Fundamentals of Road Construction

Lecturer :   **Marcin Bilski, BEng, PhD**

Division of Road Engineering
Institute of Civil Engineering
room 324B (building A2)
room K4 (hall A4)
marcin.bilski@put.poznan.pl
bilski.put.poznan.pl

Project 3

The subject of the project:

Horizontal alignment

List of the points in the project

2. Geometric elements of the horizontal alignment

2.1. Coordinates of vertex points of horizontal alignment of the design road

2.2. Distance between vertex points

2.3. Deflection angle of horizontal alignment of the design road

2.4. Tortuosity of section of the design road

2.5. Adopting the parameters of horizontal curves

	Adopting $R^{(1)}$ [m]	i_o [%]	scheme of the road transverse slope
W1	250	4,0	one way slope
W2	320	3,5	one way slope
W3	380	3,0	one way slope
W4	200	5,0	one way slope

The adoption of horizontal curve radius based on regulation of the Minister of Transport and Maritime Economy (consolidated text, Journal of Laws of 2016, item 124, as amended) - in short JoL16

2.6. Checking the requirements for the assumed radius of horizontal curves

2.7. Calculation of basic elements of a horizontal curve
2.8. Determination of the clothoid a-parameter
2.9. Determination of characteristic values of a colloidal transition curve
2.10. Coordinates for staking out the transition curve

3. Mileage of the horizontal alignment

THANK YOU FOR YOUR ATTENTION