

5 Network Analysis for Alternative T

Figure 9 Network Model without Distribution System Development, Alternative T

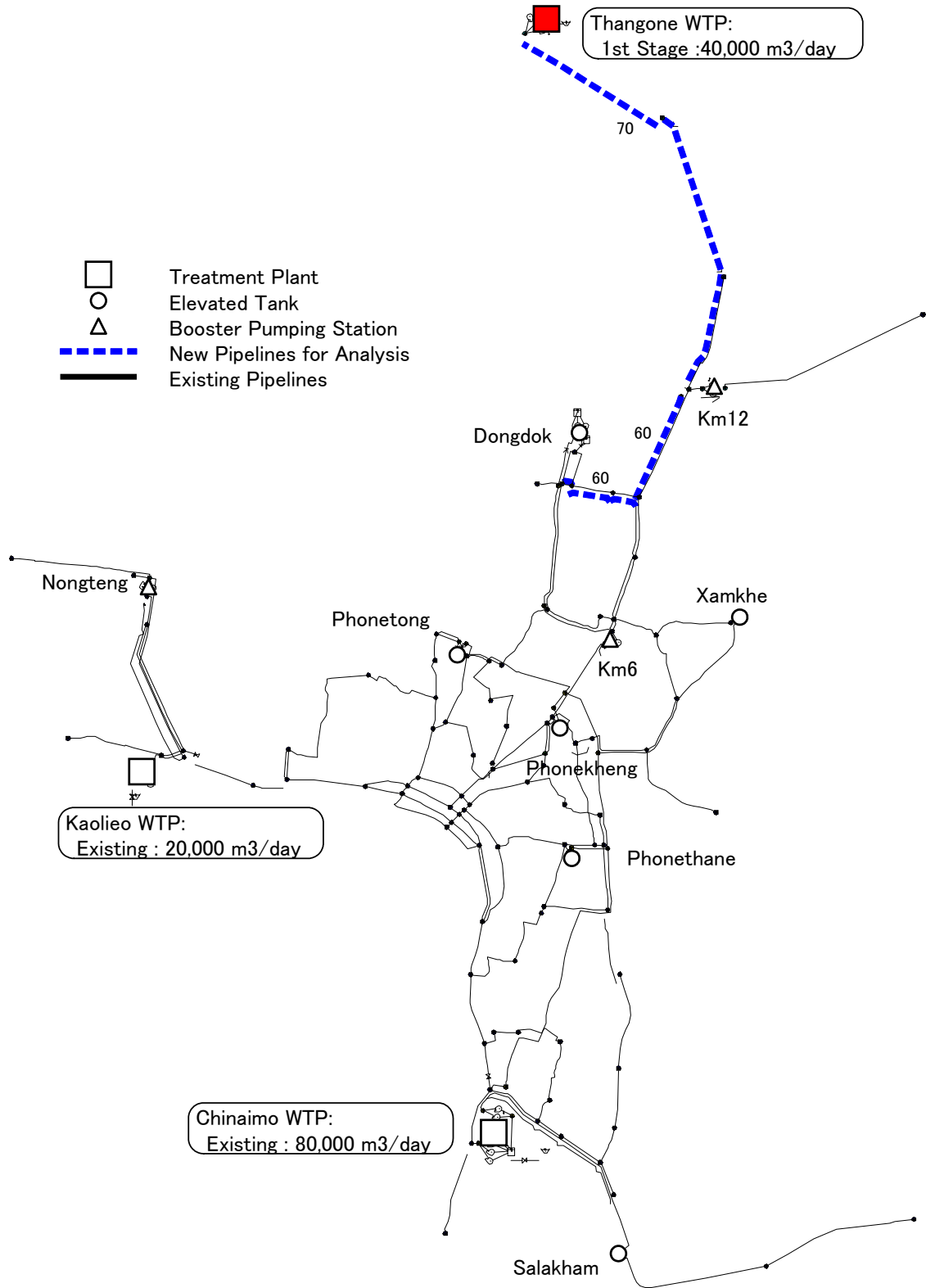


Table 7 Residual Pressure at Each Junction without Distribution System Development, Alternative C

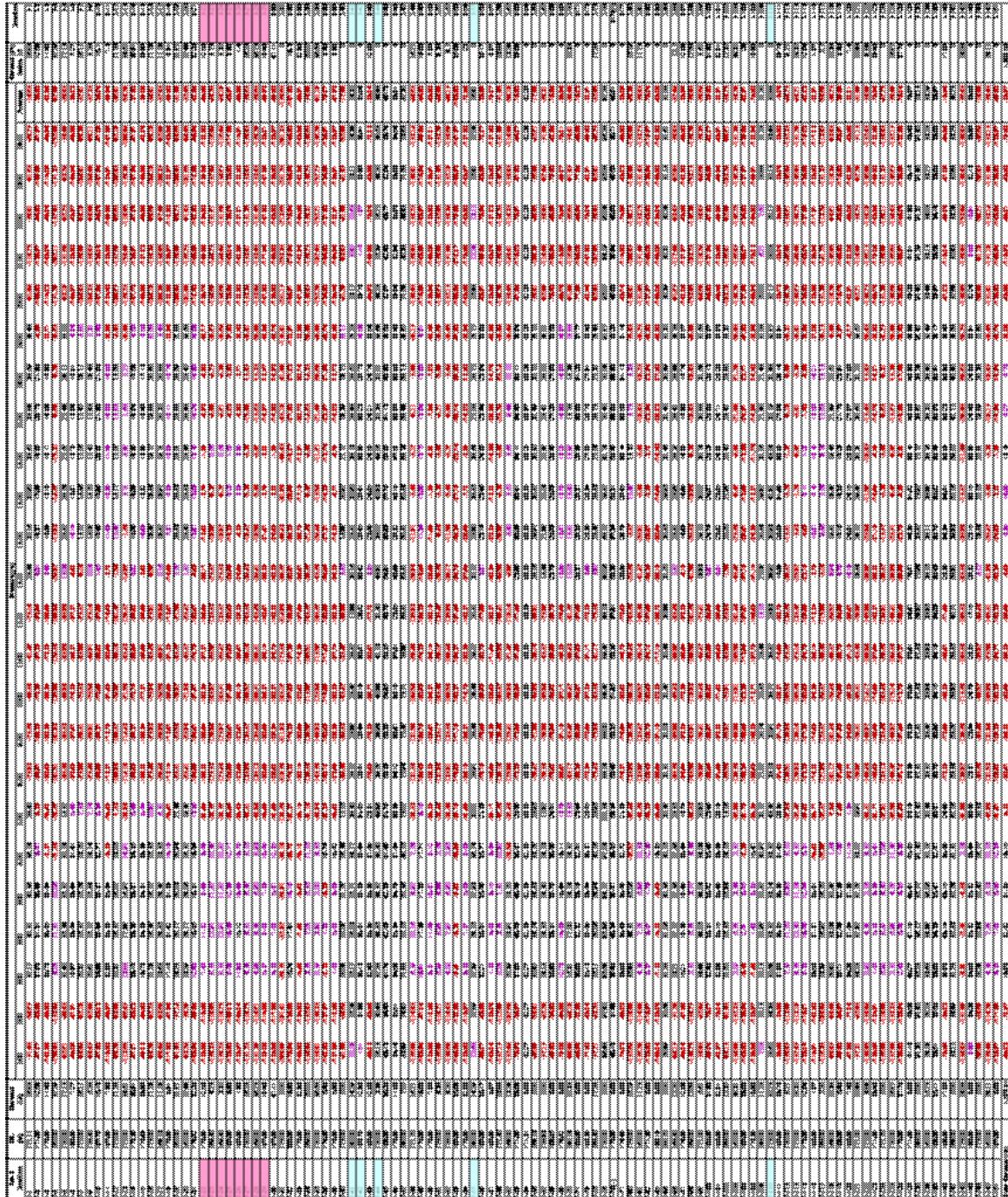


Figure 10 Residual Water Pressure Contour at 13:00 without Distribution System Development, Alternative C

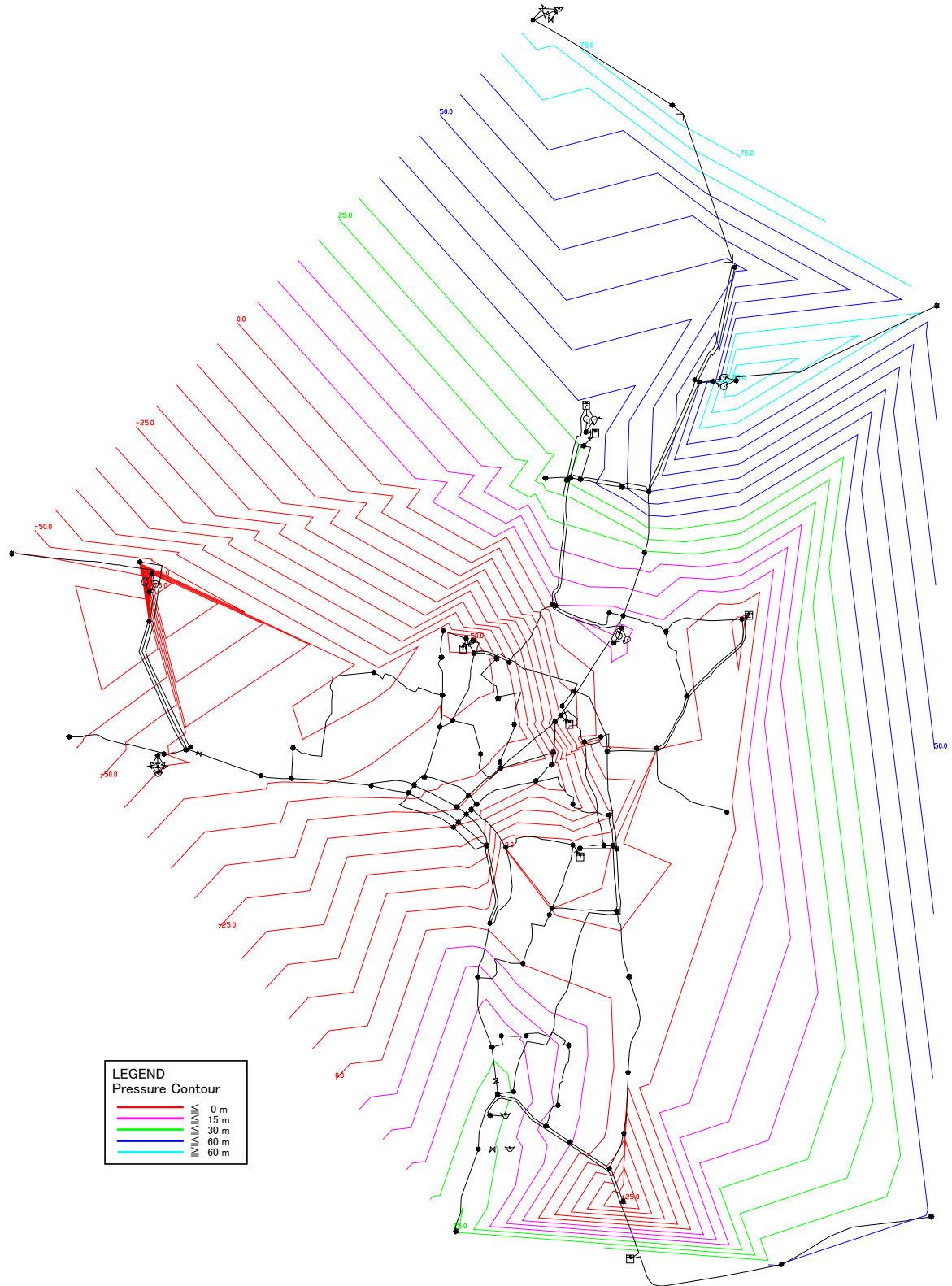


Figure 11 Clear Water Transmission and Required Distribution Trunk Mains, Alternative C

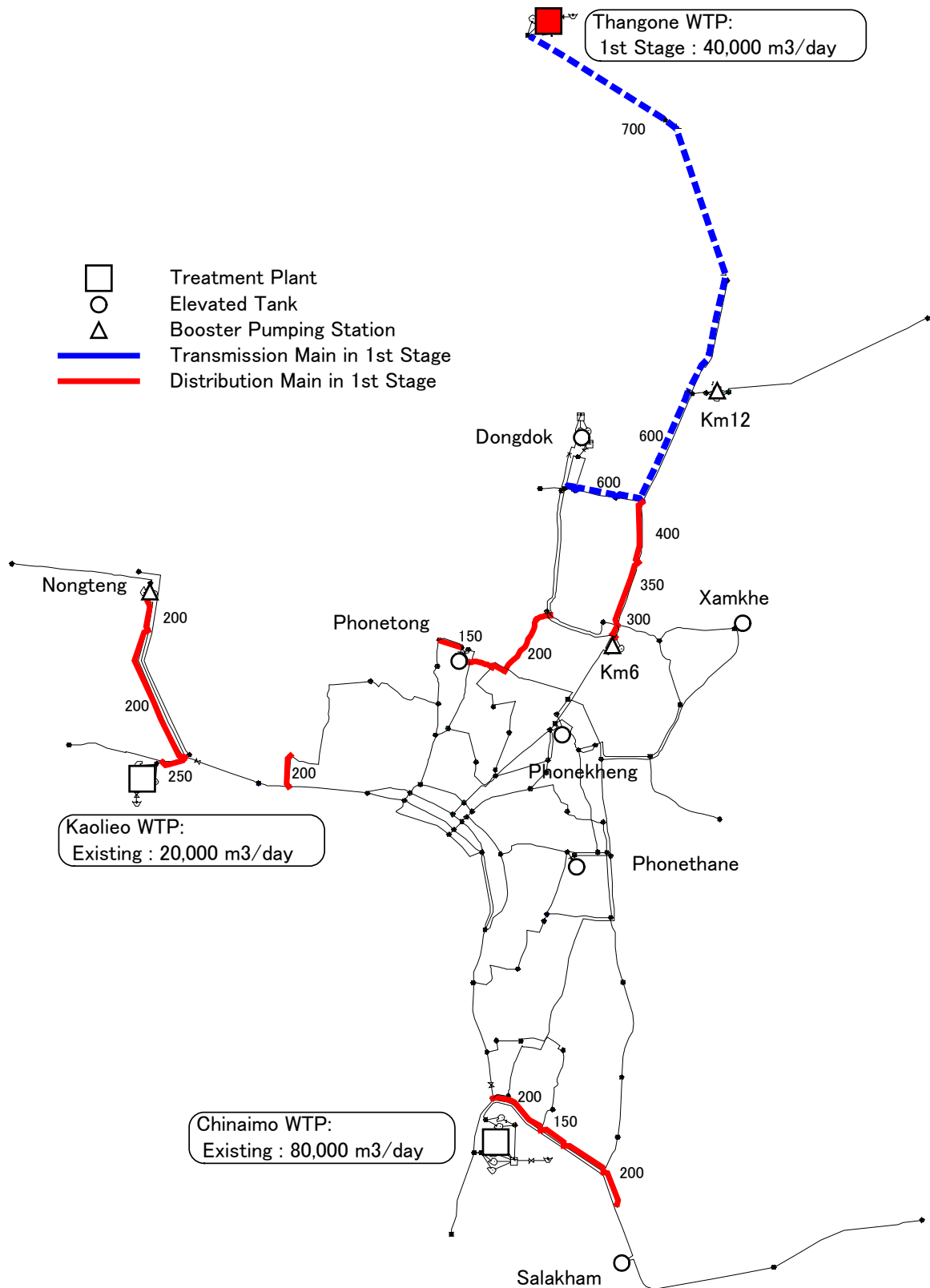


Table 8 **Residual Pressure at Each Junction with Required Distribution Trunk
Mains,
Alternative C**

The table contains a large amount of data organized into columns and rows. The columns represent different junctions or network components, and the rows represent different parameters or data points. The data is presented in a grid format, with some cells containing numerical values and others containing text or symbols. The table is divided into several sections, with the top and bottom sections having highlighted columns in pink and cyan. The middle section contains the main body of data.

Figure 12 Residual Water Pressure Contour at 13:00 with Required Distribution Trunk Mains, Alternative C

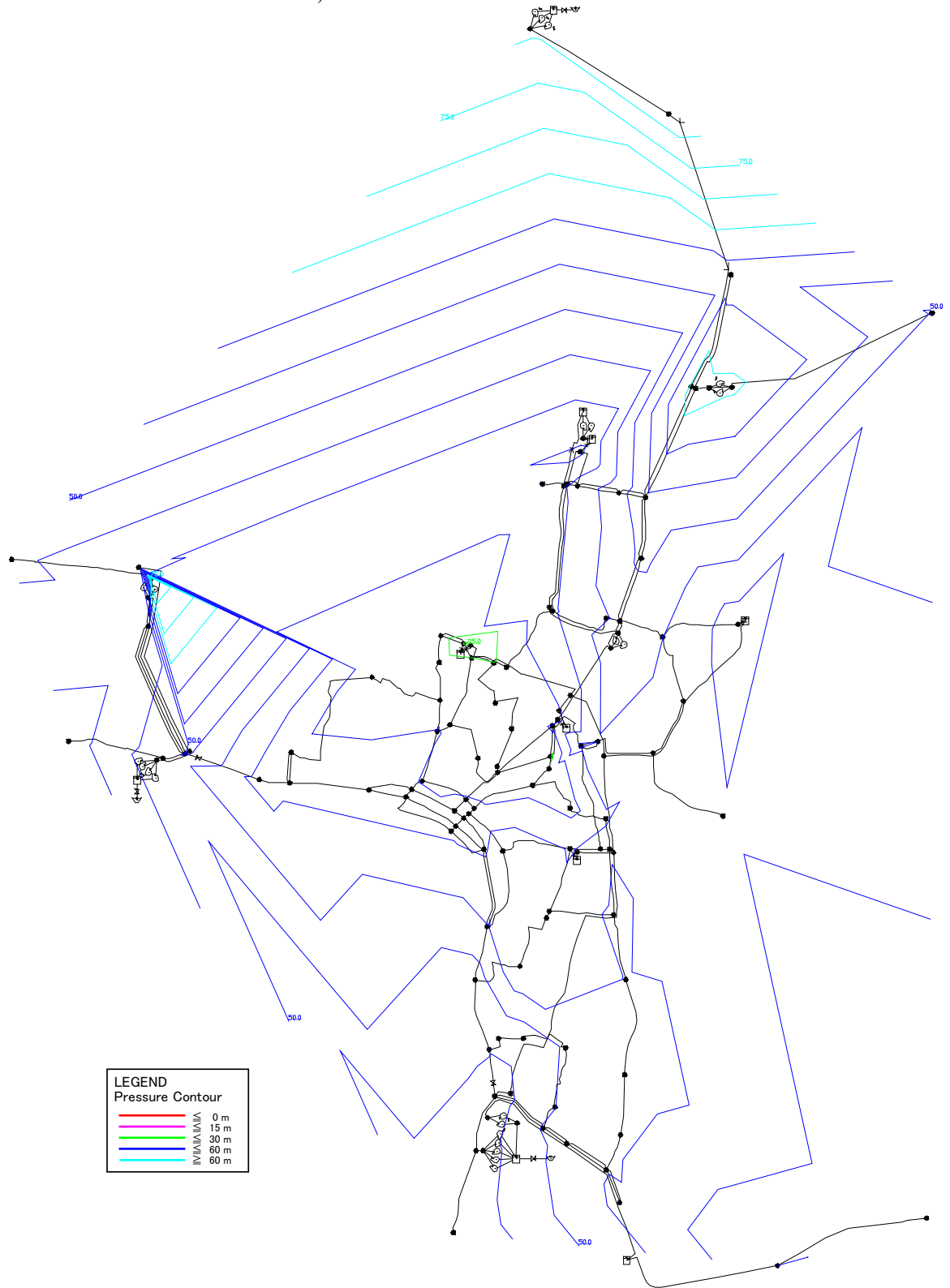


Table 9 Length and Cost for Required Distribution Trunk Mains, Alternative T

Diameter	Length	Costs	
		x 1,000 Yen	x 1,000 US\$
mm	m		
150	1,700	10,115	85
200	10,255	87,462	735
250	680	7,755	65
300	320	8,187	69
350	1,520	47,631	400
400	1,390	52,104	438
450		0	0
500		0	0
600		0	0
700		0	0
800		0	0
Total	15,865	213,255	1,792
Sub-total (150-250mm)		105,332	885
Sub-total (300-800mm)		107,922	907

6 Results of the Analysis

Costs required for the required distribution mains are added to the construction costs and total costs are compared as shown on Table and Figure below. As the results of the analysis, Alternative K is evaluated as the plan which would be the least influenced by the delay of the implementation of the distribution system improvement.

x 1,000 US\$	Alternative C	Alternative K	Alternative T
Treatment Plant	8,782	9,624	10,461
Transmission Pipelines	1,234	1,234	10,144
Improvement of Chinaimo WTP	2,433	2,433	0
Booster Pumping Station	737	737	0
Required Distribution Mains	6,829	4,936	1,792
Total	20,014	18,964	22,397

