

Project Description

Project Name: PAV. RÍGIDA Owner: PMRQ Zip Code:
 Designer's Name: VINICIUS FELLER Route: RIO KNAUL
 Project Description: PROJETO DE PAVIMENTAÇÃO RÍGIDA NO DA SUBIDA DO RIO KNAUL EM RANCHO QUEIMADO

Design Summary

	Doweled	Undoweled		Doweled	Undoweled
Recommended Design Thickness:	175.00 mm	175.00 mm	Maximum Joint Spacing:	2.91 m	2.91 m
Calculated Minimum Thickness:	172.72 mm	172.72 mm			

Pavement Structure

SUBBASE

Calculated Composite K-Value of Substructure: 133.4 MPa/m

Layer Type	Resilient Modulus	Layer Thickness
JOINTED PLAIN CONCRETE SURFACE		
Granular Base	172 MPa	150 mm
SUBGRADE		

CONCRETE

Compressive Strength: 40 MPa Edge Support: No
 Modulus of Elasticity: 27500 MPa Macrobuffers in Concrete: No
 Calculated Flexural Strength: 5 MPa

SUBGRADE

CBR: 11 %
 Calculated MRSG Value 69 MPa

Project Level

TRAFFIC

Spectrum Type: Minor Arterial
 Design Life: 20 years

USER DEFINED TRAFFIC

Trucks Per Day: 150
 Traffic Growth Rate %: 3 % per year
 Directional Distribution: 50 %
 Design Lane Distribution: 100 %

GLOBAL

Reliability: 95 %
 % Slabs Cracked at End of Design Life: 5 %

Avg Trucks/Day in Design Lane Over the Design Life: 101
 Total Trucks in Design Lane Over the Design Life: 736 080

Design Method

The PCA design methodology from StreetPave, was used to produce these results.