

**PERENCANAAN GEOMETRIK DAN TEBAL PERKERASAN KAKU
RUAS JALAN SIDOMULYO – TALANG JAYA STA 0+000 – 7+114
KABUPATEN OGAN KOMERING ILIR
PROVINSI SUMATERA SELATAN**

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ABSTRAK

Skripsi ini membahas perencanaan geometrik jalan dan tebal perkerasan kaku (*Rigid Pavement*) pada ruas Jalan Sidomulyo – Talang Jaya sepanjang 7.109,02 meter di Kabupaten Ogan Komering Ilir, Provinsi Sumatera Selatan. Berdasarkan kemiringan medan sebesar 0,679%, jalan ini dikategorikan sebagai jalan dengan kondisi medan datar. Perencanaan alinyemen horizontal terdiri dari lima tikungan, yaitu dua tikungan Full Circle (FC) dan tiga tikungan Spiral-Circle-Spiral (SCS). Untuk alinyemen vertikal direncanakan sembilan lengkung, meliputi tiga lengkung cekung dan enam lengkung cembung. Volume pekerjaan galian tanah sebesar 183.519,98 m³, sedangkan volume timbunan tanah sebesar 96.818,71 m³. Jenis perkerasan yang digunakan adalah beton bersambung tanpa tulangan (*Jointed Plain Concrete Pavement*) dengan mutu beton $f_s' 4,5$ MPa. Struktur perkerasan terdiri dari pelat beton 27 cm, lean mix concrete 10 cm, agregat kelas A 15 cm, dan timbunan pilihan 20 cm. Rencana Anggaran Biaya (RAB) disusun berdasarkan perhitungan kuantitas dan AHSP Bina Marga 2025 dengan total biaya sebesar Rp130.693.361.931,00. Waktu pelaksanaan proyek direncanakan selama 288 hari kerja.

Kata kunci: Geometrik Jalan, Perkerasan Kaku, RAB

**GEOMETRIC DESIGN AND RIGID PAVEMENT THICKNESS ROAD
SECTION SIDOMULYO-TALANG JAYA STA 0+000-7+114
OGAN KOMERING ILIR DISTRICT
SOUTH SUMATRA PROVINCE**

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ABSTRACT

This thesis discusses the geometric design of the road and the thickness of the rigid pavement on the Sidomulyo – Talang Jaya road section, which is 7,109.02 meters long, located in Ogan Komering Ilir District, South Sumatra Province. Based on a terrain slope of 0.679%, this road is classified as a road with flat terrain conditions. Horizontal alignment planning consists of five curves, including two Full Circle (FC) curves and three Spiral-Circle-Spiral (SCS) curves. For the vertical alignment, nine curves are planned, including three concave curves and six convex curves. The volume of earth excavation work is 183.519,98 m³, while the volume of earth fill is 96.818,71 m³. The type of pavement used is jointed plain concrete pavement (JPCP) without reinforcement, with concrete strength f_c 4.5 MPa. The pavement structure consists of a 27 cm concrete slab, a 10 cm lean mix concrete layer, a 15 cm Class A aggregate layer, and a 20 cm selected fill layer. Detailed Cost Estimate was prepared based on quantity calculations and the 2025 Bina Marga AHSP, with a total cost of IDR 130.693.361.931,00. The project is scheduled to be completed within 288 working days.

Keywords: *Road Geometry, Rigid Pavement, Detailed Cost Estimate*