CONCEPT DESIGN FOR GROCHOWSKA STREET IN WARSAW – COMPETITION ETSC

SZCZECIN UNIVERSITY OF TECHNOLOGY

FACULTIES: CIVIL ENGINEERING AND ARCHITECTURE

Bernadetta Warezak

Piotr Aleksiun

Marcin Kotowicz

Damian Krasnianski

SZCZECIN 2006

DESCRIPTION

1.1. SUBJECT MATTER

The subject master is a preliminary concept design for Grochowska street in Warsaw near the intersection with Minska street.

1.2. SUBJECT AREA

We want to present you our design which ensures safety for all road users, especially safety of pedestrians and cyclists.

Our design consists of the following:

a) description,

b) drawings :

1) location plan / site plan in scale 1:500;

2) traffic regulation plan in scale 1:500;

3) cross – section in scale 1:100 (details in scale 1:50);

c) visualization of our design for a Grochowska street.

1.3. ANALYSIS OF PRESENT SITUATION PLAN

At the moment present Grochowska street hale two separate roads for both directions. Each road consists of two roadways, every roadway is 3.5 m wide. On the analysed length of Grochowska Street, this street has road class "G" – the main road in the road, communication net.

Along Grochowska street there is situated separate tramway in the middle of the cross – section.

The present sidewalk has variable width. There is a place where the sidewalk has only 2 m width, because of stairs which lead to the adjoining buildings.

1.4. ANALYSIS OF PRESENT TRAFFIC SAFETY

Grochowska street is one of the most important road in Warsaw; it connects two big districts Praga and Grochów.

The cross – section and geometry of traffic track makes it possible to drive with prohibited speed.

High speed of cars is also possible, because of the turning lane to housing estates and the merging and acceleration lanes near the intersection of Grochowska street with Minska street. Therefore, possible traffic accidents may have very dangerous effect on pedestrians.

Additionally, the location of pedestrian crossing on Grochowska street influences negatively on the safety of traffic.

The sidewalk near the pedestrian crossing is only 2 m wide and is also limited by the stairs which lead to the adjoining buildings. Also, there is a problem for the people driving from Zamoyski street, who can misunderstand the situation on the road and in the road area, especially at bad weather and at dusk. The bigger danger of this situation is the possibility to knock down a pedestrian.

1.5. DESCRIPTION OF OUR SOLUTION

The main concept of the project are as follows[1]:

- to change the traffic lane width from 3,5 m to 3,0 m,
- to break down the traffic track due to the geometry of the centre line,
- to eliminate the merging lanes on the local road,
- to change the location of pedestrian crossing,
- to widen the sidewalk in the neighbourhood of new pedestrian crossing,
- to design the safety place for pedestrians between tram track and the two-lane roadway,
- to apply color paint to pedestrian crossing.

1.6. FINNAL / ENDING COMMENT / SUMMARY

Because of the very good bituminous pavement and the will to limit the cost of rebuilding Grochowska street, we concentrated on the most dangerous places.

The main target of our design is to ensure safety for pedestrians and to make this design being real to built in our Polish economic situation.

We didn't have all the needed city plans to connect our design section of Grochowska street to the existing conditions. We expect to connect our design by using road signs.

1.7. LITERATURE

1. **Rozporzadzenie Ministra Transportu i Gospodarki Morskiej z dnia 2 marca 1999 r. „w sprawie warunków technicznych jakim powinny odpowiadac drogi publiczne i ich usytuowanie", Dziennik Ustaw nr 43, poz. 430, Warszawa 1999.**
2. **Komentarz do warunków technicznych jakim powinny odpowiadac drogi publiczne i ich usytuowanie cz. II, GDDKiA, Warszawa 2002.**

Contact:

Bernadetta Warezak

tel. 0 602 662 529

e - mail: bernadetta_warezak@op.pl