said there were also issues so far as whether the GID would want to accept some of these easements as right-of-ways because as a governmental agency, they would have to be brought up to our standards before they would be accepted. He said there would be a lot of issues that would have to be addressed.

Trustee Dennis agreed and said Louie had just hit the tip of the iceberg; there was a lot more, including the politics of where the money goes and where it flows from for roads. Unless you had a public road, you couldn't get dollars from the Feds or the State. We don't get road tax money.

In answer to Trustee Otto's question, Trustee Dennis responded the reason why we were considering this was because it would bring money to the General Improvement District so we could improve and maintain and do betterments to our roads.

Trustee Helton stated this was thought about years ago, but what it would do was lower the parcel sizes below the State minimum of 40 acres.

8. Judicial/Government Affairs:

Louie Test said he had nothing to report. He said he wanted to say one thing, that he liked the way the conversations went during this meeting and he said, thank you.

9. Calendar Review: Cathy Glatthar reviewed the upcoming items:

- Next month's meeting would be on August 19th.

10. Correspondence:

None

11. Public Comment:

Pam Roberts echoed Louie Test's comments and said she was very impressed with how the Board handled their disagreements, how they shared their opinions and allowed each other to talk; she complimented the Board.

Trustee Dennis thanked Ms. Roberts.

Marvin Reed said the Board talked about salvaging material off of the back slopes of the roads, and yet somebody had been neglecting to keep the brush from growing on the back slopes so it would cost almost double to get the material off the back slopes.

Mr. Reed asked when they were going to do Crossover?

Trustee Dennis asked if there were any further public comments? Hearing no requests, he moved to the next agenda item.

12. Board Member and Staff Items:

- Trustee Johnson stated there was a public comment about his reimbursement to the District for Class E material placed on Quaking Aspen in front of his house. He pointed out that past Board resolutions declared upper Quaking Aspen as a seasonal road and no improvements were to be made. The latest resolution, adopted earlier this year, eliminated the terminology of seasonal roads but recognized the fact that any improvements to those roads were to be paid for by the property owner. When Shawn was placing Class E material on upper Quaking Aspen above Trustee Johnson's property, Shawn also finished the short section, that was just a rock pile, in front of Trustee Johnson's house and covered it up with Class E. He said he pointed out to Shawn at the time that according to Board policy if that was to be done, that Trustee Johnson was to pay for it, and therefore, you would see a check to the PVGID for the amount of both the Class E material and the trucking that went to surface that area in front of his house. He said it was also a Board resolution and policy that any resident can ask for improvement of the road in front of their house if they were willing to pay for it. He said he wanted to clarify that and make sure for the record that it was very clear that he neither asked for, nor sought, nor received any special favors or any additional costs; that he paid for it himself.

- 13. Adjournment:** Trustee Johnson made a motion to adjourn the meeting. Trustee Patterson seconded the motion, and hearing no opposition, the meeting adjourned at 7:56 p.m.

PALOMINO VALLEY GENERAL IMPROVEMENT DISTRICT

TRANSACTION REPORT

As of July 12, 2021

Total of all Bank Accounts:	Balance as of July 12, 2021 - Almost CD #5010	387,061.71
	Balance as of July 12, 2021 - A/P / General Ckg #4179	689.72
	Balance as of July 12, 2021 - Payroll #4430	17,000.00
	Balance as of July 12, 2021 - Petty Cash	400.00
	Total Cash In All Accounts	405,151.43

<u>Wells Fargo - Almost CD #5010</u>		Balance as of June 14, 2021	557,038.18
Income for the Month			
Ad Valorem/Property Tax	0.00		
Consolidated Tax (CTX)	41,987.53		
LGTA/Fair Share	3,726.12		
Other Income	0.00		
TOTAL	45,713.65		
Interest Income	4.58		45,718.23
Transfer to Wells Fargo #4179	(7,000.00)		
Transfer to Wells Fargo #4430	(208,694.70)		(215,694.70)
		Balance as of July 12, 2021	387,061.71

<u>Wells Fargo - A/P / General Ckg #4179</u>		Balance as of June 14, 2021	798.93
Transfer from Wells Fargo #5010	7,000.00		
Interest Income	0.06		7,000.06

NAME	CK #	AMOUNT	DESCRIPTION	
Shawn & Heather Kelly	9909	237.91	Refund of remaining deposit and prorated Property Taxes for Kelly Exclusion	
Catherine Glatthar	9910	2,246.83	Secretarial Services \$1,585.93, Accounting \$630.00, Office Supplies \$30.90	
EMRB	9911	6.00	EMRB annual Assessment per employee 2 X \$3.00	
Flyers Energy	9912	1,474.78	Fuel	
Hoffman & Test	9913	35.00	5/20/21 travel cost [Note: May retainer paid on 6/17/21 check #9904]	
Pyramid Business Services	9914	861.25	Monthly Bookkeeping and Payroll	
Sierra Rental and Transport	9915	2,072.00	Trucking of Class E to Bacon Rind (S) 18.5 hours @ \$112.00/hour [Note: Partial Billing]	
Sparks Tribune/Battle Born Media	9916	175.50	Legal Notice for Annual Fiscal Reports	
TOTAL		7,109.27		(7,109.27)
			Balance as of July 12, 2021	689.72

ESTIMATED OPERATING FUNDS FOR ROAD IMPROVEMENTS

ATTACHMENT - 07/15/2021 Meeting - Agenda Item 4b

Total Cash in all Bank Accounts as of July 12, 2021	405,151			
Additional Revenue Expected Through August 31, 2021	47,691			
ESTIMATED OPERATING FUNDS THROUGH AUGUST 31, 2021			452,842	
LESS Average Monthly Expenses (\$30,000) x 1 Month	-30,000			
LESS: Capital Outlay (\$91,537); SNC Edge Paving \$88,650 (per bid); Unexpected Repairs (\$5,000/mo x 1 mo); Mag-Chloride \$20,000; Workers' Comp \$1,360 (Aug); SRT Bal for Bacon Rind \$5,572	-212,119			
LESS Reserve Funds (= Ending Fund Balance per Budget)	-60,000			
ESTIMATED EXPENSES & RESERVES THROUGH AUGUST 31, 2021			-302,119	
ESTIMATED NET OPERATING FUNDS FOR ROAD IMPROVEMENTS AS OF AUGUST 31, 2021			150,723	
Additional Revenue Expected Through August 31, 2021:				
From 2020/2021	Figures Used for			
<u>Final Budget</u>	<u>Est Op Funds Rpt</u>			
301,627	300,000	Ad Valorem	Aug '21	7,026
502,198	450,000	CTX	37,500 x 1	37,500
38,000	38,000	LGTA	3,165 x 1	3,165
841,825	788,000			47,691
	-53,825	Difference between Budget and Estimated Operating Funds Report Projected Revenues		
MONTHLY EXPENSES:				
	Average	Actual	Difference	
Payroll	17,000	15,962	1,039	
Other (non Road Maint)	13,000	6,371	6,629	
	30,000	22,332	7,668	
			A/P Acct Exps	7,109
Capital Outlay		0	P/R Acct Exps	208,695
Road Maintenance		193,472	Petty Cash Exps	0
TOTAL EXPENSES		215,804		215,804

REVENUE - ACTUAL AND ESTIMATED

NOTE: As of 07/12/2021, Actual Revenue is Greater Than YTD Estimated By:

\$25,002.44

AD VALOREM				
Date	Estimated	Actual	Difference	YTD Difference
at 09/17/20 (35%)	105,000.00	111,847.45	6,847.45	6,847.45
at 10/15/20	0.00	0.00	0.00	6,847.45
at 11/19/20 (21%)	63,000.00	57,293.25	-5,706.75	1,140.70
at 12/17/20	0.00	6,500.23	6,500.23	7,640.93
at 01/21/21	0.00	201.68	201.68	7,842.61
at 02/18/21 (21%)	63,000.00	56,559.51	-6,440.49	1,402.12
at 03/18/21	0.00	8,763.45	8,763.45	10,165.57
at 04/15/21 (21%)	63,000.00	0.00	-63,000.00	-52,834.43
at 05/17/21	0.00	51,211.07	51,211.07	-1,623.36
at 06/14/21	0.00	0.00	0.00	-1,623.36
at 07/12/21 (2%)	6,000.00	0.00	-6,000.00	-7,623.36
August	0.00			
	300,000.00	292,376.64	-7,623.36	
CTX				
Date	Estimated	Actual	Difference	YTD Difference
at 09/17/20	37,500.00	42,976.54	5,476.54	5,476.54
at 10/15/20	37,500.00	38,746.57	1,246.57	6,723.11
at 11/19/20	37,500.00	38,947.03	1,447.03	8,170.14
at 12/17/20	37,500.00	41,296.50	3,796.50	11,966.64
at 01/21/21	37,500.00	40,021.57	2,521.57	14,488.21
at 02/18/21	37,500.00	38,748.72	1,248.72	15,736.93
at 03/18/21	37,500.00	43,828.87	6,328.87	22,065.80
at 04/15/21	37,500.00	37,377.54	-122.46	21,943.34
at 05/17/21	37,500.00	36,960.09	-539.91	21,403.43
at 06/14/21	37,500.00	43,323.13	5,823.13	27,226.56
at 07/12/21	37,500.00	41,987.53	4,487.53	31,714.09
August	37,500.00			
	450,000.00	444,214.09	-5,785.91	
LGTA				
Date	Estimated	Actual	Difference	YTD Difference
at 09/17/20	3,165.00	2,861.68	-303.32	-303.32
at 10/15/20	3,165.00	643.06	-2,521.94	-2,825.26
at 11/19/20	3,165.00	7,503.29	4,338.29	1,513.03
at 12/17/20	3,185.00	0.00	-3,185.00	-1,671.97
at 01/21/21	3,165.00	4,094.97	929.97	-742.00
at 02/18/21	3,165.00	2,845.40	-319.60	-1,061.60
at 03/18/21	3,165.00	3,013.98	-151.02	-1,212.62
at 04/15/21	3,165.00	4,659.27	1,494.27	281.65
at 05/17/21	3,165.00	2,672.79	-492.21	-210.56
at 06/14/21	3,165.00	3,726.15	561.15	350.59
at 07/12/21	3,165.00	3,726.12	561.12	911.71
August	3,165.00			
	38,000.00	35,746.71	-2,253.29	

PVGID OPERATIONS REPORT
Report Period 6/14/2021 to 7/11/2021
ATTACHMENT: 7/15/2021 Meeting Agenda Item 5b

ROADS GRADED AND/OR COMPACTED:

1. Bacon Rind (N)
2. Bacon Rind (S): Axe Handle – Sky Canyon
3. Grass Valley: Wayside – Whiskey
4. Prairie: Damage from Reno Rodeo cattle drive
5. Big Dog: Damage from Reno Rodeo cattle drive
6. Amy: Whiskey Springs – James Ranch
7. Sharrock: Amy – Wild Horse
8. Bacon Rind (N)
9. Bacon Rind (S): Axe Handle – Sky Canyon
10. Grass Valley: Pyramid – Wayside
11. Two Forty
12. Lost Spring
13. Anniversary

OTHER ROAD WORK:

1. Bacon Rind (S): Prep and spread 1869.17 tons of Class E from Axe Handle to Sky Canyon

OTHER:

1. Office work
2. Road committee meetings
3. GID Meeting
4. Road Surveys
5. Town for parts
6. Misc. Yard work
7. Employees off on Monday, July 5th for Independence Day

EQUIPMENT:

1. 05 Intl Water Truck: Truck broke down - Rear brake chamber bad, R&R. Weld cracks in tank. Change oil & filter and lube.
2. Wayside Generator: Change oil & filter
3. Ironwood Generator: Change oil & filter

PVGID MINUTES JULY 15, 2021
ATTACHMENT - Agenda Item #5.c.
Discussion of General Road Grading Requirements
Submitted by Trustee Don Otto

1. Maintain 5% crown wherever possible, unless full slope to one side is needed.
2. No purposely cut high volume ditches unless escapes cannot be constructed there. MINIMIZE ditch depth to prevent vehicle damage when ditch travel is needed for a variety of reasons including to prevent high speed accidents. (Excluding Range Land, Wilcox Ranch and the uphill side of any other roads of which the ditch acts as a high-water detention) (No tiny V ditches that are useless and waste valuable grading time to create)
3. Water escapes flow lines should be cut in lower than ditch flow line to force water into the escape. Slope escape entrance to force water outward.
4. Daylight out road shoulders where adjacent ground is level with or sloping away. Fill in existing ditch or swale where this condition exists.
5. Put consideration and effort into raising and rewidening roads using previously graded off material piled where ditches used to be.
6. Always cut washboarded surfaces to full depth of depressions and if water is available, moisture condition, reshape, and roller compact.
7. ALWAYS pull material in from edges.
8. DO NOT remove any material from roadway!
9. DO NOT narrow any roadway's travel width, (unless road work is being conducted).
10. Maintain 20 ft wide road way at hill crests and curves wherever possible.
11. Periodically remove roadside vegetation, ESPECIALLY on blind curves and narrow hill crests.
12. Any imported gravel should be placed purposely leaving uncovered native space along edges, creating room for natural gravel sluff-off from future regrading and traffic wear.
13. Transition grade driveways and all road intersections smoothly.
14. Shoulder up hard surfaced road edges when needed.
15. When installing culverts, use adequate length to reach natural slope.

PVGID Road Improvement Cost Analysis Estimate

Class E Surfacing - Urgent Roads List

Attachment: July 15, 2021 Meeting Agenda Item: 5diii

NOTE: Roads are in alphabetical order, not in order of repair

P = Paved UP = Unpaved

Road (Priority: R-Urgent Y-Needed G-OK) Avg. Aggregate spread - 18'-20' @ .2 thick	Existing Road Material	UP Miles	Class E Tonage (1000 tons/mile)	Class E Total (\$5.50/ton)	7 Axle Trucking \$131/hr	5 Axle Trucking \$112/hr	# of Trucks	Estimated Cost	
					Avg. 10 hr day = 6 - 1.5 hr trips				
Amy (Whiskey Springs - James Ranch)	R	1.57	1600	\$ 8,800		\$ 12,320	11	\$ 21,120	
Amy (S) (Wilcox Ranch - End)	R	Sand, Rock, Clay	1.4	1400	\$ 7,700		\$ 11,200	10	\$ 16,800
Bacon Rind (N: End of Surfacing - End)	R	DG Sand	1.2	1200	\$ 6,600		\$ 7,840	7	\$ 14,440
Bootstrap	R	Rock	0.5	500	\$ 2,750		\$ 3,360	3	\$ 6,110
Broken Spur (S: Whiskey - Tumbleweed)	R	Sand,Rock,Clay	0.38	400	\$ 2,200		\$ 2,240	2	\$ 4,440
Crazy Horse (Wilcox - Yellow Tail)	R	Sand,Rock,Clay	0.73	800	\$ 4,400		\$ 5,600	5	\$ 10,000
Crazy Horse (Yellow Tail - End)	R	Sand,Rock,Clay	0.37	400	\$ 2,200		\$ 3,360	3	\$ 5,560
Crossover (Wild Horse - Twin Springs)	R	Clay, Gravel	0.6	600	\$ 3,300	\$ 3,930	\$ 3,360	3	\$ 10,590
Curnow Cyn (Quonset - Top of Hill 455 CCRd)	R	Granite, DG	0.9	1000	\$ 5,500		\$ 6,720	6	\$ 12,220
Peak (E - W)	R	Sand,Rock,Clay,Class E	0.7	700	\$ 3,850	\$ 3,930	\$ 3,360	3	\$ 11,140
Piute Creek (Whiskey - Turn)	R	Lots of Rocks,Dirt	0.5	500	\$ 2,750		\$ 3,360	3	\$ 6,110
Piute Creek (Turn - Stop/2155 PCRd)	R	Lots of Rocks,Dirt Avg 12'	1.2	1200	\$ 6,600		\$ 3,360	3	\$ 9,960
Prairie (Winnemucca - Big Dog)	R	DG Sand, Slime when wet	0.45	500	\$ 2,750		\$ 3,360	3	\$ 6,110
Prairie (Big Dog - Jackrabbit)	R	DG Sand	0.55	600	\$ 3,300		\$ 3,360	3	\$ 6,660
Range Land (Peak - Winnemucca)	R	DG Sand, Clay"ish"	1	1000	\$ 5,500	\$ 6,550	\$ 5,600	5	\$ 17,650
Right Hand C (End of Asphalt - Block Hs)	R	Redo with Spec Class E	0.6	600	\$ 3,300		\$ 3,360	3	\$ 6,660
Right Hand C (Wrangler - Raptor)	R	DG Sand Rock	0.6	600	\$ 3,300		\$ 3,360	3	\$ 6,660
Right Hand C (Raptor - Ed's 3300 RHC)	R	DG Sand Rock	0.8	800	\$ 4,400		\$ 5,600	5	\$ 10,000
Twin Springs (Crossover - Cul-de-sac)	R	DG Fine sand	1.6	1600	\$ 8,800		\$ 12,320	11	\$ 21,120
Yellow Tail (Crazy Horse - Chantry)	R	Lots of Rocks,Dirt	1.3	1300	\$ 7,150		\$ 10,080	9	\$ 17,230
Yellow Tail (Chantry - Pioche) "Hill"	R	Lots of Rocks,DG	0.25	300	\$ 1,650		\$ 2,240	2	\$ 3,890
Yellow Tail (Pioche - End)	R	Lots of Rocks,Dirt	0.55	600	\$ 3,300		\$ 4,480	4	\$ 7,780
Calc based on Op Mgr's Material & Trucking Ests:		Road Priority R-urgent	17.75	18,200	\$ 100,100	\$ 14,410	\$ 119,840		\$ 232,250
Calculation based on Average Cost Per Mile:		Road Priority R-urgent	17.75		Average	\$13,000	Per mile		\$ 230,750