

**PERANCANGAN GEOMETRIK DAN TEBAL PERKERASAN KAKU
JALAN SP.1 SUMBER HIDUP – KAYU LABU
KECAMATAN PEDAMARAN TIMUR
KABUPATEN OGAN KOMERING ILIR
PROVINSI SUMATERA SELATAN**

ABSTRAK

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Jalan merupakan sarana transportasi yang berperan penting dalam mendukung mobilitas masyarakat dan perkembangan wilayah. Oleh karena itu, dilakukan perancangan geometrik dan tebal perkerasan kaku pada ruas Jalan SP.1 Sumber Hidup – Kayu Labu Kecamatan Pedamaran Timur Kabupaten Ogan Komering Ilir guna meningkatkan aksesibilitas dan konektivitas daerah. Perencanaan dilakukan berdasarkan pedoman geometrik jalan, perkerasan kaku, serta drainase jalan yang berlaku. Hasil perencanaan menghasilkan trase jalan sepanjang $\pm 8,122$ km dengan alinyemen horizontal dan vertikal yang memenuhi persyaratan teknis. Struktur perkerasan kaku dirancang mampu menahan beban lalu lintas selama umur rencana, sedangkan saluran drainase dan box culvert direncanakan untuk mengalirkan debit air rencana dan melindungi badan jalan dari kerusakan akibat genangan. Berdasarkan hasil perhitungan Rencana Anggaran Biaya (RAB), diperoleh total biaya konstruksi sebesar Rp124.957.025.334,00 (**Seratus dua puluh empat miliar sembilan ratus lima puluh tujuh juta dua puluh lima ribu tiga ratus tiga puluh empat rupiah**). Selain itu, penyusunan Kurva S dan Network Planning (CPM) digunakan sebagai dasar pengendalian waktu pelaksanaan proyek.

Kata Kunci: Geometrik Jalan, Perkerasan Kaku, Drainase, Box Culvert, RAB.

**GEOMETRIC DESIGN AND THICKNESS OF RIGID PAVEMENT FOR
ROAD SP.1 SUMBER HIDUP – KAYU LAPU
EAST PEDAMARAN DISTRICT
OGAN KOMERING ILIR REGENCY
SOUTH SUMATRA PROVINCE**

ABSTRACT

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*Roads are a vital means of transportation, supporting community mobility and regional development. Therefore, geometric design and rigid pavement thickness were carried out on the SP.1 Sumber Hidup – Kayu Labu road section in Pedamaran Timur District, Ogan Komering Ilir Regency, to improve regional accessibility and connectivity. The planning was conducted based on applicable road geometric, rigid pavement, and drainage guidelines. The resulting design resulted in a road route of approximately 8.122 km, with horizontal and vertical alignments that meet technical requirements. The rigid pavement structure was designed to withstand traffic loads throughout the design life, while drainage channels and box culverts were designed to channel the planned water flow and protect the roadway from damage due to flooding. Based on the Cost Budget Plan (RAB) calculations, the total construction cost was Rp124,957,025,334.00. **(One hundred twenty-four billion nine hundred fifty-seven million twenty-five thousand three hundred thirty-four rupiah)**. Furthermore, S-Curve and Network Planning (CPM) were used to control the project's implementation time.*

Keywords: *Road Geometric, Rigid Pavement, Drainage, Box Culvert, RAB.*