

2017/2018 GROUP

HIGHWAY & TRANSPORTATION GROUP			
S/No.	Reg. No	Project Title	Supervisor
1.	EN251-5117/2013	Behaviour and performance of high performance concrete for pavements	Mr. Mungathia
	EN251-3649/2013		
2.	EN251-3659/2013	Study on the use of blast furnace slag as a fine aggregate in concrete	Mr. Karimi
	EN251-5850/2014		
3.	EN251-4811/2013	The investigation of the effect of plastic waste in bituminous mix in road construction	Eng. Wanyoike
	EN251-0337/2013		
4.	EN251-9401/2015	An investigation report on the effect of supestone on the properties of quartzitic gravel as a road base materials	Mr. Mungathia
	EN251-5975/2013		
5.	EN251-2537/2013	Study on Mombasa Road optimization for efficient traffic flow	Mr. Karimi
	EN251-2553/2013		
6.	EN251-0283/2012	Stabilization of expansive clay soil using a combination of rice husk ash and saw dust ash	Mr. Mungathia
	EN251-1840/2012		
7.	EN251-5707/2014	Study on the use of pedestrian footbridges along Nairobi-Thika Road	Eng. Wanyoike
	EN251-5461/2014		
8.	EN251-0361/2013	A study on traffic control during road reconstruction. Case study: Ngong Road	Mr. Karimi
	EN251-0357/2013		
9.	EN251-9374/2015	A study of the causes and effects of traffic congestion at the junction of road C71 and C71-A2 link road, in Kenol Town	Eng. Wanyoike
	EN251-9362/2015		
10.	EN251-4200/2015	Study of the use of Lateritic gravel/Emulsion (A3) mix for surfacing layer as an alternative for asphalt concrete on traffic class T5 road	Eng. Wanyoike
	EN251-4195/2015		
11.	EN251-0365/2013	A study on the traffic congestion at globe cinema intersection	Mr. Karimi
	EN251-0332/2013		
12.	EN251-0364/2013	The impact of reducing the accessibility of public service vehicles (PSVs) to the city centre on traffic volumes an travel times in the immediate suburbs.Case study: Ngara Area in Nairobi	Prof. Gariy
	EN251-0348/2013		
13.	EN251-0338/2013	Study on the effects on use of resin as a partial replacement for bitumen in asphalt concrete	Mr. Karimi
	EN251-3653/2013		
14.	Absent Partner	Use of recycled concrete aggregates blend with lightweight aggregates in production of internally cured concrete pavements	Mr. Mungathia
	EN251-5122/2013		
15.	EN251-9392/2015	A Study on the performance of the Nairobi eastern Bypass	Mr. Karimi
	EN251-9399/2013		
16.	EN251-3784/2012	Investigating the effect of cotton fibre as a stabilizing additive in stone matrix asphalt	Mr. Mungathia
	EN251-3662/2013		

17.	EN251-2531/2013	A study of the suitability of waste foundry sand blended in fine aggregate for asphalt mixes in road surfacing	Prof. Gariy
	EN251-0353/2013		
18.	EN251-0340/2013	A study on the performance of jute geotextiles in pavement construction on black cotton soil	Prof. Gariy
	EN251-0765/2013		
19.	EN251-5811/2013	An investigation on the suitability of quarry dust as a partial replacement for cement stabilization of laterite gravel for road base material	Prof. Gariy
	EN251-1541/2011		
20.	EN251-4184/2015	Traffic congestion in Thika town: Case Study Central Business District	Eng. Wanyoike
	EN251-4167/2015		
21.	EN251-2526/2013	An investigation on the performance of a blend of reclaimed asphalt pavement concrete and gravel as an expansive soil subgrade stabilizer	Prof. Gariy
	EN251-3654/2013		
22.	EN251-3123/2014	To investigate the causes of flooding on Nairobi Roads: Case Study Lenana Road	Eng. Wanyoike
	EN251-3522/2014		
23.	EN251-4174/2015	To determine the level of performance of Waiyaki Way (Museum Hill-James Gichuru roundabout section) Nairobi City County	Mr. Mungathia
	EN251-4186/2015		
24.	EN251-5714/2014	Assessment of performance of super pave mix design method on pavement base	Prof. Gariy
	EN251-5851/2014		
25.	EN251-4171/2015	Design of a full cloverleaf replacing Changamwe roundabout	Mr. Mungathia
	EN251-7529/2015		
26.	EN251-7436/2013	A study of road traffic accidents at Salгаа area of Nakuru County	Eng. Wanyoike
	EN251-7528/2015		
27.	EN251-3522/2014	Investigating the causes of flooding on Nairobi roads: a case study on lenana road.	Eng. Wanyoike
STRUCTURE & MATERIALS GROUP			
28.	EN251-0347/2013	The structural design of a footbridge on Thika super highway at witeithie bus station	Mr. Njuki
	EN251-2512/2013		
29.	EN251-2523/2013	Reinforcement of timber beam using carbon fiber reinforced polymer	Prof. Manguriu
	EN251-0358/2013		
30.	EN251-1862/2012	Performance of glass fines and coconut husks in asphalt concrete	Eng. Kioko
	EN251-2994/2012		
31.	EN251-4815/2013	Analysis on the effects of incorporating rice straws and banana stem fibers on the properties of compressed earthen blocks	Mr. B.Mutua
	EN251-0333/2013		
32.	EN251-9400/2015	Investigating the effects of using a blend of pumice and coconut shell as coarse aggregate in concrete production	Eng. Kioko
	EN251-0369/2013		
33.	EN251-9388/2015	Design of a multi-storey car park at Taifa B parking lot along Taifa road in Nairobi.	Prof. Manguriu
	EN251-9398/2015		

34.	EN251-9377/2015	Comparative analysis of reinforced concrete design and pre stressed concrete design in a multi-storey commercial building	Dr. Kabubo
	EN251-9391/2015		
35.	EN251-0367/2013	Investigating the structural performance of foam concrete made using a synthetic foaming agent.	Mr. B.Mutua
	EN251-5717/2014		
36.	EN251-4176/2015	Investigation of the use of broken ceramic tiles as a partial replacement of coarse aggregate in concrete	Mr. Winja
	EN251-4185/2015		
37.	EN251-4816/2013	A study on development self-healing concrete using bacteria to improve the durability of structures	Dr. Kabubo
	EN251-3200/2013		
38.	EN251-4192/2015	Investigation of the use of volcanic ash and crushed pumise as a partial of sand in concrete	Mr. Winja
	EN251-4175/2015		
39.	EN251-5718/2014	Investigating on the engineering properties of concrete made of dagah stone locally found in Mandera County as a coarse aggregate	Mr. B.Mutua
	EN251-5712/2014		
40.	EN251-0349/2013	Investigation of the effects of rice husk ash and egg shells as a partial replacement of cement for low cost construction	Mr. Odera
	EN251-0344/2013		
41.	EN251-2521/2013	Investigating of the suitability of crushed recycled motor as partial replacement of sand as fine aggregate in concrete	Mr. Winja
	EN251-0362/2013		
42.	EN251-2536/2013	Investigating the effects of using Kikuyu grass fibres on cement mortar	Eng. Kioko
	EN251-0339/2013		
43.	EN251-9422/2015	A study of treated terephthalate as a partial replacement of ballast in concrete	Mr. Nguru
	EN251-9418/2015		
44.	EN251-4189/2015	A comparative study on strength properties of plain concrete made from cements containing local manufactured and imported clinker	Mr. B. Mutua
	EN251-3126/2014		
45.	EN251-0355/2013	Investigation on the use of waste rubber and glass as partial replacement of fine aggregate in concrete	Eng. Kioko
	EN251-0331/2013		
46.	EN251-4177/2015	Investigating the effect of waste rubber tyre and fibre mesh on reinforced concrete properties	Mr. Winja
	EN251-4199/2015		
47.	EN251-6597/2015	Design of a reinforced bridge across river Kwekwe connecting Nairobi to Kiserian	Mr. Njuki
	EN251-5759/2014		
48.	EN251-7531/2015	Design of flexible pavement and drainage on expansive soils. Case study: Uthiru Gichagi Road at St.Peter's Medical Centre	Mr. Winja
	EN251-5969/2013		
49.	EN251-5716/2014	Investigating the effect of Non-Newtonian fluid (oobleck) on the mechanical properties of concrete	Eng. Kioko
50.	EN251-0334/2013	Investigating the effects of crumb rubber as a partial replacement of coarse aggregates on lightweight concrete prepared with cement partially replaced with coffee husk ash.	Dr. Kabubo
	EN251-2511/2013		

51.	EN251-2555/2013	Flyover footbridge across the Thika superhighway at Garden City (Thome) section using composite design	Mr. Odera
	EN251-0288/2013		
52.	EN251-9366/2015	Design of an underground bus stage	Mr. Njuki
	EN251-9373/2015		
53.	EN251-0341/2013	Investigation of sewage sludge ash on soil blocks	Prof. Manguriu
	EN251-2545/2013		
54.	EN251-2532/2013	Comparative study of expanded polystyrene in concrete slab and concrete soild slab	Mr. B.Mutua
	EN251-3652/2013		
55.	EN251-2533/2013	Structural analysis and design of a parkade complex with a heliport at KNH	Mr. Njuki
	EN251-0354/2013		
56.	EN251-2517/2013	Assessment of wood ash as a stabilizer for black cotton soil in earth blocks for low cost buildings	Mr. Odera
	EN251-5708/2014		
57.	EN251-4193/2015	An investigation of crushed buildings rubble material as all-in aggregate for concrete	Mr. Winja
	EN251-4188/2015		
58.	EN251-4173/2015	Investigation of low cost building materials. Case study: Plastic bottles	Mr. Njuki
	EN251-4181/2015		
59.	EN251-9369/2015	Investigation of plastic wastes for prefabricated eco-wall panel in Kenya	Mr. Odera
	EN251-9359/2015		
60.	EN251-9371/2015	Investigating the performance of a concrete waffle slab reinforced with natural organic fibres	Mr. Nguru
61.	EN251-0350/2013	Redesign of existing structures accommodating change of use. (A case study: New Common Lecture Building, JKUAT)	Mr. Odera
62.	EN251-4187/2015	Use of dry maize ash as an admixture in concrete made with recycled concrete aggregates	Mr. Winja
	EN251-4169/2015		
WATER & ENVIRONMENTAL ENGINEERING GROUP			
63.	EN251-5706/2014	Design of sand dam to supply water for domestic use in Makueni County. Case study: Masongoleni Catchment	Dr. Kiptala
	EN251-2543/2013		
64.	EN251-0359/2013	Assessment of water quality of Upper Athi River Basin. Case study: Mbagathi River	Mr. H. Mutua
	EN251-2540/2013		
65.	EN251-5687/2013	Physio-chemical and microbiological water quality assessment for sand dams. A case study of Tiva river, Kitui county, Kenya.	Dr. Kiptala
	EN251-3658/2013		
66.	EN251-3702/2012	Improving river water quality using cascading weirs – case of Mathare river	Mrs. Kibetu
	EN251-0352/2013		
67.	EN251-9395/2015	To assess the impacts of land use changes on hydrological process and implications on Aguthi water supply project	Dr. J.K. Mwangi
	EN251-9394/2015		
68.	EN251-0318/2013	Design of an Eco-Pond for water harvesting in Arid and Semi-Arid areas. Case study: Makueni	Mr. H. Mutua
	EN251-0345/2013		

69.	EN251-2507/2013	Mitigation of Urban floodline. Case study: Nairobi South C	Dr. J.K. Mwangi
	EN251-0371/2013		
70.	EN251-3650/2013	Efficiency of sewage sludge briquettes mixed with bagasse as a fuel alternative	Mrs. Kibetu
	EN251-0343/2013		
71.	EN251-1728/2010	Mapping of pollution profile of Kirichwa Kubwa River in Nairobi	Eng. Wangai
	EN251-9367/2015		
72.	EN251-9368/2015	Performance evaluation of electrocoagulation in treatment of hospital wastewater	Mrs. Kibetu
	EN251-9386/2015		
73.	EN251-9379/2015	Modelling of stream flows using weap model: River Sabaki	Mr. Matoke
	EN251-2539/2013		
74.	EN251-0372/2013	Design of a water supply project for Kwanza Constituency Trans-Nzoia County	Mr. H. Mutua
	EN251-0346/2013		
75.	EN251-9370/2015	Design of a microhydro power station foe Gatura as a small-scale representation for rural Kenya	Mr. Matoke
	EN251-9380/2015		
76.	EN251-2510/2013	Design of surface water drains. Case study: Fedha Estate, Nairobi	Mr. H. Mutua
	EN251-2530/2013		
77.	EN251-9382/2015	Impacts of floods in Budalang'i and alternative to its dykes	Mr. Matoke
	EN251-9389/2015		
78.	EN251-4168/2015	Application of water cad for the optimised design of incremental rural water supply system: Case study Sihanikha area in Kakamega County	Eng. Wangai
	EN251-4190/2015		
79.	EN251-9412/2015	Wetland design for treatment of Abattoir effluent in Kiserian town	Mr. Matoke
	EN251-0306/2011		
80.	EN251-9403/2015	Use of geothermal brine/steam to develop a concrete autoclaving process for production of precast concrete	Dr. Kiptala
	EN251-9404/2015		
81.	EN251-7530/2013	Sustainable Environmental management of small hydro power plants. Case Study: Imenti, South Mara and Iraru small hydropower plants in Meru	Dr. Cheruiyot
	EN251-7527/2013		
82.	EN251-3311/2012	Stabilization of black cotton soil using sodium silcate	Mr. Mulei
	EN251-1834/2012		
83.	EN251-4817/2013	Use of rice husk ash for stabilizing red soil for road subgrade construction.	Mr. Mulei
	EN251-2503/2013		
84.	EN251-9383/2015	Design of a sprinkler irrigation system for a Golf course resort. (Aberdare Hills Golf Resort, Naivasha)	Dr. Kahsay/ Dr.B.Kakoi
	EN251-9364/2015		
85.	EN251-5713/2014	Decongestion plan for a highway using grade separated junction. Case study: Hailesellasi roundabout along Mombasa Road	Mr. Mulei
	EN251-5711/2014		
86.	EN251-2551/2013	Assessment of alternative water sources to supplement the existing water supply of Kwa Vonza Town, Kitui County	Dr.Kahsay/ Dr.B.Kakoi
	EN251-4677/2013		

87.	EN251-1531/2011	Investigating the causes of traffic delay on General Waruingi Eastleigh Nairobi	Mr. Mulei
	EN251-5722/2014		
88.	EN251-4197/2015	Causes of flooding, it's effects and mitigation along Thika Road, Case study - Kasarani	Dr. Cheruiyot
	EN251-4194/2015		
89.	EN251-3002/2012	Use of melted waste thermoplastics in stabilization of black cotton soil in road construction	Mr. Mulei
	EN251-1804/2012		
90.	EN251-6970/2015	Assesing the viability of harvesting surface water in Makueni County	Dr. Cheruiyot
	EN251-4191/2015		
91.	EN251-4814/2013	Improvement and evaluation of the behaviour of murrum, black cotton and red soils as a subgrade materials	Mr. Mulei
	EN251-4935/2013		
92.	EN251-0378/2013	Performance evaluation of wastewater management in Public learning institutions. Case study: Lenana School	Mr. G. Mwangi
	EN251-0370/2013		
93.	EN251-0342/2013	Assessment of the waste water system and sewerage treatment in Mombasa and effects on the marine environment	Dr. Kahsay/ Dr. B. Kakoi
	EN251-0356/2013		
94.	EN251-9375/2015	Impact of the plastic carrier bags ban on solid waste management in town centres; Case study Gachororo	Mr. G. Mwangi
	EN251-9358/2015		
95.	EN251-5529/2014	Investigating the use of mabble Quarry waste as a mineral filler in Asphalt concrete	Mr. Mulei
	EN251-9376/2015		
96.	EN251-4172/2015	Solid waste management in Eastleigh area Nairobi	Dr. B. Kakoi
	EN251-4170/2015		