

Earth Moving Calculations

Existing Contours

Proposed Contours

Cut Calculation

$$C1 = 31.5\text{m}^2 \times 6.7\text{m} = 211\text{ m}^3$$
$$C2 = 157.5 \text{ m}^2 \times 6.2 \text{ m} = 977 \text{ m}^3$$
$$C3 = 400.0 \text{ m}^2 \times 5.2 \text{ m} = 2080 \text{ m}^3$$
$$C4 = 400.0 \text{ m}^2 \times 4.2 \text{ m} = 1680 \text{ m}^3$$
$$C5 = 297.5 \text{ m}^2 \times 3.2 \text{ m} = 952 \text{ m}^3$$
$$C6 = 165.0 \text{ m}^2 \times 2.2 \text{ m} = 363 \text{ m}^3$$
$$C7 = 660.0 \text{ m}^2 \times 1.9 \text{ m} = 1254 \text{ m}^3$$
$$= \underline{7517 \text{ m}^3}$$

Fill Calculation

$$F1 = 0.33 \times 1010 \text{ m}^2 \times 3.5 \text{ m} = 1167 \text{ m}^3$$
$$F2 = 0.5 (40m) \times 15m \times 2.5m = 750 \text{ m}^3$$
$$F3 = 0.5 (29m) \times 12m \times 1.5m = 261 \text{ m}^3$$
$$F_4 = 1050.0 \text{ m}^2 \times 2.5 \text{ m} = 2625 \text{ m}^3$$
$$F5 = 561.0 \text{ m}^2 \times 1.0 \text{ m} = 561 \text{ m}^3$$
$$F6 = 2200.0 \text{ m}^2 \times 1.0 \text{ m} = 2200 \text{ m}^3$$
$$= \underline{7564 \text{ m}^3}$$
