Network diagram:

- $93\ TBD$ — W_1 — 1.52 → P_1
- 1.60, 1.40
- 1.70
- $88\ TBD$ — W_2 — 1.63, 1.55
- 1.45, 1.57
- $95\ TBD$ — W_3 — 1.30 → P_3

$276\ TBD$
$= Total$

P_1 → R_1 edges: 5.15, 5.69, 6.13, 5.65, 5.80, 0

P_2 edges: 5.12, 5.47, 6.05, 6.12, 5.71, 0

P_3 edges: 5.32, 6.16, 6.25, 6.17, 5.87, 0

$R_1 = -30$
$R_2 = -57$
$R_3 = -48$
$R_4 = -91$
$R_5 = -48$
$R_6 = -2$

$W_1 = 1,\quad W_2 = 2,\quad W_3 = 3,\quad P_1 = 4,\quad P_2 = 5,\quad P_3 = 6,\quad R_1 : R_6 = A : F.$

$$Z_{min} = 1.52X_{14} + 1.60X_{15} + 1.40X_{16} + 1.70X_{24} + 1.63X_{25} + 1.55X_{26} + 1.45X_{34} + 1.57X_{35} + 1.30X_{36} + 5.15X_{4A} + 5.69X_{4B} + 6.13X_{4C} + 5.63X_{4D} + 5.80X_{4E}$$

$$+ 0X_{4F} + 5.12X_{5A} + 5.47X_{5B} + 6.05X_{5C} + 6.12X_{5D} + 5.71X_{5E} + 0X_{5F} + 5.32X_{6A} + 6.16X_{6B} + 6.25X_{6C} + 6.25X_{6C} + 6.17X_{6D} + 5.87X_{6E} + 0X_{6F}$$

S.T.,

$$X_{14} + X_{15} + X_{16} = 93$$
$$X_{24} + X_{25} + X_{26} = 88$$
$$X_{34} + X_{35} + X_{36} = 95$$

$$X_{14} + X_{24} + X_{34} = X_{4A} + X_{4B} + X_{4C} + X_{4D} + X_{4E} + X_{4F}$$
$$X_{15} + X_{25} + X_{35} = X_{5A} + X_{5B} + X_{5C} + X_{5D} + X_{5E} + X_{5F}$$
$$X_{16} + X_{26} + X_{36} = X_{6A} + X_{6B} + X_{6C} + X_{6D} + X_{6E} + X_{6F}$$

$$X_{4A} + X_{5A} + X_{6A} = 30$$
$$X_{4B} + X_{5B} + X_{6B} = 57$$
$$X_{4C} + X_{5C} + X_{6C} = 48$$
$$X_{4D} + X_{5D} + X_{6D} = 91$$
$$X_{4E} + X_{5E} + X_{6E} = 48$$
$$X_{4F} + X_{5F} + X_{6F} = 2$$