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**MINISTRY OF ROADS AND TRANSPORT**

**STATE DEPARTMENT FOR ROADS**

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Materials Testing & Research Division

Along Machakos Road, Industrial Area

P.O. Box 11873 – 00400,

NAIROBI

Ref. No: **M.1096/35/L10 22nd 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:** | **TSG AND SUBBASE LAYER** | **Job Card No:** | **1396/S/2023** |
| **Sampled by:** | **MTRD STAFF** | **Date fee paid:** | **19/12/2023** |
| **Date Sample received:** | **19/12/2023** | **GOK MR No.** | **4388770** |
| **Date Analysis started:** | **19/12/2023** | **Amount Paid:** | **12,550Ksh** |
| **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 & T180**  **(Kg/m3** | **Optimum moisture content (%)** | **Relative Compaction (%)** | **Relative moisture content (%)** |
| **KM 0+900 - 1+000 TOP SUBGRADE** | | | | | | | | | | |
| 887/S/23 | 20/12/2023 | 0+860 | LHS | 150 | 1525 | 18.5 | 1510 | 20.2 | 101 | 92 |
| 888/S/23 | 20/12/2023 | 1+000 | CL | 150 | 1540 | 18.2 | 1510 | 20.2 | 102 | 90 |
| **KM 0+160 - 0+780 SUBBASE** | | | | | | | | | | |
| 889/S/23 | 20/12/2023 | 0+200 | LHS | 150 | 1521 | 19.5 | 1584 | 20.2 | 96 | 95 |
| 890/S/23 | 20/12/2023 | 0+300 | CL | 150 | 1616 | 20.2 | 1584 | 20.2 | 102 | 99 |
| 891/S/23 | 20/12/2023 | 0+400 | RHS | 150 | 1600 | 20.1 | 1584 | 20.2 | 101 | 98 |
| 892/S/23 | 20/12/2023 | 0+500 | CL | 150 | 1552 | 20.1 | 1584 | 20.2 | 98 | 98 |
| 893/S/23 | 20/12/2023 | 0+600 | LHS | 150 | 1521 | 20.2 | 1584 | 20.2 | 96 | 99 |
| 894/S/23 | 11/12/2023 | 0+730 | CL | 150 | 1568 | 20.0 | 1584 | 20.2 | 99 | 98 |
| ***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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