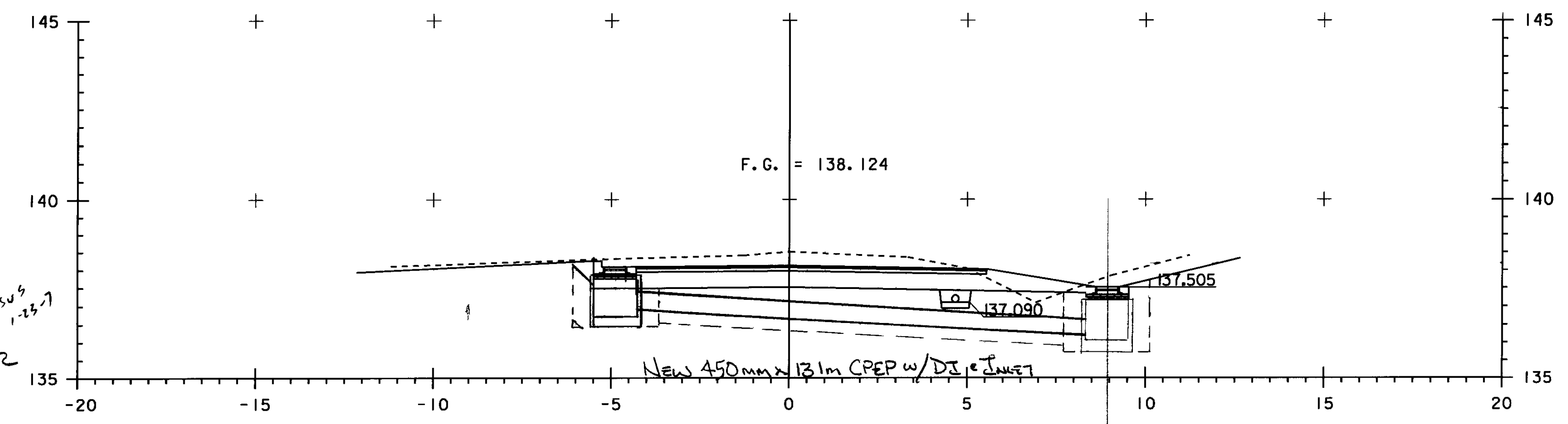


TRENCH EARTH

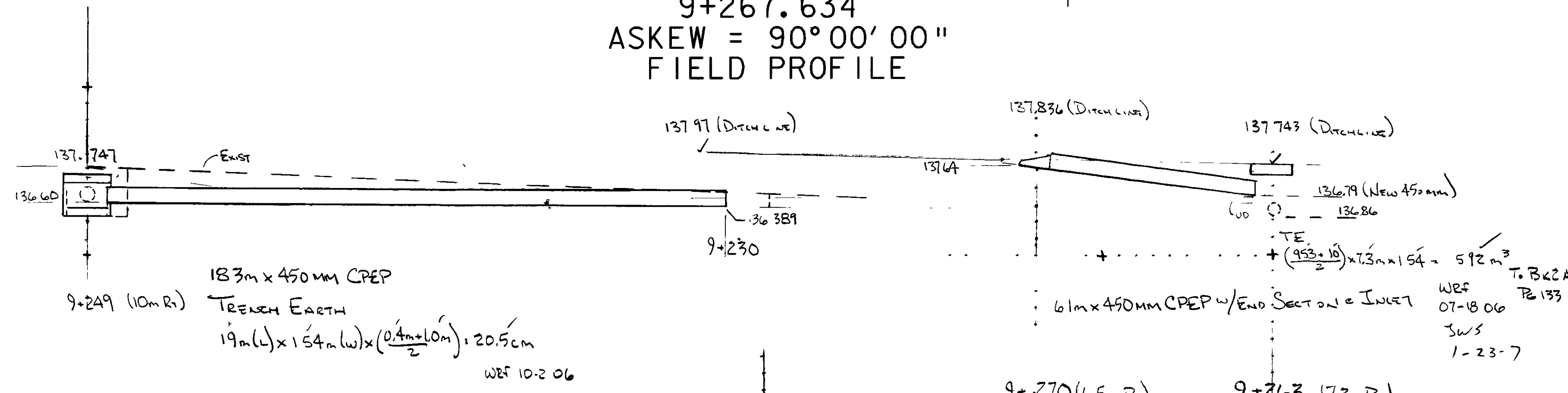
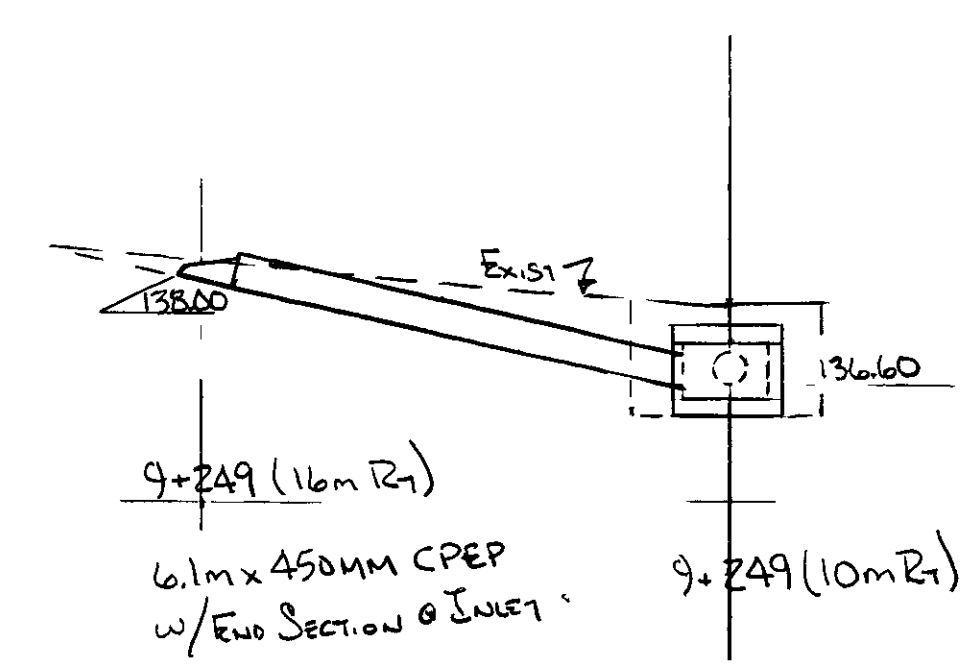
DI
 $4.5m \times 1.2m = 5.4cm$
 CONVEY
 $\left[\frac{0.9m \times 1.5}{2} \times 3.6 + \left(\frac{1.15m \times 1.45}{2} \times 7.7 \right) \right] \times 1.55 = \frac{21.2cm}{26.6cm}$

GRANULAR BACKFILL FOR STRUCTURES

DI
 $30cm \times 1.4m = 4.2cm$
 CONVEY
 $\frac{21.2cm}{25.4cm}$
 WEF 12-19-06
 To Bk 2A, Pg 132

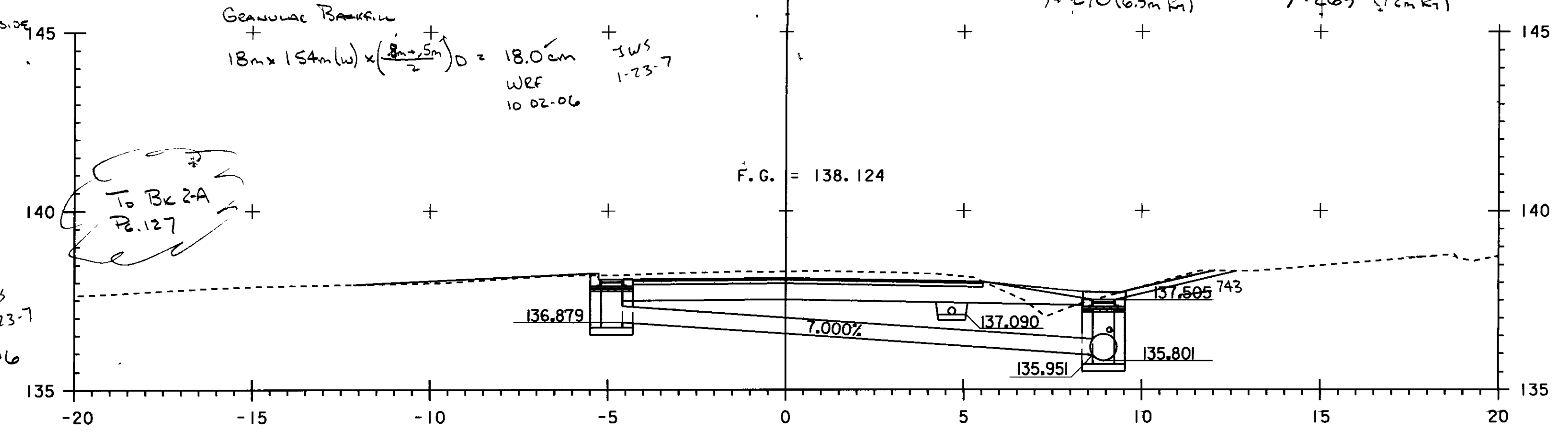


9+267.634
 ASKEW = 90°00'00"
 FIELD PROFILE



TRENCH EARTH DI (54") (1.37m) Round + 0.5m Excavation Outside
 $AREA = \frac{\pi D^2}{4} = \frac{\pi (2.37)^2}{4} = 4.415m \times 1.45m(b) = 6.4cm$
 $PPE = Bm \times 1.54m(w) \times \frac{0.5m}{2} = 6.2cm$
 WEF 10-02-06

GRANULAR BACKFILL
 DI
 $4.4m - \frac{\pi (1.37)^2}{4} = 4.4m - 1.53m = 2.95m \times 1.2m = 3.5cm$
 $PPE = 6m(l) \times 1.54m(w) \times \left(\frac{1.5m + 8m}{2} \right) = \frac{60cm}{95cm}$
 WEF 10-02-06



9+267.634
 ASKEW = 90°00'00"
 DESIGN SECTION