

**REPUBLIC OF KENYA**

**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT OF ROADS**

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Ref No. M.955/35/L/10 Date: 21st November, 2023

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| **Laboratory Test Report** |

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| **1. Customer’s Details:** INSTRUMENTATION ENGINEERS (EA) LIMITED.  **E-mail:** Not provided  **Address:** P.O BOX 18986-00500 NRB Phone: 0707116105  **2. Customer Contact:** 0707116105 6. Job Card No. 1164/S/2023  **3. Sample Description:** Red soil and soft tone 7. Date fee paid: 06/11/2023  **4. Sampled by:** Client. 8. GOK MR No.4388515  **5. Date Sample received:** 06/11/2023 9. Date Analysis started:14/11/2023  **10. Additional information provided by the customer:** Boiler site.  **Source:** Githunguri Town.     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | TEST RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | **Sample No.** | **Reference** | **Grading** | | | | | | | | | | **Atterberg Limits** | | | | | | | | | **Compaction T99/T180** | | | **CBR** | | | % Passing BS Sieve Size (mm) | | | | | | | | | | LL | | PL | | PI | LS | | PM | |  | OMC( % ) | | 4days Soak  (%) | Swell (%) | | 20 | | 10 | | 5 | 2 | | 0.425 | | 0.075 | % | | % | | % | % | |  | | MDD Kg/m3 | | 696/S/23 | Red soil Wall side | 100 | | 100 | | 100 | 95 | | 80 | | 75 | 53 | | 28 | | 25 | 12 | | 2000 | | 1275 | 27.9 | | 7 | 0.9 | | **SOIL COMPOSITION: Gravel = 5%, Sand = 20%, Silt/clay =75%** | | | | | | | | | | | | | | | | | | | | | | | | | 697/S/23 | Soft stone Container Side | 100 | 85 | | 74 | | 58 | 40 | | 36 | | 45 | 32 | | 13 | | 7 | 520 | | 1845 | | 13.5 | 30 | | 0.2 | | **SOIL COMPOSITION: Gravel = 42%, Sand = 22%, Silt/clay =36%** | | | | | | | | | | | | | | | | | | | | | | | | |

**Eng. J. M. Mbarua**

**For: CHIEF ENGINEER (MATERIALS)**

**OiC Soils Laboratory CSE Soils Laboratory**

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