

# Dealing with Gravel Shortages Clay County, SD Experience

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# **Our Problem**

- **No suitable gravel available within our county.**
- **We will not use gravel that doesn't meet SD Gravel Surfacing specification.**
- **Nearest source outside our county makes approx 40 mile haul average (one-way).**
- **Fortunately, we do not have a lot of gravel roads.**

# Other Limitations

- Only own tandem end-dump trucks – not good for long hauls.
- We rent a trailer for our semi-tractor at times.
- Do not have time for a lot of hauling.
- Our gravel cost is running approx \$15 per ton in-place on the road.

# How we try to solve the problem

- We do aggressive gravel recovery on our roads.
- Two methods:
  - A small tractor-mounted disk for shoulder work.
  - A wing-mounted disk on a motorgrader for recovering material from the in-slope.

# Gravel Recovery

- We ran the tractor-mounted disk on both shoulders all gravel roads in 2010.
  - That recovers most gravel lost from snow plowing and whip-off from traffic.
- We do more aggressive gravel recovery projects working to the toe of the in-slope as time allows.
- We estimate recovery of 450 to 500 tons per mile!

# How we do common shoulder recovery:









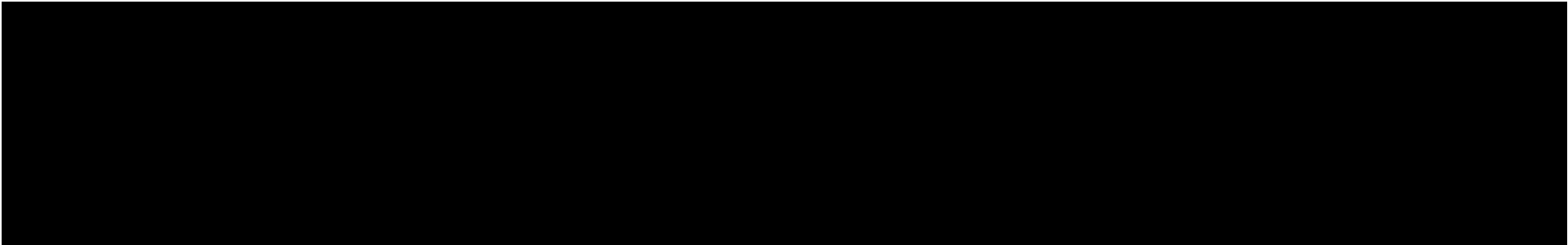




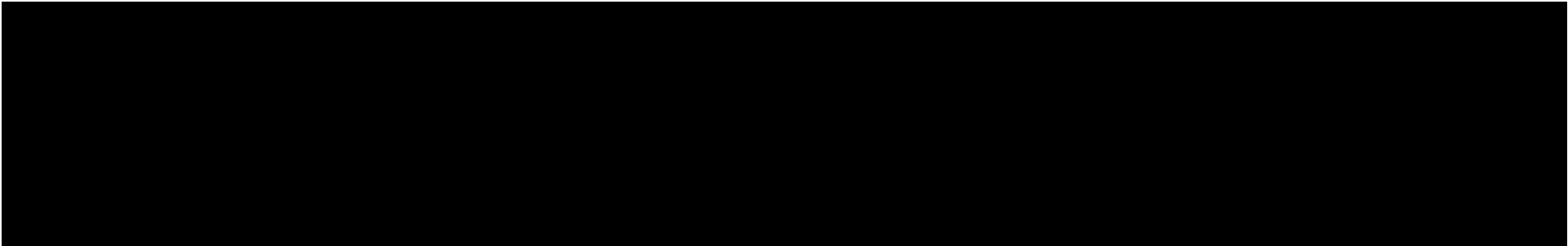
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# How we do more aggressive recovery:

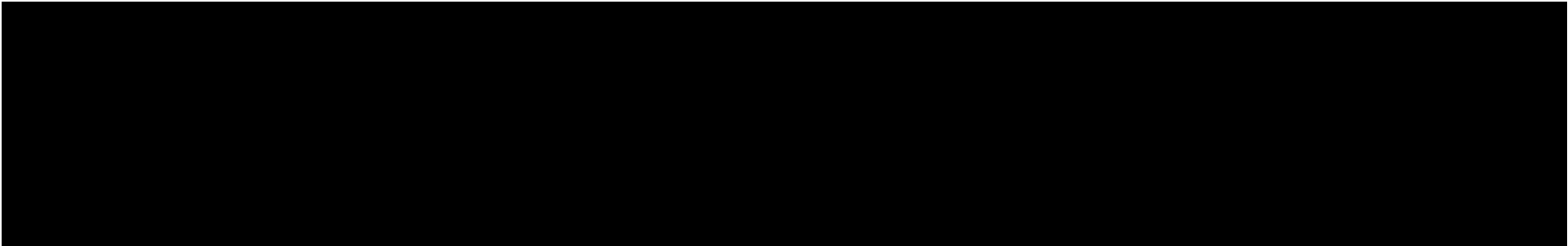
- One motorgrader with wing mounted disk mulching and processing material.
- Second motorgrader working and shaping material on the roadway.
- Use up to four rubber tired rollers.
- One water truck.
- Traffic control – signs only.







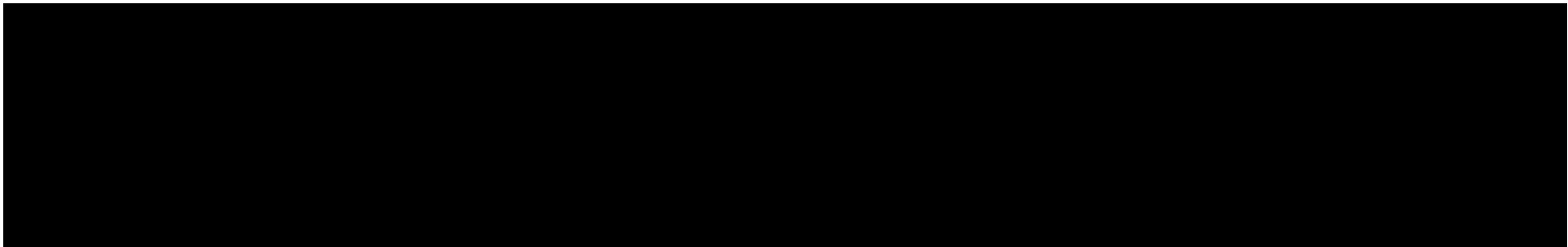




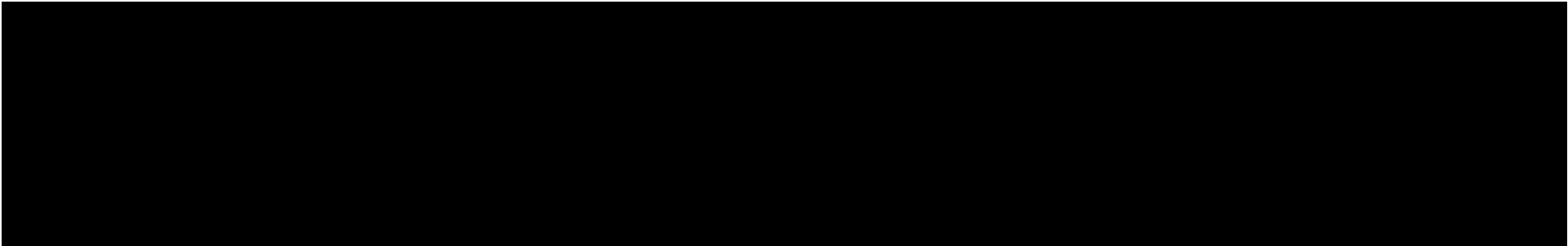


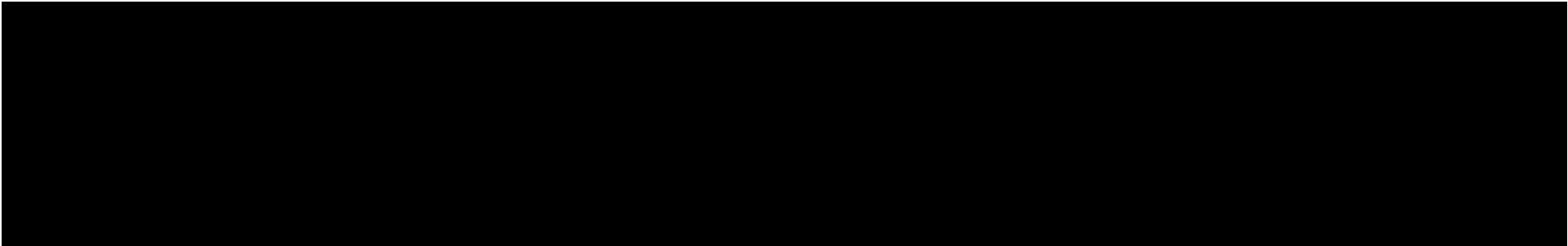


















**This work is weather sensitive!**



**But end result has been very good**



# Finished project





**All recovered material – no virgin gravel here.**

