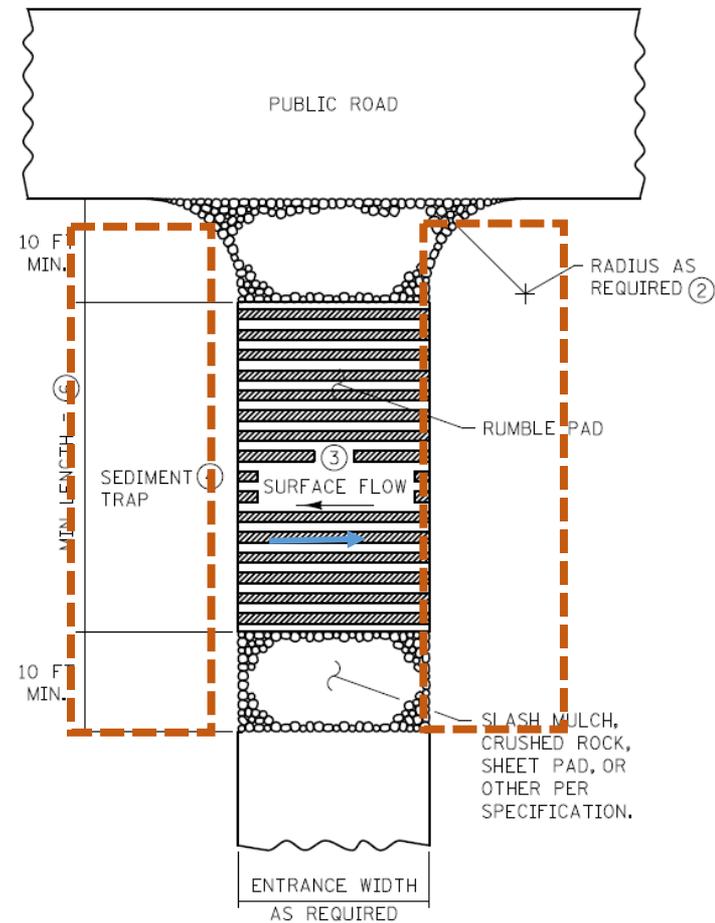


SLASH MULCH, CRUSHED ROCK, OR SHEET PAD CONSTRUCTION EXIT (5)(7)



RUMBLE PAD CONSTRUCTION EXIT (5)(7)

All projects are required to have stabilized exits to a minimum running length. The detail shows the location of a sediment trap to either side of the stabilized exit.

1. Grade exit area, excavate sediment traps, \$500
2. Geotextile fabric (25x70), \$10 sy, \$1,900
3. 2 inch minus crushed aggregate, 6 inch depth, \$40/t, \$1,300
4. Weekly rock maintenance \$100//wk, \$5,200
5. Daily street sweeping, \$150/hr, 1 hour/day/exit, \$39,150
6. Inlet (4) maintenance down gradient on pavement \$800/ea/yr, \$2,400

Eng Est. = \$50,450/yr

Construction Exit Control Type 9: Wash-off



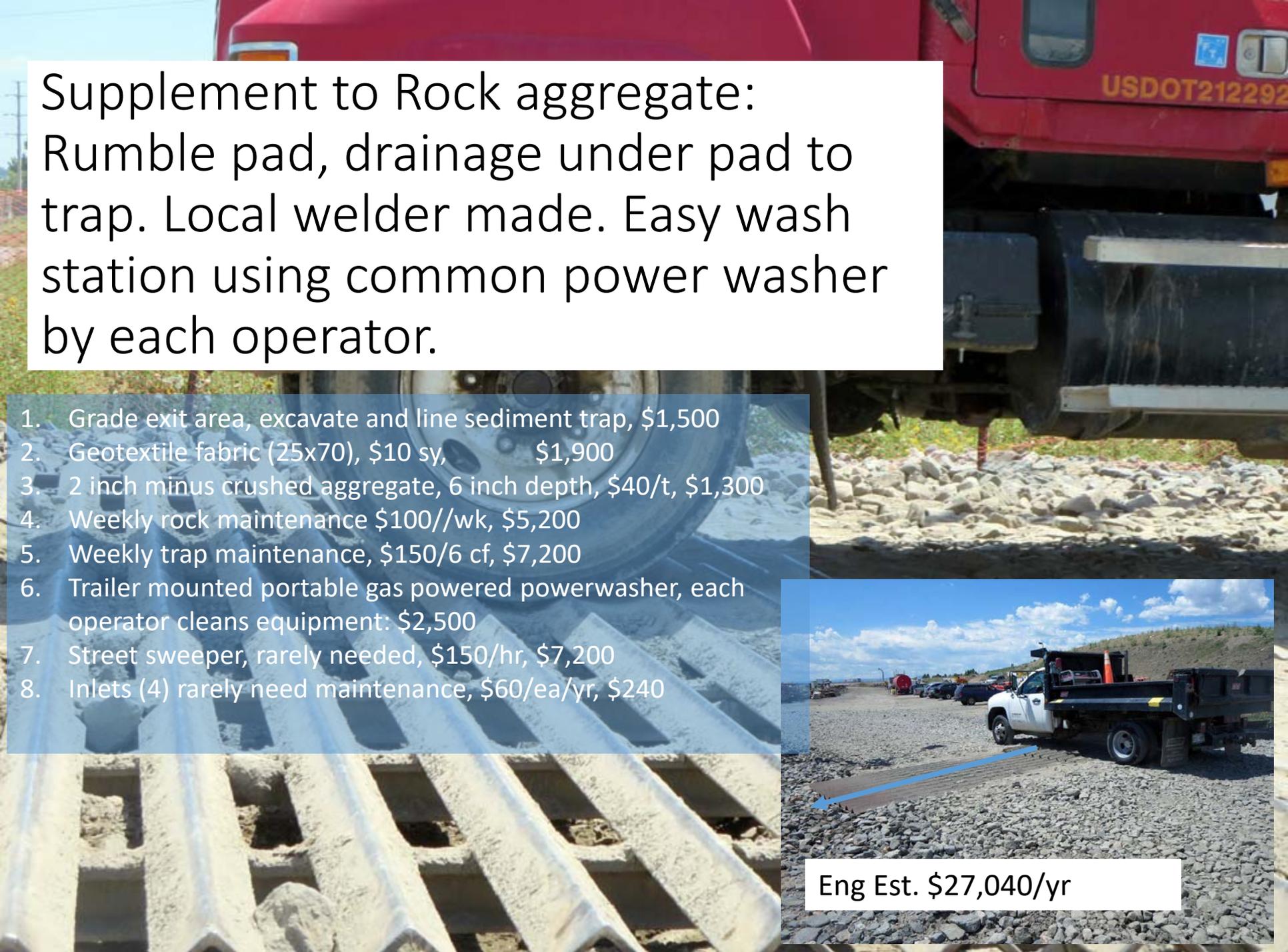
Manufactured Wheel Wash-off: \$100,000 – \$250,000
depending on options and level of automation
Little need for inlet maintenance
Severe reduction in street sweeping



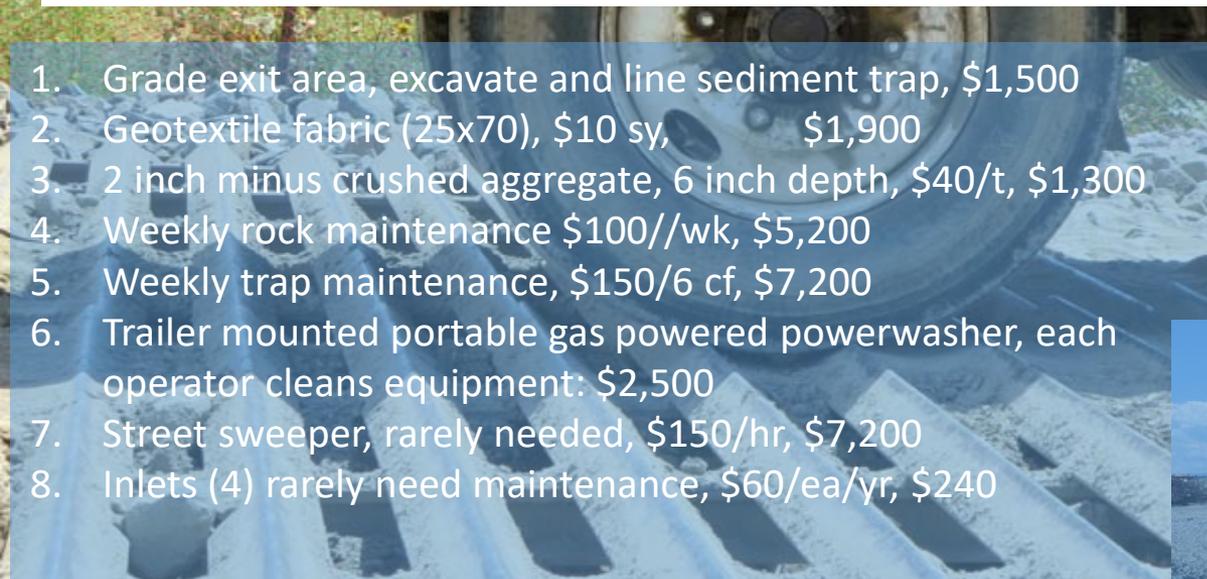
Veit System used in Duluth

- Stabilized rock exit:
 1. Grade exit area, excavate and line sediment trap, \$1,500
 2. Geotextile fabric (25x70), \$10 sy, \$1,900
 3. 2 inch minus crushed aggregate, 6 inch depth, \$40/t, \$1,300
 4. Weekly rock maintenance \$100//wk, \$5,200
 5. Weekly sediment trap maintenance, (minimal, replaced once), \$1000
 6. Functional water truck, each operator cleans equipment: \$2,500
 7. Street sweeper, rarely needed, \$150/hr, \$7,200
 8. Inlets (4) rarely need maintenance, \$60/ea/yr, \$240

Eng Est \$20,840/yr



Supplement to Rock aggregate:
Rumble pad, drainage under pad to
trap. Local welder made. Easy wash
station using common power washer
by each operator.

- 
1. Grade exit area, excavate and line sediment trap, \$1,500
 2. Geotextile fabric (25x70), \$10 sy, \$1,900
 3. 2 inch minus crushed aggregate, 6 inch depth, \$40/t, \$1,300
 4. Weekly rock maintenance \$100//wk, \$5,200
 5. Weekly trap maintenance, \$150/6 cf, \$7,200
 6. Trailer mounted portable gas powered powerwasher, each operator cleans equipment: \$2,500
 7. Street sweeper, rarely needed, \$150/hr, \$7,200
 8. Inlets (4) rarely need maintenance, \$60/ea/yr, \$240



Eng Est. \$27,040/yr

1. Grade exit area, excavate and line sediment trap, \$1,500
2. Geotextile fabric (25x70), \$10 sy, \$1,900
3. 2 inch minus crushed aggregate, 6 inch depth, \$40/t, \$1,300
4. Weekly rock maintenance \$100//wk, \$5,200
5. Weekly trap maintenance, \$150/6 cf, \$7,200
6. Small portable gas powered powerwasher, each operator cleans equipment: \$1,200
7. Street sweeper, rarely needed, \$150/hr, \$7,200
8. Inlets (4) rarely need maintenance, \$60/ea/yr, \$240

Sediment
Trap

07/07/2004

Eng. Est. \$25,740/yr