

**Perencanaan Konstruksi Jalan Serta Drainase
(Studi Kasus: Jalur Lintas Selatan Pada Ruas Jalan PTP Blater Desa Curah
Nongko, Kecamatan Tempurejo, Kabupaten Jember**

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RINGKASAN

Konstruksi jalan memegang peran yang sangat penting dalam memajukan pembangunan nasional. Transportasi darat seperti jalan raya dapat mempercepat perkembangan ekonomi dan membantu dalam pembangunan nasional.. Sebuah jalan baru akan dibangun di Desa Curahnongko, Kecamatan Tempurejo, Kabupaten Jember dengan panjang 3.839 km. Studi ini mencakup tiga aspek dari perencanaan infrastruktur jalan, yaitu perencanaan geometrik, perkerasan, dan drainase. Dalam perencanaan geometrik jalan, trase jalan akan mengikuti garis lurus dan sudut tikungan akan ditentukan melalui perhitungan alinyemen horizontal dan vertikal, dengan hasil jari-jari tikungan pertama 170m dan kedua 250m serta elevasi berkisar antara -1.10% hingga 0.03%. Perekerasan akan dilakukan dengan metode binamarga 2013 dengan memperhitungkan jumlah kendaraan dan kekuatan tanah, dengan ketebalan 3cm untuk HRS WC, 3.5cm untuk HRS Base, 25cm untuk LPA Kelas A, dan 12.5cm untuk LPA Kelas B. Perencanaan drainase memperhitungkan curah hujan selama 10 tahun dan kemiringan jalan, dengan membagi dimensi saluran drainase menjadi tiga jenis, saluran pertama memiliki dimensi B=1.2m, H=0.8m, dan R=0.3m, saluran kedua B=0.6m, H=0.4m, dan R=0.2m, dan saluran ketiga B=1.8m, H=1m, dan R=0.5m.

Kata Kunci : *Konstruksi Jalan, Perencanaan, Drainase*

**Planning of South Cross-Route Road Construction and Drainage
(Case Study: PTP Blater Road, Curah Nongko Village, Tempurejo District,
Jember Regency)**

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ABSTRACT

Construction of roads plays a crucial role in advancing national development. Ground transportation, such as highways, can speed up economic growth and assist in national development. In road planning, geometric planning is a very important aspect as it focuses on the physical shape of the road that is appropriate for its function. A new road is to be built in Curahnongko Village, Tempurejo Sub-district, Jember Regency with a length of 3.839 km. However, the hilly and rocky terrain creates some challenges in planning. This study encompasses three aspects of road infrastructure planning, which are geometric planning, pavement, and drainage. In geometric road planning, the road alignment will follow a straight line and the curvature of turns will be determined through the calculation of horizontal and vertical alignments, resulting in a first curve radius of 170m and second curve radius of 250m with elevations ranging from -1.10% to 0.03%. Pavement will be done using the binamarga 2013 method considering the number of vehicles and soil strength, with a thickness of 3 cm for HRS WC, 3.5 cm for HRS Base, 25 cm for A-Class LPA, and 12.5 cm for B-Class LPA. Drainage planning takes into account rainfall during 10 years and the slope of the road, dividing the dimensions of drainage channels into three types. The first channel has dimensions $B=1.2\text{m}$, $H=0.8\text{m}$, and $R=0.3\text{m}$. The second channel has dimensions $B=0.6\text{m}$, $H=0.4\text{m}$, and $R=0.2\text{m}$. The third channel has dimensions $B=1.8\text{m}$, $H=1\text{m}$, and $R=0.5\text{m}$

Keywords : Road Construction, Planning, Drainage