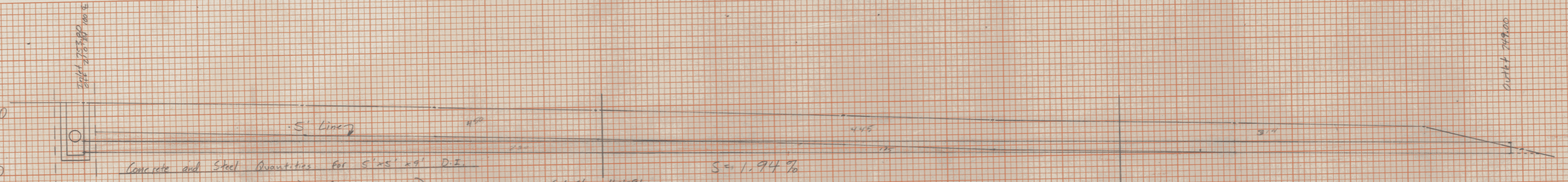


Concrete and Steel Quantities for 5'×5'×9' D.I.

Conc., Base & Walls: $\left(\frac{5' \times 5' \times 8.33'}{27}\right) - \left(\frac{3' \times 3' \times 7.67'}{27}\right) = 5.15$ c.y.

Conc., Top: $\left(\frac{5' \times 5' \times 0.67'}{27}\right) - \left(\frac{2' \times 2' \times 0.67'}{27}\right) = 0.52$ c.y.

S.G.N. 11-1-91

Total Conc. Class B = 5.7 c.y.

Reinforcing Steel: Prorate steel from 4'×6' D.I. to 5'×5' D.I.
conc. 4'×6' = 5.8 c.y. 5.7 ÷ 5.8 = 0.98
conc. 5'×5' = 5.7 c.y. Use 98% of Steel from Chart on D-6.

489 lbs. × 0.98 = 479 lbs. of Reinforcing Steel

107+72 ~ 110+20 Rt. (DS 195)
24" × 248' RCP CL. III
w/RCDI @ Inlet
(Laliberty's Drive Pipe)

Book 2J Page 82

Trench Earth
Pipe 0'-5' = 1190' × 4.5' × 1/27 = 198.3 c.y.
Pipe over 5' = 347' × 4.5' × 1.5 × 1/27 = 86.8 c.y.
D.I. 0'-5' = 7' × 7' × 5' × 1/27 = 9.1 c.y.
D.I. over 5' = 7' × 7' × 5' × 1.5 × 1/27 = 13.6 c.y.

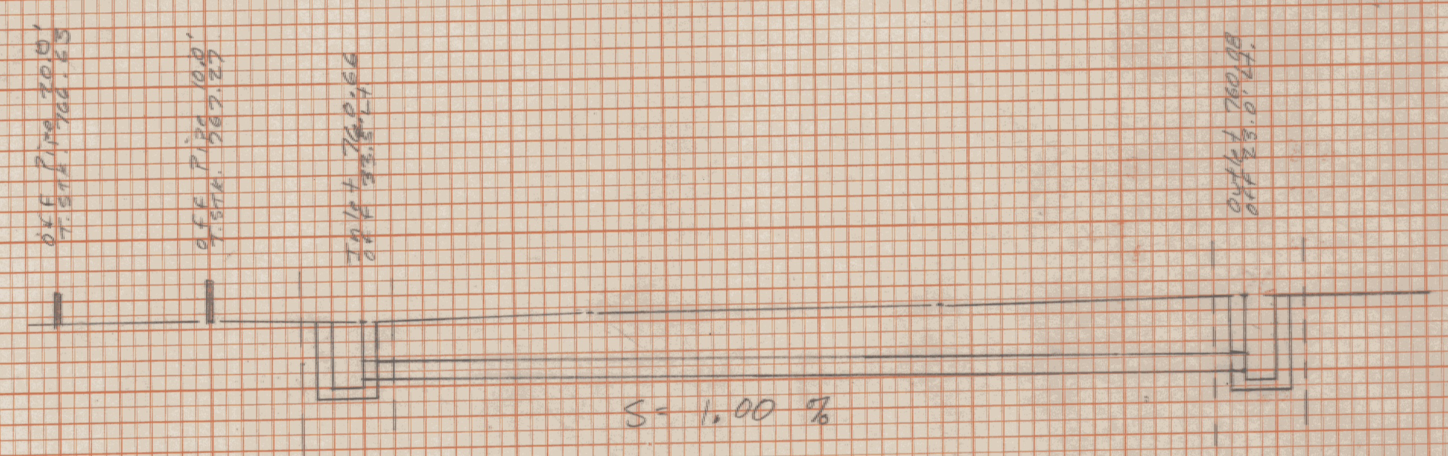
Total Trench Earth = 307.8 c.y.

11-14-91 LDS

Subbase of Gravel
200' × 1.5' × 4.5' × 1/27 = 50.0 c.y.

S.G.N. 7.25.91

To Bk 1 P. 76



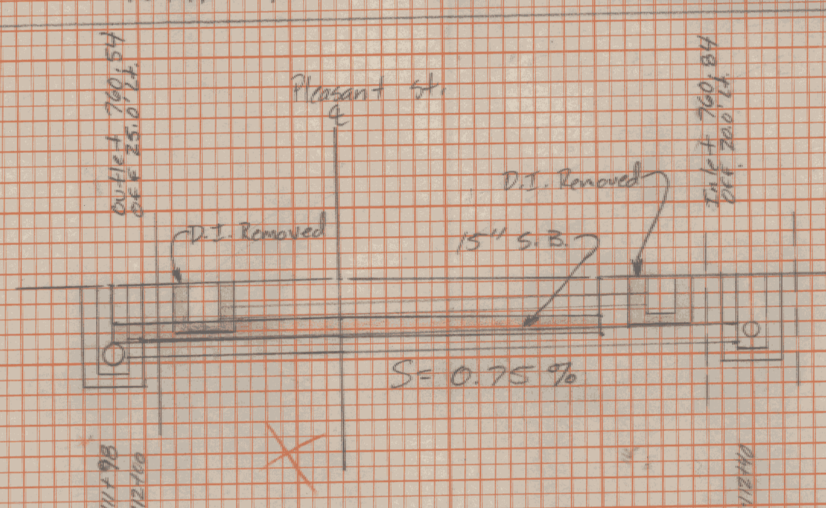
110+20 ~ 110+78 Lt. (DS 196)
15" × 58' CSP (.064)
w/RCDI @ Inlet
Book 2J Page 86

Trench Earth
Pipe 0'-5' = 243' × 3.3' × 1/27 = 29.7 c.y.
D.I. 0'-5' = 6' × 6' × 5' × 1/27 = 6.7 c.y.

Total Trench Earth = 36.4 c.y.

S.G.N. 7.25.91

11-14-91 LDS



111+99 ~ 112+39 Lt. (DS 197)
15" × 40' CSP (.064)
w/ RCDI @ Inlet
Book 2J Page 90

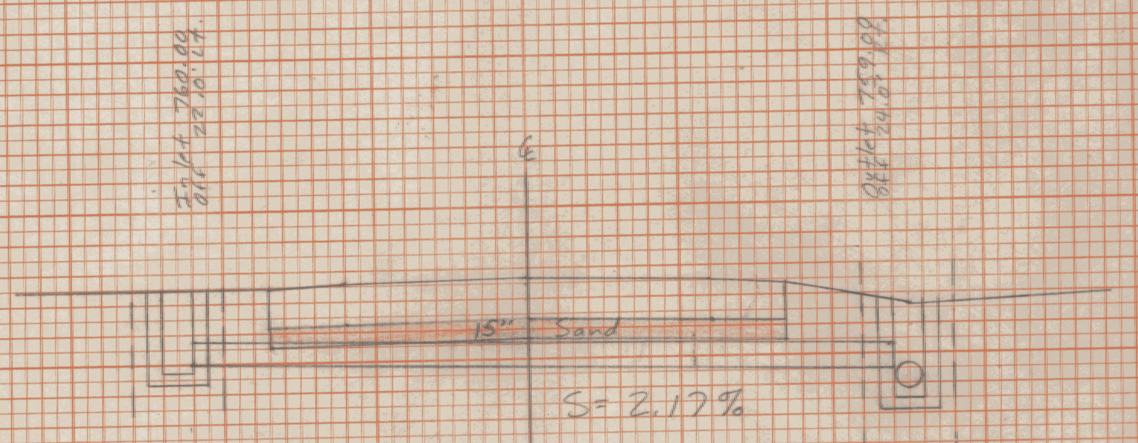
Trench Rock
2-D.I.'s = 4' × 4' × 3' × 2 × 1/27 = 3.6 c.y.
2 D.I.'s and Pipe in Same trench.
1 D.I. in Road way, 1 off shoulder

Trench Earth
Pipe 0'-5' = 61' × 3.3' × 1/27 = 7.5 c.y.
D.I. 0'-5' = 6' × 6' × 5' × 1/27 = 6.7 c.y.
D.I. over 5' = 6' × 6' × 0.75' × 1.5 × 1/27 = 1.5 c.y.
15.7 (T.E.) − 1.8 (1 D.I.) = 13.9 c.y. Total T.E.

S.G.N. 7.31.91

11-15-91 LDS

For Pleasant St. System See Drainage Sheet #36



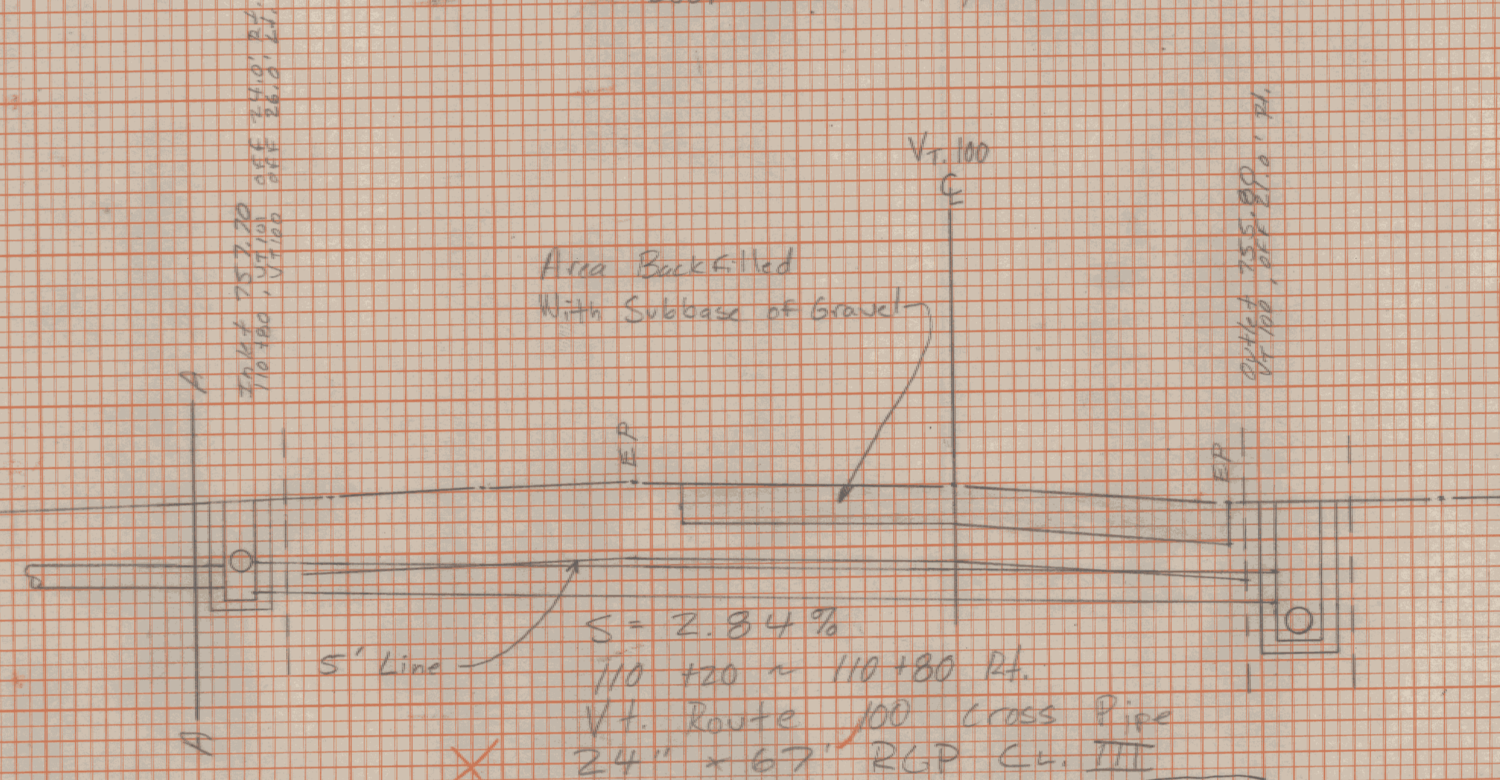
110+80 ℄ (DS 193)
18" × 46' RCP CL. III
W/ RCDI @ Inlet
Book 2J Page 74

Trench Earth
Pipe 0'-5' = 93' × 3.9' × 1/27 = 13.4 c.y.
D.I. 0'-5' = 6' × 6' × 5' × 1/27 = 6.7 c.y.
D.I. over 5' = 6' × 6' × 1' × 1.5 × 1/27 = 2.0 c.y.

Total Trench Earth = 22.1 c.y.

S.G.N. 7.22.91

11-14-91 LDS



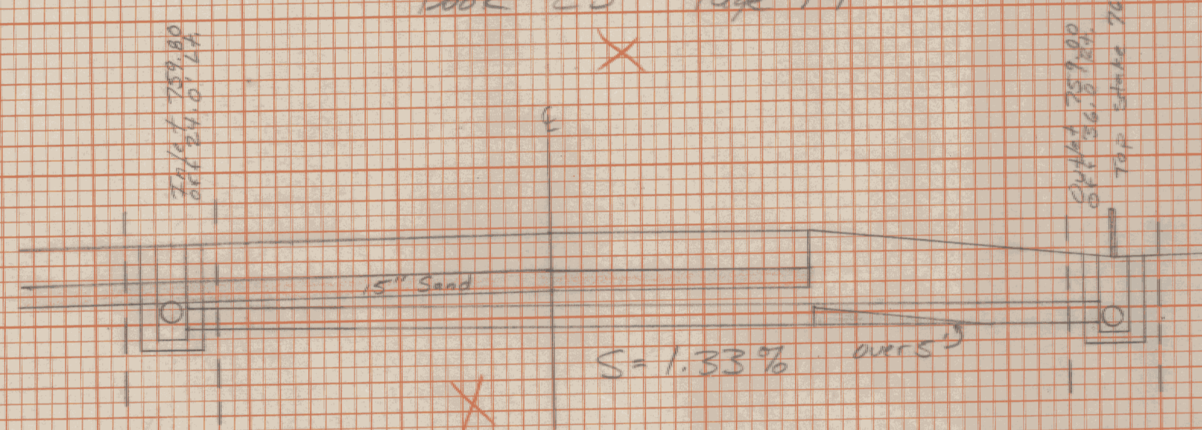
110+20 ~ 110+80 Rt.
Vt. Route 100 Cross Pipe
24" × 67' RCP CL. III
W/ RCDI @ Inlet (DS 194)
Book 2J Page 78

Gravel
36' × 2.5' × 6' × 1/27 = 20.0 c.y.
SEE BK 1 PG. 76

Trench Earth
Pipe 0'-5' = 315' × 4.5' × 1/27 = 52.5 c.y.
Pipe over 5' = 142' × 4.5' × 1.5 × 1/27 = 35.5 c.y.
D.I. 0'-5' = 6' × 6' × 5' × 1/27 = 6.7 c.y.
D.I. over 5' = 6' × 6' × 2' × 1.5 × 1/27 = 4.0 c.y.

Total Trench Earth = 98.7 c.y.

S.G.N. 7.23.91



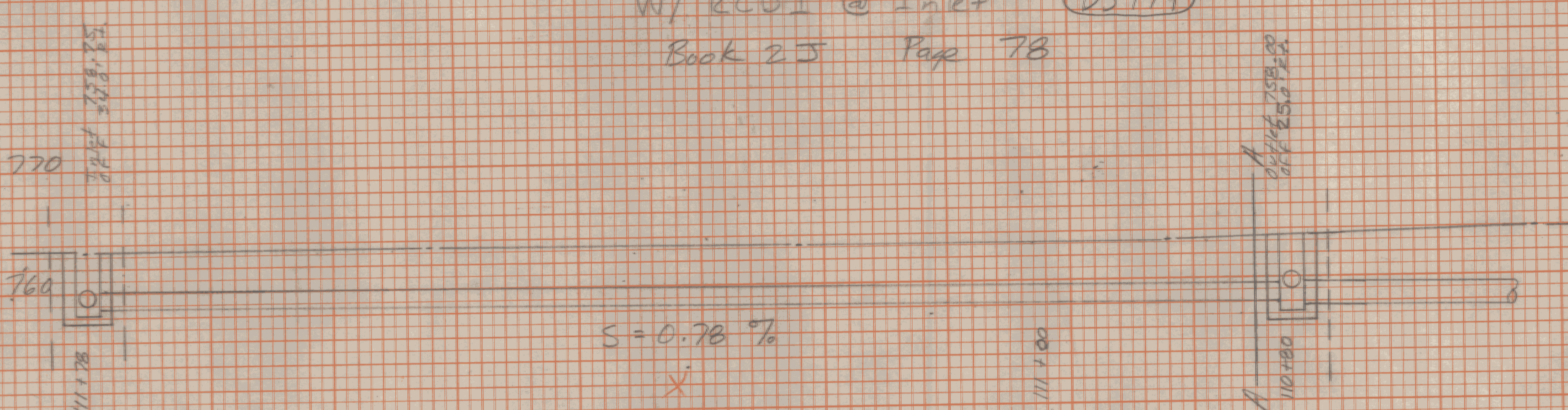
111+78 Rt. ~ 111+98 Lt.
18" × 60' RCP CL. III
W/RCDI @ Inlet (DS 191)
Drawn Askew
Book 2J Page 66

Trench Earth
Pipe 0'-5' = 172' × 3.9' × 1/27 = 24.8 c.y.
Pipe over 5' = 5' × 3.9' × 1.5 × 1/27 = 1.1 c.y.
D.I. 0'-5' = 6' × 6' × 3' × 1/27 = 4.0 c.y.

Total Trench Earth = 29.9 c.y.

S.G.N. 7.22.91

11-15-91 LDS



110+81 ~ 111+77 Rt. (DS 192)
18" × 96' RCP CL. III w/ RCDI @ Inlet

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Trench Earth
Pipe 0'-5' = 460' × 3.9' × 1/27 = 66.4 c.y.
D.I. 0'-5' = 6' × 6' × 5' × 1/27 = 6.7 c.y.
D.I. over 5' = 6' × 6' × 1' × 1.5 × 1/27 = 2.0 c.y.

Total Trench Earth = 75.1 c.y.

S.G.N. 7.22.91

11-15-91 LDS

Village Stormwater System

Troy RS 0311(17)
Drainage Sheet # 28

PLATE 3 CROSS SECTION O. P. R. & R. S. STANDARD
DIETZGEN CORPORATION

328 DRAIN