

**GEOTECHNICAL ENGINEERING EXPLORATION
INTERSTATE ROUTE H-1 AND H-201
DESTINATION SIGN UPGRADE/REPLACEMENT, PHASE 3
FEDERAL-AID PROJECT NO. NH-0300(144)
ISLAND OF OAHU, HAWAII
W.O. 7341-00 FEBRUARY 3, 2022**

TABLE OF CONTENTS

	Page
SUMMARY OF FINDINGS AND RECOMMENDATIONS.....	iii
1. GENERAL	1
1.1 Introduction	1
1.2 Project Considerations.....	1
1.3 Purpose and Scope	2
2. SITE CHARACTERIZATION.....	4
2.1 Regional Geology	4
2.2 Existing Site Conditions	5
2.2.1 Sign H1EBR-253 Site.....	5
2.2.2 Sign H1WB-421 Site	5
2.2.3 Sign H1EB-305 Site	5
2.2.4 Sign 78WB-853 Site	5
2.2.5 Sign H2NBR-722 Site.....	6
2.2.6 Sign H1EB-104 Site	6
2.3 Subsurface Conditions.....	6
2.3.1 Sign H1EBR-253 Site.....	6
2.3.2 Sign H1WB-421 Site	7
2.3.3 Sign H1EB-305 Site	7
2.3.4 Sign 78WB-853 Site	8
2.3.5 Sign H2NBR-722 Site.....	9
2.3.6 Sign H1EB-104 Site	9
3. DISCUSSION AND RECOMMENDATIONS	11
3.1 Drilled Shaft Foundations.....	11
3.1.1 Lateral Load Resistance.....	12
3.1.2 Torsional Resistance.....	14
3.1.3 Foundation Settlement	14
3.1.4 Drilled Shaft Construction Considerations.....	14
3.2 Design Review.....	16
3.3 Construction Observation	16
4. LIMITATIONS.....	18
CLOSURE.....	20

TABLE OF CONTENTS

	Page
PLATES	
Project Location Map.....	Plate 1
Site Plans	Plates 2.1 thru 2.6
P-Y Curves	Plates 3.1 thru 4.2
APPENDIX A	
Field Exploration.....	Pages A-1 and A-2
Soil Log Legend.....	Plate A-0.1
Soil Classification Log Key	Plate A-0.2
Rock Log Legend	Plate A-0.3
Logs of Borings.....	Plates A-1 thru A-9
APPENDIX B	
Laboratory Tests.....	Page B-1
Laboratory Test Data	Plates B-1 thru B-9
APPENDIX C	
Photographs of Core Samples.....	Plates C-1 thru C-7