

TRENCH EXCAVATION @ 100%

UNDERCUT -
 $17.3m(L) \times 0.15m(D) \times 1.54m(W) = 4.00 \text{ cm}^3$

CULVERT -
 $(\frac{0+10}{2})(L) \times (10 \times 4) + (\frac{10+0.7}{2} \times 4) \times (\frac{15+1}{2} \times 4)$
 $(0.8m^2 + 47m^2 + 4.7m^2 - 0.6m^2) \times 1.54m = 15.9 \text{ cm}^3$

REMOVE EXISTING CULVERT
 $10m(L) \times (1.3m)W \times (\frac{0.3m}{2})D = 1.95 \text{ cm}^3$
 $\frac{21.9 \text{ cm}^3}{2} = 10.95 \text{ cm}^3$
 WDF 04-25-06

GRANULAR BACKFILL FOR STRUCTURES
 (To 0.3m over culvert)

$19m(L) \times 1.54m(W) \times 0.9m(D) = 26.3 \text{ cm}^3$ WDF
 04-25-06

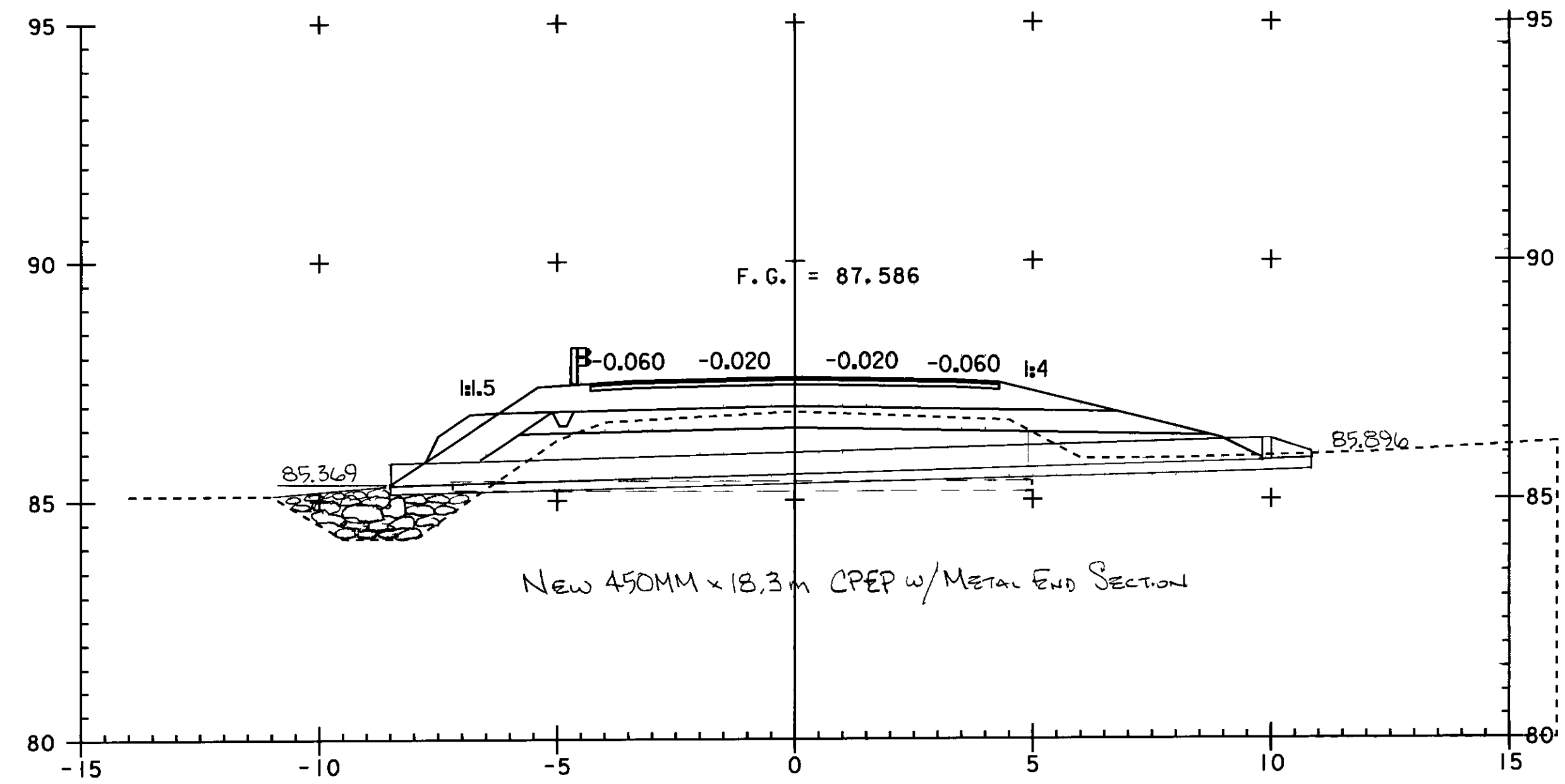
STONE FILL TYPE II @ Outlet

$(\frac{0+10}{2} \times 15) + (\frac{10+11}{2} \times 1) + (0.9 \times 0.5) + (\frac{0.9+0.9}{2} \times 1.8) = 30.6 \text{ cm}(W)$
 $30.6 \text{ cm}(W) \times 6m(L) = 184 \text{ cm}^3$
 WDF 04-26-06

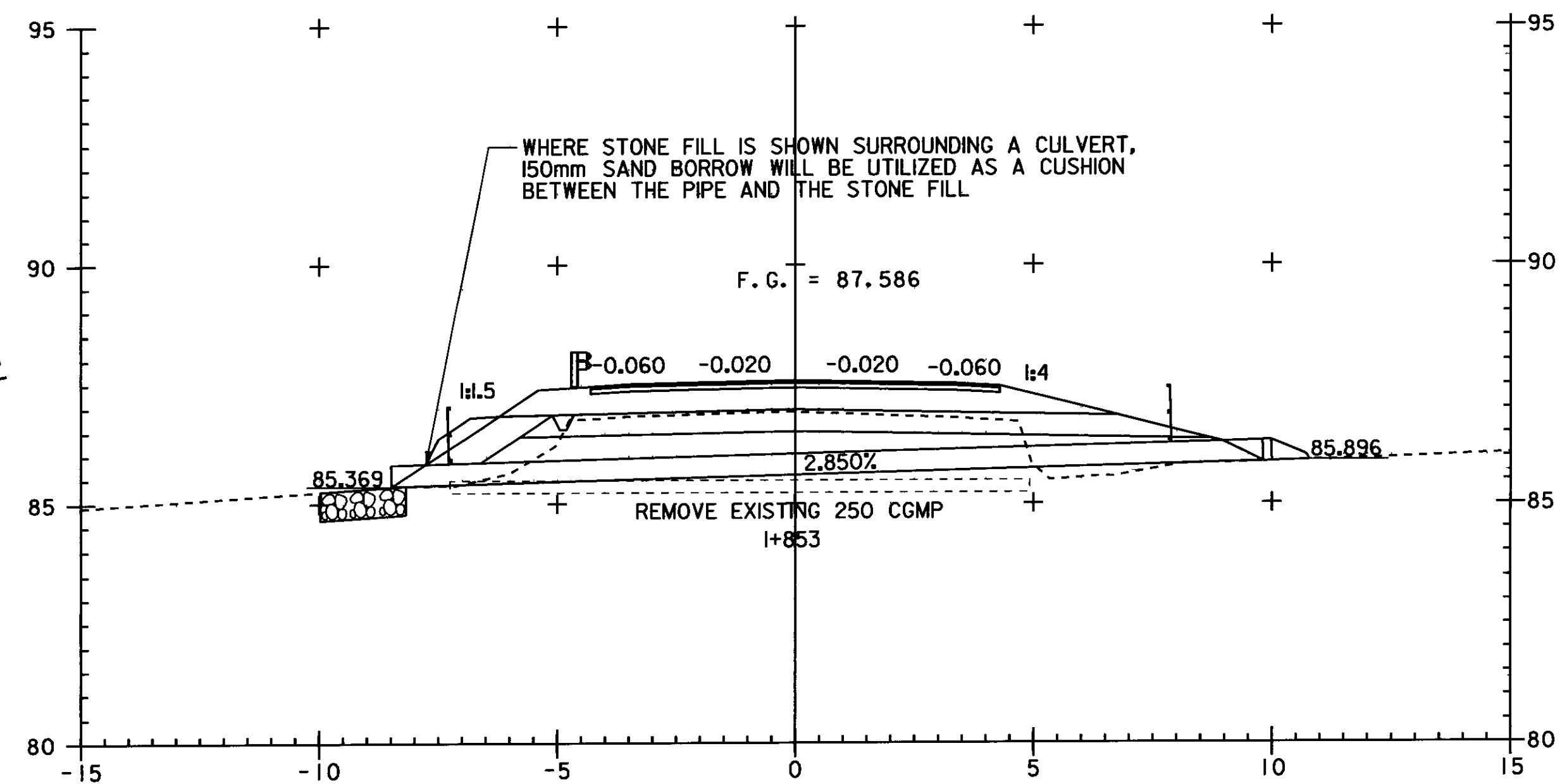
GEOTEXTILE FOR Stone Fill

$6m L \times 9m \text{ wide} = 54 \text{ m}^2$

To Bk 2, Pg 62



1+853
 ASKEW = 82° 49' 21" LT
 FIELD PROFILE



1+853
 ASKEW = 82° 49' 21" LT
 DESIGN SECTION