TECHNICAL REPORT DOCUMENTATION PAGE

1. REPORT NO. FHWA-OK-12-04	2. GOVERNMENT ACCESSION NO.	3. RECIPIENT=S CATALOG NO.		
4. TITLE AND SUBTITLE Development of ODOT Guidelines for the Use of Geogrids in Aggregate Bases		5. REPORT DATE March 2012 6. PERFORMING ORGANIZATION CODE		
7. AUTHOR(S) Kianoosh Hatami, Ph.D., P.En Candidate, Musharraf Zaman, Ph.D. Candidate	•	8. PERFORMING ORGANIZATION REPORT		
9. PERFORMING ORGANIZATION NAME AND ADDRESS University of Oklahoma School of Civil Engineering and Environmental Science 202 W. Boyd Street, Room 334, Norman, OK 73019		10. WORK UNIT NO. 11. CONTRACT OR GRANT NO. ODOT SP&R Item Number 2220		
12. SPONSORING AGENCY NAME AND ADDR Oklahoma Department of Trans Planning and Research Division 200 N.E. 21st Street, Room 3A7 Oklahoma City, OK 73105	portation	13. TYPE OF REPORT AND PERIOD COVERED Final Report August, 2009 – March, 2012 14. SPONSORING AGENCY CODE		

15. SUPPLEMENTARY NOTES

16.ABSTRACT

A primary objective of the current study was to help ODOT expand its selection of approved geogrid products for base reinforcement applications by producing measured data on selected geogrids and a dense-graded base aggregate commonly used in ODOT roadway projects. The study involved in-isolation and in-aggregate laboratory testing of several base reinforcement geogrid products from major geosynthetic suppliers. In-isolation tests included rib strength and junction strength tests, and in-aggregate tests included pullout and plate load tests. Field-scale installation damage tests were also performed. Test results on different geogrids in this study were aimed to quantify the significance of the geogrids in-isolation properties on their inaggregate response under controlled conditions.

Geogrid, pavement, aggregate, strength, pullout test, cyclic plate load test, installation damage	1			
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19. SE CURITY CLASSIF. (OF THIS REPORT)	20. SECURITY CLASSIF. (OF THIS PAGE)	21. NO.	10	22.
19. SECURITY CLASSIF. (OF THIS REPORT) Unclassified	20. SECURITY CLASSIF. (OF THIS PAGE) Unclassified	PAGES	10	PRICE