

1987 Fiscal Year Final Research Report Summary

Study on the Actual Condition Research and Serviceability Evaluation of Existing Bridges

Research Project

Project/Area Number

60550316

Research Category

Grant-in-Aid for General Scientific Research (C)

Allocation Type

Single-year Grants

Research Field

土木構造

Research Institution

KANAZAWA UNIVERSITY

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Bridge test / Serviceability / Maintenance / 点検診断 / 維持管理 / 耐荷性診断

Research Abstract

In this study, concepts of the serviceability evaluation of an existing bridge were investigated. And the evaluation method of the load resistance capacity of an existing bridge which was one of the significant indices of the serviceability evaluation was investigated. This study consists of three main parts as followings.

- (1) Firstly, the literature research on the serviceability evaluation of existing bridges was made, and the fundamental concepts of the serviceability evaluation were established. Those concepts contain the life cycle and life time evaluation of existing bridges.
- (2) Secondly, the method of testing an existing bridge for evaluating the serviceability and the procedure of analyzing the results of the test were investigated. Some examples about existing bridges of the test such as the static and dynamic loading tests and the out-looking investigations, were shown.

Throughout this study, the evaluation of the load resistance capacity was deeply investigated as one of the significant indices, and new graphical judge procedure of the load resistance capacity of an existing bridge was proposed as a result.

(3) Finally, desired further studies were listed such as the global serviceability evaluation and the local one. And a sample flow chart of the serviceability evaluation process of existing bridges was presented.

Research Products (8 results)

All	Other
All	Publications (8 results)

- [Publications] 小堀為雄,城戸隆良,近田康夫,本田秀行: 橋梁と基礎. 19. 35-40 (1985) ▼
- [Publications] 小堀為雄,近田康夫,城戸隆良,浅井豊弘: 金沢大学工学部紀要. 18. 1-9 (1985) ▼
- [Publications] 小堀為雄,城戸隆良,近田康夫: 金沢大学工学部紀要. 19. 83-91 (1986) ▼
- [Publications] 小堀為雄,城戸隆良,近田康夫: 金沢大学工学部紀要. 20. 103-110 (1987) ▼
- [Publications] Tameo KOBORI: "Case Study on the Bridge Test of a RC Cantilever Bridge" The Bridge and Foundation Engineering. 19. 35-40 (1985) ▼
- [Publications] Tameo KOBORI: "Dynamic Response of the Isotropic Slab Bridge under Traffic Jam" Memoirs of the Faculty of Technology , Kanazawa University. 18. 1-9 (1985) ▼
- [Publications] Tameo KOBORI: "Study on the Integrity Evaluation of Existing Bridges" Memoirs of the Faculty of Technology , Kanazawa University. 19. 83-91 (1986) ▼
- [Publications] Tameo KOBORI: "Dynamic Response Investigations of Girder Bridges under Actual Traffic Flow" Memoirs of the Faculty of Technology , Kanazawa University. 20. 103-110 (1987) ▼

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