

**PERBANDINGAN PEKERJAAN SALURAN IRIGASI PENAMPANG
TRAPESIUM *IN-SITU* DENGAN *U-FLUME IN-SITU* DARI SEGI BIAYA,
WAKTU DAN METODE PEKERJAAN**

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ABSTRAK

Dikawasan Ranjeng, pada sta RJ.35-RJ.41 terjadi perubahan desain dari bentuk penampang trapesium menjadi tipe *U-Flume*. Perubahan ini dilakukan karena keterbatasan lahan, dan terdapat beban jalan. Proses pengumpulan data untuk membandingkan dari segi waktu, biaya, dan metode pekerjaannya, dilakukan melalui metode wawancara, observasi, dan penelaahan laporan internal. Wawancara dilaksanakan dengan *site engineering manager, engineer office, quantity surveyor*, pelaksana, masyarakat terdampak, dan pekerja, guna memperoleh wawasan langsung mengenai pengalaman dalam memilih jenis saluran, termasuk tantangan yang dihadapi serta manfaat yang dirasakan. Observasi lapangan dilakukan secara langsung pada lokasi pekerjaan. Dari perhitungan rencana anggaran biaya pekerjaan saluran trapesium didapatkan Rp.198.118.354,21. dan saluran *U-Flume in-situ* Rp.195.392022,51. Estimasi tersebut merupakan pekerjaan dari sta RJ.35-RJ.41 dengan panjang 36 meter. Berdasarkan observasi langsung di lapangan, durasi pekerjaan saluran penampang *U-Flume* umumnya lebih cepat dibandingkan dengan saluran penampang trapesium. Pekerjaan saluran *U-Flume* dari segi biaya lebih rendah dibandingkan dengan saluran trapesium. Efisiensi waktu pekerjaan pada saluran *U-Flume* lebih baik karena metode pelaksanaannya hanya melalui 2 tahap. Saluran *U-Flume in-situ* lebih tepat digunakan untuk daerah yang memiliki keterbatasan lahan.

Kata Kunci : Penampang Saluran, Waktu, Biaya

**COMPARISON OF IN-SITU TRAPEZODIAL CROSS-SECTION IRRIGATION
CANAL WORK WITH IN-SITU U-FLUME IN TERMS OF COST, TIME
AND WORK METHOD**

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ABSTRACT

In the Ranjeng area, at sta RJ.29-RJ.55 there was a change in design form a trapezoidal cross section to a U-Flume type. This change was made due to land limitations and road loads. The data collection proses to compare aspects of time, cost, and work methods was conducted through interviews, observations, and reviews of internal reports. Interviews were conducted with the site engineering manager, engineering office staff, quantity surveyor, contractors, affected communities, and workers to gain direct insights into their experiences in selecting channel types, including the challenges faced and the benefits perceived. Field observations were conducted directly at the work site. The estimated cost of constructing the trapezoidal channel is Rp.198.118.354,21. The estimated cost of the in-situ U-Flume is Rp.195.392.022,51. These estimates are for work on the 36 meter section between RJ.35-RJ.41. Based on direct observations in the field, U-Flume construction generally takes less time than trapezidal channel construction. In terms of cost, the U-Flume is more economical than the trapezoidal channel. The U-Flume execution method involves only two stages, making it more time efficient. A U-Flume in-situ is more appropriate for areas with limited space.

Keywords: Canal Cross Section, Time, Cost.