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# **REPUBLIC OF KENYA**

**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT OF ROADS**

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Ref No. M.130/35/L/10 Date: 8th August, 2023

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| **Laboratory Test Report** |

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| **1. Customer’s Details:** RESIDENT ENGINEER KeNHA  **E-mail:** rd.nairobi@kenha.co.ke  **Address:** P.O.BOX 200-00507 NAIROBI Phone: 0713141871  **2. Customer Contact:** 0713141871 6. Job Card No. 054/S/2023  **3. Sample Description:** Lateritic Gravel 7. Date fee paid: 07/07/2023  **4. Sampled by:** Client. 8. GOK MR No.4053835  **5. Date Sample received:** 07/07/2023 9. Date Analysis started:17/07/2023  **10. Additional information provided by the customer:** Periodic Maintenance of Ruiru-Tatu city -Kiambu (B15) Road.  **SOURCE:** Kamiti Prison.     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | TEST RESULTS | | | | | | | | | | | | | | | | | | **Sample No.** | **Reference** | **Dosage**% | **Grading** | | | | | | **Atterberg Limits** | | | | | **Compaction T180** | | **CBR** | | | % Passing BS Sieve Size (mm) | | | | | | LL | PL | PI | LS | PM | MDD Kg/m3 | OMC( % ) | 4days Soak  (%) | Swell(%) | | 20 | 10 | 5 | 2 | 0.425 | 0.075 | % | % | % | % |  |  |  | | 012/S/23 | Lateritic  Gravel | **Neat** | 100 | 93 | 71 | 50 | 31 | 25 | 52 | 39 | 14 | 7 | 434 | 1964 | 11.5 | 45 | 0.3 | | **SOIL COMPOSITION: Gravel = 50%, Sand=25%, Silt/Clay=25%** | | | | | | | | | | | | | | | | **Improved with Bamburi Cement, 42.5N,7 Days Cure and 7 Days Soak** | | | | | | | | | | | | | | | | | **1%** |  |  |  |  |  |  | 31 | 19 | 11 | 6 | 434 |  |  | 100 | 0.1 | | **2%** |  |  |  |  |  |  | 28 | 19 | 9 | 4 | 279 |  |  | 160 | <0.1 | | **3%** |  |  |  |  |  |  | 26 | 19 | 7 | 4 | 217 |  |  | 220 | <0.1 | | **4%** |  |  |  |  |  |  | 24 | 20 | 5 | 2 | 155 |  |  | 280 | <0.1 | |

**Eng. J. M. Mbarua**

**For: CHIEF ENGINEER (MATERIALS)**

**OiC Soils Laboratory. CSE Soils Laboratory**

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