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ICS 93.080
CCS P 66

JTGTD

JTGTD 21-2014

Guidelines for Design of Highway Grade-separated Intersections

公路立体交叉设计细则

(English Translation)

Issued on: August 29, 2014 **Implemented on: November 1, 2014**

Issued by: Ministry of Transport

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1 Foreword

JTGTD 21-2014 was issued by Ministry of Transport on 29 August 2014 and has been in force since 1 November 2014.

According to the requirements of the Notice on issuing the 2009 Preparation and revision project plan of highway engineering standards (TINGGONGLUZI [2009] No.190) issued by the Ministry of Transport, China Highway Engineering Consulting Corporation is responsible for the preparation of the Guidelines for design of highway grade-separated intersections.

Highway grade-separated intersection is an important specialty of highway survey and design. These guidelines are formulated with a view to improve the technical standard system of highway engineering, standardize the design of highway grade-separated intersections and meet the needs for development of highway construction in China.

These guidelines are developed under the basic principles of "based on the domestic status quo, focus on key issues, reflection of the contemporary level and integration of modern concepts", taking operational safety as the main line, and showing the various considerations. Through absorbing the latest research results and design technologies of highway grade-separated intersections at home and abroad, a technical standard system of highway grade-separated intersections is established, ranging from control elements, overall design, scheme design, and geometric design to the design of renovated and expanded engineering.

These guidelines consist of the following 14 clauses: 1 General provisions; 2 Terms; 3 Function and classification; 4. Control elements; 5 Overall design; 6 Interchange form; 7 Ramp cross-section; 8 Horizontal and vertical ramp alignment; 9 Ramp superelevation and widening; 10 Connection; 11 Ramp terminal at-grade intersection; 12 Access to other facilities; 13 Grade separation and overpass bridge; 14 Reconstruction and expansion of interchanges.

In these guidelines, Clauses 1, 2, 3, 5 and 6 were drafted by Liu Zijian, Clause 4 by Zhou Ronggui, Clause 7 by Du Boying and Yu Yonghua, Clause 8 by Gao Hong, Clause 9 by Fang Jing, Clause 10 by Wang Bao, Clause 11 by Yang Shaowei, Clause 12 by Yang Shaowei and Shen Shunliu, Clause13 by Hu Sheng, and Clause 14 by Wang Xiaozhong.

2 Scope Preview

This Standard applies to roads and highways text fork perspective and have other access needs of new facilities and renovation and expansion project design.

JTGTD 21-2014 falls under ICS 93.080, in the field of civil engineering.

This catalogue holds 7 other JTGTD standards in that field.

In this catalogue, JTGTD standards carry edition years from 2004 to 2017.

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3 About this standard

Issued by: Ministry of Transport

English translation: about 93 pages

Chinese original: about 140,164 characters

4 Related standards

Standards on related subjects:

GB/T 23827-2021 - Road traffic sign plate and support

CJJ/T 135-2009 - Technical specification for pervious cement concrete pavement

5 Classification and status

International classification (ICS): 93.080

Chinese Standard Classification (CCS): P 66

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