## New Low Volume Seal Road Contractors – Site Supervisors Course - 8 weeks

The Site Supervisors for this training must possess Diploma in Civil Engineering for recognised institution; must have been trained in Labour based road construction from KIHBT/KTC and must have successfully supervised at least two Roads 2000 gravelling projects

Module: 1	Labour based LVSRs roads	<b>Duration</b>
	construction Activities	3 weeks

This module provides the Site supervisors with knowledge and skills of the procedures used in improving roads to bitumen standards using labour-based methods.

The main emphasis of training with this group is on how to organise and manage a large labour force for maximum productivity on site. The topics covered include

- Overview of Horizontal and Vertical alignment standards for LVSRs
- Specifications for LVSR Pavements
- Pavement materials and tests for LVSRs
- Tools and Equipment for LVSR site
- Procedures for construction of roads to bitumen standards using labour- based methods
- Organization and sequencing of work activities
- Quality control tests / measures
- Preparation of weekly/ monthly work programme
- Unit rates calculation of key activities
- Implementation of Cross Cutting issues on site

## Module: 2

## Practical training on the demonstration road

# Duration - 2 weeks

The objectives of the practical training on the demonstration road is to provide the site supervisors with an opportunity to practically apply the knowledge and skills learned in a real-life contract but still under supervision by the training providers. During this stage mentorship and guidance is given to ensure the works are carried out to the required standards and that all the required proper business management ethics are followed.

The supervisors will be required to:-

- Plan and execute all the activities
- Carry out quality control tests
- Make work approval requests
- Carryout joint measurement of works approved works
- Prepare interim payment certificates
- Prepare progress Reports

Also, during this period, the site supervisors' participants will be expected to produce a resource-based work programme for the works

### Module: 3

### Plant and Equipment Practical training

Duration - 3 weeks

The objectives of this module is to provide practical knowledge and skill in managing plant and equipment on site so that they can be optimally used and to ensure that the equipment availability rate is always high.

The following topics will be covered

- Choice of construction plant and equipment and their uses
- Cost estimation and pricing of equipment-based activities
- General maintenance and simple repairs
- Introduction to basic operation and maintenance of key construction plant and equipment
- o Only those Site Supervisors who will have successfully completed the practical training on the demonstration road and Plant and equipment training will be awarded completion certificates.









#### **KENYA RURAL ROADS AUTHORITY**

# IMPLEMENTATION OF ARID AND SEMI ARID LANDS (ASAL) RURAL ROADS PROJECT









# CURRICULUM/SYLLABUSFOR TRAINING OF

# LOW VOLUME SEAL ROAD CONTRACTORS (2025)

- (i). Managing Directors' Course (25 No.)
- (ii). Site Supervisors' Course (50 No.)

Egis (K) / Egis (I) /Norken Int Ltd Joint Venture - The Priory 5<sup>th</sup> Floor Argwings Kodhek Road P.O. Box 76672-00508 Nairobi, Kenya Director General
Kenya Rural Roads Authority Director
General
Kenya Rural Roads Authority
Barabara Plaza
Block B Building
P.O.Box 48151 - 00100
Nairobi. Kenya

## Low Volume Seal Roads Contractors -Directors Course - 5 weeks

The selected participants consist of owners of small enterprises registered under the Companies Act and also registered with the National Construction Authority under Categories 5, 6 and 7.

The objective is to provide them with the knowledge and skills on procedures for sealing roads to bitumen standards using labour-based methods; required equipment and the cost implications of the whole operation.

This is **5 weeks course** consists of 2-week classroom modules followed by a 1-week practical training on the demonstration road in Isiolo and 1-week equipment management training in Kisii, and 1-week Business Management training as briefly described in the following section.

### Entry:

Entry will be on invitation for prequalification in the press.

#### Requirements:

- Contracting firms must be currently registered with National Construction Authority - NCA in Categories 5, 6 and 7. Contractors already registered in categories 1- 4 need not apply. The firms must have been successfully undertaken at least two Roads 2000 gravelling projects.
- Each contracting firm must propose one Director and two site supervisors, both of whom must have successfully attended the Labour based gravelling course at KIHBT/KTC and have been involved in at least two R2000 gravelling projects
- The Managing Directors of the applying firms must have minimum of KCSE grade D+. Additional technical or professional training will be an added advantage.
- 4. The site supervisors must have a minimum qualification of Diploma in Civil Engineering
- 5. The duration of training for the successful applicants will be 3 weeks (2 weeks classroom + 1 week for practical training on a demonstration road in Isiolo

The Project Management will be responsible for food and accommodation during training while the contractors will be responsible for salaries, transport to and from the training venues and any out of pocket expenses for the participants.

Module:	Labour based Low Volume	Duration - 2
1	Seal Road Construction	weeks
	Activities	

This module provides the Managing Directors with a general understanding of road rehabilitation to bitumen standards using labour based methods

The main emphasis is how to organise and manage a large labour force for maximum productivity on site

The Topics covered include: -

- Overview of Horizontal and Vertical alignment standards for LVSRs
- Specifications for LVSR Pavements
- Pavement materials and tests for LVSRs
- Procedures for construction of roads to bitumen standards using labour based methods
- Organisation and sequencing of work activities
- Cost estimation of pavement construction activities
- Progress Reports
- Implementation of Cross Cutting issues on site

	Practical training on the	Duration-
Module : 2	demonstration road	1week

The objectives of the practical training on the demonstration road is to provide the Managing Directors with an opportunity to practically apply the knowledge and skills learned on the actual live contract but still under supervision by the training providers.

During this stage mentorship and guidance is given to ensure the works are carried out to the required standards and that all the required proper business management ethics are followed.

Also, during this period, the participants will be expected to produce a work programme and Cash-flow projection for the trial contract before the actual start of the works

# Module: 3 Plant and Equipment Practical training

Duration -1 weeks

The objectives of this module is to provide the Directors with practical knowledge and skill in managing plant and equipment they hire or even those that they own or are planning to buy so that they can get optimum output of the machines

The following topics will be covered

- Choice of construction plant and equipment and their uses
- Cost of owning construction equipment
- General maintenance and simple repairs
- Introduction to basic operation and maintenance of key construction plant and equipment

Only those Directors who will have successfully completed the practical training on the demonstration road and attended the Plant and equipment training will be awarded completion certificates.