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**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT FOR ROADS**

Telegraphic Address: “MINWORKS”, Nairobi

Telephone: Nairobi 0202554950

Fax: 554877

E-mail: [chiefengineer@mtrd.go.ke](mailto:chiefengineer@mtrd.go.ke)

Materials Testing & Research Division

Along Machakos Road, Industrial Area

P.O. Box 11873 – 00400,

NAIROBI

Ref. No: **M.1052/35/L10 15th December 2023**

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| **Laboratory Test Report** |

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| --- | --- | --- | --- |
| **Client’s Name:** | **RESIDENT ENGINEER KURA HQ.** | | |
| **Client’s E-mail:** | **NOT PROVIDED** | | |
| **Client’s Address:** | **P.O BOX 17956-00500 NRB** | **Client’s Mobile No:** | **0723860748** |
| **Sample Description:** | **TOP & BOTTOM SUBGRADE LAYER** | **Job Card No:** | **1341/S/2023** |
| **Sampled by:** | **MTRD STAFF** | **Date fee paid:** | **11/12/2023** |
| **Date Sample received:** | **11/12/2023** | **GOK MR No.** | **4388725** |
| **Date Analysis started:** | **11/12/2023** | **Amount Paid:** | **10,150Ksh** |
| **Additional information provided by the customer:** | **IMPROVEMENT OF ACACIA ACCESS ROAD KITENGELA.** | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IN-SITU DENSITY TESTS USING SAND REPLACEMENT METHOD** | | | | | | | | | | |
| **Sample No.** | **Date tested** | **Testing Location** | **Offset (metres from LHS)** | **Layer Thickness (mm)** | **Field dry density**  **Kg/m3** | **Field moisture content (%)** | **Max. dry density**  **T99**  **(Kg/m3** | **Optimum moisture content (%)** | **Relative Compaction (%)** | **Relative moisture content (%)** |
| **KM 0+160-0+480 TOP SUBGRADE** | | | | | | | | | | |
| 877/S/23 | 11/12/2023 | 0+180 | LHS | 150 | 1344 | 22.9 | 1368 | 26.8 | 98 | 85 |
| 878/S/23 | 11/12/2023 | 0+320 | CL | 150 | 1452 | 17.4 | 1368 | 26.8 | 106 | 65 |
| 879/S/23 | 11/12/2023 | 0+460 | RHS | 150 | 1299 | 25.5 | 1368 | 26.8 | 95 | 95 |
| **KM 0+600-1+000 BOTTOM SUBGRADE** | | | | | | | | | | |
| 880/S/23 | 11/12/2023 | 0+610 | CL | 150 | 1331 | 22.7 | 1368 | 26.8 | 97 | 85 |
| 881/S/23 | 11/12/2023 | 0+760 | LHS | 150 | 1345 | 17.7 | 1368 | 26.8 | 98 | 66 |
| 882/S/23 | 11/12/2023 | 0+910 | CL | 150 | 1375 | 21.1 | 1368 | 26.8 | 101 | 79 |
| 883/S/23 | 11/12/2023 | 0+990 | RHS | 150 | 1316 | 16.9 | 1368 | 26.8 | 96 | 63 |
| ***Note:*** *The results are specific to the sample(s) tested.* | | | | | | | | | | |

**Eng. J.M. Mbarua**

**FOR: CHIEF ENGINEER (MATERIALS)**

**OiC Soils Laboratory CSE Soils laboratory**

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