Technical Report Documentation Page

1. Report No. FHWA-HI-99-007	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle ROCK SLOPES REFERENCE MANUAL		5. Report Date October 1998 6. Performing Organization Code
7. Author(s) Principal Investigator - George Munfakh* Authors- Duncan Wyllie ▲ and Chris W. Mah ▲		8. Performing Organization Report No.
9. Performing Organization Name and Address * Parsons Brinckerhoff Quade & Douglas, Inc. One Penn Plaza, New York, NY 10119 In association with: ▲ Golder Associates, Inc. 4104-148th, Avenue NE, Redmond, WA 98052		10. Work Unit No. (TRAIS) 11. Contract or Grant No. DTFH61-94-C-00104
12. Sponsoring Agency Name and Address National Highway Institute U.S. Department of Transportation Federal Highway Administration Washington, D.C.		13. Type of Report and Period Covered 14. Sponsoring Agency Code

15. Supplementary Notes

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16. Abstract

This manual describes procedures for the design, excavation and stabilization of rock cuts, with particular application to highway project. The main topics covered are geotechnical data collection, design methods and construction procedures. The geotechnical data includes structural geology and the use of stereonets, the shear and compressive strength of rock and ground water pressures in slopes. The slope designs concentrate on the limit equilibrium methods and demonstrate specific procedures for planar, wedge, circular and toppling instability. The designs include the influence of geology, rock strength and ground water on stability as well as the incorporation of stabilization methods such as rock bolting and drainage. Construction procedures discussed include blasting and stabilization methods. Blasting covers production, final wall and damage control, while stabilization methods cover rock reinforcement, rock removal and rock fall protection.

17. Key Words structural geology stereonets shear strength ground water rock reinforcement topping failure limit equilibrium analysis plane failure wedge failure circular failure blasting rock fall protection		18. Distribution Statement No restrictions.

19. Security Classif. (of this report)	20. Security Classif. (of this page)	21. No. of Pages	22. Price
UNCLASSIFIED	UNCLASSIFIED	393	

Form DOT F 1700.7(8-72) Reproduction of completed page authorized

MODULE 5
ROCK SLOPES

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