

C&J Gravel 2021 permit reclamation cost (see map 1 for reference)
35.43 acres

1: Northwest corner shaping 7.05 acres:

-Cat D10T: 30 hours \$7,500

A. 7.05 acres

B. 200' maximum push

2: Southwest corner shaping

-Cat D10T: 8 hours \$2,000

A. 1.44 acres

B. 150' maximum push

3: Northwest slope soil placement (Map 1)

-Volvo A35-C: 12.58 hours \$968.66

-Cat 982M: 2.39 hours \$395.54

-Cat D10T 3.64 hours \$910

A. 7.05 acres: 6" overburden = 5,460yd³

B. 816' maximum haul distance

C. A-35C: 287 loads @ 2.63 min per load

I. 30 second load time. 2 passes with a Cat 982M

II. 1.23 minutes haul time roundtrip @ 10MPH

III. 45 seconds to dump material

D. Cat 982M: 287 loads @ 30 seconds each = 2.39hrs

E. Cat D10T: 5,460yds³ @ 1,500yds³ hour = 3.64hrs

4. Southwest slope soil placement

-Volvo A35-C: 2.58 hours \$198.66

-Cat 982M: .49 hours \$81.09

-Cat D10T: .74 hours \$185

A. 1.44 acres:

B. 1.44 acres @ 6" = 1,119.2 yds³ dirt

C. 816' maximum haul distance

D. A35-C: 58.90 loads @ 2.63 min per load

I. 30 second load time. 2 passes with a Cat 982M

II. 1.23 minutes haul time @10mph

III. 45 seconds to dump material

E. Cat 982M: 58.9 loads @ 30 seconds each = .49hour

F. Cat D10T: 1,119.2yds³ @1,500yds³ hour = .74hour

5: Rip pit floor

D10T : 25.25 hours \$6,312.50

A. 25.12 acres

B. 12" rip depth

6: Place overburden/topsoil over the pit floor 25.12 acres

- Volvo A-35C 29.01 hours \$2,233.77

-Cat 982M 8.53 hours \$1,411.71

-Cat D10T 12.97hours \$ 3,242.50

A. 25.12 acres

B. 25.12 acres @ 6" = 19,456.97 yd³ dirt

C. 600' max haul distance from numerous load out zones; using a Volvo A-35 articulated haul truck with the capability of holding 19 cubic yards heaped.

D. A-35C: $19,456.97 \text{ yd}^3 \div 19 = 1,024 \text{ loads @ } 1.7 \text{ min per load}$

I: 30 second load time. 2 passes with a Cat 982M

II: 27 seconds drive to the dump site @15mph

III: 45 seconds to dump material

E. Cat 982M: $1,024 \text{ loads @ } 30 \text{ seconds per load} = 8.53 \text{ hours}$

F. Cat D10T: $19,456.97 \text{ yd}^3 @ 1,500 \text{ yd}^3 \text{ per hour} = 12.97 \text{ hours}$

7: Seed 2021 permit area

-35hr labor \$875

-800.71 pounds seed \$8,007.10

A: Pit floor + slopes = 35.43 acres

B: Hand broadcast 800.71 pounds of seed hand broadcasted @ 22.6 pounds per acre

Summary

Cat D10T:\$20,150

Cat 982M: \$1,888.34

Volvo A35: \$3,401.09

Labor: \$875

Seed: \$8007.10

\$34,321.53

