

THE UNITED REPUBLIC OF TANZANIA



**PRIME MINISTER'S OFFICE  
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT**



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Reducing Poverty  
by Enabling Access

**IMPROVED MAINTENANCE SYSTEMS FOR  
DISTRICT ROADS IN TANZANIA  
AFCAP/TAN/019**

**QUARTERLY PROGRESS REPORT NO. 6**

**1<sup>st</sup> January to 31<sup>st</sup> March 2012**

April 2012  
(rev May 2012)

I T Transport Ltd., Ardington, United Kingdom  
in association with Ambicon Engineering Ltd.

DISCLAIMER: This document is one of the outputs from the DFID funded AFCAP Study into Improved Maintenance Systems for District Roads. The Study is being implemented by IT Transport Ltd (ITT). Eng. Abdul Awadh has prepared the report on behalf of ITT. The views expressed are those of the author and not necessarily those of PMO-RALG, DFID or Crown Agents.

<b>Revision</b>	Issue 2	
<b>Status</b>	Final	
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<b>Reviewed by</b>	G Taylor	24/04/12
<b>Issued</b>	G Taylor	11/5/12

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## Table of Contents

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<b>Table of Contents</b> .....	<b>i</b>
<b>List of Abbreviations and Acronyms</b> .....	<b>ii</b>
<b>Executive Summary</b> .....	<b>iii</b>
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
<b>2.0 PROGRESS IN BAHI DISTRICT</b> .....	<b>2</b>
2.1 System to be Tested .....	2
2.2 Progress of 'Framework Contracts' being implemented in F/Y 2011/12.....	2
2.3 Planned Activities April – June 2012 .....	2
<b>3.0 PROGRESS IN MPWAPWA DISTRICT</b> .....	<b>4</b>
3.1 Systems to be Tested .....	4
3.2 Progress .....	4
3.3 Planned activities April - June 2012.....	5
<b>4 PROGRESS IN DODOMA MUNICIPALITY</b> .....	<b>6</b>
4.1 System to be Tested .....	6
4.2 Progress .....	6
4.3 Planned activities April – June 2012.....	7
<b>5 MONITORING EFFECTIVENESS</b> .....	<b>8</b>
<b>6 ISSUES AND CHALLENGES</b> .....	<b>9</b>
<b>Annexes</b> .....	<b>10</b>

## List of Abbreviations and Acronyms

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AFCAP	Africa Community Access Programme
CBO	Community Based Organisation
DE	District Engineer
DED	District Executive Director
DEO	District Engineers Office
DFID	Department for International Development (UK)
GBP	Great Britain pound
MC	Municipal Council
ME	Municipal Engineer
MEO	Municipal Engineers Office
Mio.	Million
PMMR	Performance Based Management and Maintenance of Roads
PMO-RALG	Prime Minister's Office – Regional Administration and Local Government
ToR	Terms of Reference
TShs	Tanzanian shilling
USD	United States Dollar

### **CURRENCY**

#### **Approximate Currency Equivalentents (as of March 2012]**

1 USD = 1,620 TShs

1 GBP = 2,520 TShs

## Executive Summary

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- This is the sixth progress report for the AFCAP Study into Improved Maintenance Systems for District Roads in Tanzania. It covers the period 1<sup>st</sup> January 2012 to 31<sup>st</sup> March 2012. Three districts are included in the Study – Bahi, Mpwapwa and Dodoma Municipal.
- Delays in procurement of contracts at district level have resulted in late commencement of projects and slow progress of the Study. All contracts will now be concluded in September/October 2012. The progress in each district is described below.
- Bahi District: Contracts for the three framework contracts were signed on 13<sup>th</sup> January 2012 with contract durations of 10 months. The first work orders were issued on 23<sup>rd</sup> January 2012 after inspection of the roads by the DE staff. This was after an inspection of all roads immediately after signing of contract to establish their actual condition. The value of the works under the first work order (to be executed within three months) is about 30% of the contract values.
- Mpwapwa District:
  - Framework contracts: Slow progress in procurement of contractors was experienced throughout the quarter. A pre-bid meeting for the framework contracts took place on 30<sup>th</sup> January 2012 and the opening of quotations was on 09<sup>th</sup> February 2012. The expectation was that the evaluation process up to award of contracts would be completed within 14 days after opening of quotations. However, this was not the case and the award of contracts was only made on 26<sup>th</sup> March 2012. Contracts will be signed in early April 2012 and the contract durations will be 6 months. The first work orders will be issued immediately after signing of contracts.
  - Community contracts – The working tools to be provided to the communities were delivered to the DEO on 26<sup>th</sup> March 2012. The handing over of the working tools to the communities as well as training of communities and signing of contracts are scheduled for early April 2012. The duration of contracts will now be six months.
- Dodoma Municipal Council: The contractor has completed more than 95% of the initial improvement works. However, it is now apparent that more drainage structures are required than allowed for in the contract. These are likely to become trouble spots. Maintenance part of the contract has been going on although not to required levels on all roads. The Municipal Engineers Office (MEO) is monitoring and instructing the contractor accordingly.
- The AFCAP Technical Manager Mr. Nkululeko Leta visited the project in February 2012. He held meetings with various officials and visited the ongoing works in Bahi district and Dodoma municipality. Mr. Nkululeko also attended the Dodoma Regional Road Board meeting that took place on 16/02/2012 where the progress of the project was presented to the Board by Eng. Abdul Awadh.

## **1.0 INTRODUCTION**

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This report describes the progress of the AFCAP Study into Improved Maintenance Systems for District Roads in Tanzania (AFCAP/TAN/019) for the period from 1<sup>st</sup> January 2012 to 31<sup>st</sup> March 2012. This is the sixth progress report for the project.

The study is being carried out in three districts in Dodoma Region - Mpwapwa, Bahi and Dodoma Municipal where three different contracting systems are being tested. The systems are; i) Area based long-term framework contracts, ii) Performance based management and maintenance of roads contracts, and iii) Community contracts. Testing of the three models was planned to start in the three districts in 2010. However, there have been delays due to Councils taking time to understand fully the different systems as well as slow contract procurement procedures at district level.

This Progress Report No. 6 follows the fifth progress report that covered the period from 01<sup>st</sup> October to 31<sup>st</sup> December 2011 that was issued in February 2012.

## 2.0 PROGRESS IN BAHI DISTRICT

### 2.1 System to be Tested

The maintenance system being tested in Bahi district under the study is the 'Area based framework contracts'. The roads earmarked for maintenance during f/y 2010/11 were grouped in three packages covering the northern, central and southern parts of the district. The same system of packaging has been used for maintenance of roads in f/y 2011/12. This will further test the system's effectiveness with District Engineer's staff having gained some familiarity and experience from the first year. The works in each package include spot improvements, routine maintenance and culverts/bridge works as deemed necessary by the DE.

A map of Bahi district showing the locations of the three packages is appended as **Annex 1**

### 2.2 Progress of 'Framework Contracts' being implemented in F/Y 2011/12

The three contracts were signed on 13/01/2012 with a duration of nine months each. The first work orders were issued on 23<sup>rd</sup> January 2012 for works that have to be executed within a period of three months. As an example, a Copy of the first work order for one road of the Central package is attached as **Annex 2**. The contractors prepared programmes showing the timing for different work activities and these are used by the DE to monitor progress. The work programme for the Central package works is attached as **Annex 3**.

The works are progressing well in all three packages but the quality of some of the drainage works is not to the required standard. This has been pointed out to the District staff. The underlying problem appears to be a lack of supervision capacity due to the continued absence of a District Engineer.

### 2.3 Planned Activities April – June 2012

The planned activities for the next three months – April to June 2012 are:-

- Preparation and issuance of 2<sup>nd</sup> Work orders for three contracts in early April/May 2012;
- Supervise the road works.



*900mm diam culvert laying on Chingongwe – Chipanga road*



*AFCAP Technical Manager sharing views with DE staff on what needs to be done on the*

*collapsing drift on Chigongwe – Chipanga road*



*Spot gravelling works on Babayu – Lamaiti road*

*Excavating a catch-water drain on Lamaiti - Bahi road*



*Constructed 900 mm diameter concrete pipe culvert on Babayu- Lamaiti road*



## **3.0 PROGRESS IN MPWAPWA DISTRICT**

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### **3.1 Systems to be Tested**

The two maintenance systems to be tested in Mpwapwa district are:

1. The 'small contracts for extended periods (framework contracts)' on most of the important district roads and;
2. 'Community contracts' on selected feeder roads.

With the first approach, several medium to small contracts are being procured through quotations and competitive bidding involving registered contractors of classes 6 and 7 including some trained labour-based contractors. The 'work scheduling' approach will be used and the contracts are for periods of six months. The works will include spot improvements, routine maintenance and culverts/bridge works where deemed necessary.

With community contracts, the two models i.e. one of using villagers under village governments and the second using Community Based Organisations (CBOs) will be tested on four selected roads serving productive areas with difficult access where many farmers and livestock keepers are living. The works will be mostly routine maintenance with some spot improvement works.

A map of Mpwapwa district showing the locations of the two packages and the four roads for community contracting is appended as **Annex 4**

### **3.2 Progress**

Contract procurement continued. However, no physical progress was made on any of the contracts during this quarter.

#### **3.2.1 Framework contracts**

The quotations were requested from selected contractors for the two contracts on 30/01/2012 and a pre-bid meeting was held on the same day to sensitize the contractors on how the framework contracts are to be executed. The pre-bid meeting was attended by representatives of eight contractors together with the DED's staff who are involved with procurement and management of contracts. Five quotations were submitted by the deadline of 09<sup>th</sup> February 2012. A delay then occurred between the evaluation of the quotations and the approval for the award of the contracts. The District Tender Board finally approved award of the contracts on 26/03/2012.

The contracts will be signed in early April and the first Work orders will be issued immediately thereafter. Contract durations will be six months.

#### **3.2.2 Community Contracts**

Procurement of working tools was finalised and the tools were delivered to the DEO on 26<sup>th</sup> March 2012. The following tools costing about TShs 385,000 for a set have been procured. The quantity of tools to be issued to the communities will depend on the length of the road and the anticipated maintenance workload due to terrain (flat or hilly).

- i) Plain hoe with handle

- ii) Fork hoe with handle sword
- iii) Shovel with steel handle
- iv) Heavy duty sword
- v) Slashes
- vi) Rake with handle
- vii) Heavy duty wheel barrows
- viii) Axe with handle
- ix) Pick axe with handle
- x) Light duty hammer
- xi) Heavy duty hammer.



*Working tools to be provided to the communities*

Preparations for handing over the tools, training the communities and signing of contracts have been done. These activities are now scheduled to take place in early April 2012. Due to the delay experienced in awarding the contracts and the conditions attached to use of Road Funds, the contracts will be for six months.

### **3.3 Planned activities April - June 2012**

The planned activities for the next three months – April to June 2012 are:-

- Sign contracts for the two Framework contracts and issue the first work orders for works to be executed within the next three months;
- Hand over working tools, train the community on road maintenance basics and sign contracts with CBOs and the village government in April 2012;
- Supervise the road maintenance works planned to start in April 2012.

## 4 PROGRESS IN DODOMA MUNICIPALITY

### 4.1 System to be Tested

The maintenance system being tested in Dodoma Municipality is the 'Performance Based Management and Maintenance of Roads (PMMR) contracts. The network covered includes a number of roads outside urban area (district and feeder roads) with a total length of about 60km. The works include spot improvements and attending to 'trouble spots' followed by routine maintenance of the network for a defined period. A map of Dodoma Municipal Council showing the locations of the roads under PMMR contract is appended as **Annex 5**

### 4.2 Progress

The 'improvement works' on Mbambala Jctn – Chizomoche and Bihawana – Chididimo roads have been completed to almost 95%. Some drainage works are yet to be carried out on Nala-Veyula road to complete the 'improvement works' that were identified and quantified in the contract. However, it has been realised that many more points along the project roads require drainage structures and these points could become 'bottlenecks' in the future. The MEO intends to address the issue of more drainage structures on these roads in the coming financial year.

The contractor has been carrying out 'maintenance works' on all roads to some extent and will continue to do so in the coming months to the end of the contract in September 2012. Some maintenance activities that are not being carried out to the required quality and this could be due to low understanding by the contractor's personnel of the maintenance requirements. The MEO has been reminding the Contractor to perform as per the contract.



*Mbabane – Chizomoche road: Section of road that has been improved and is being maintained*



*Mbabane – Chizomoche road: Location requiring drainage structure (Ch. 2+100)*



*Bihawana – Chididimo road: Section of road that has been improved and will be maintained*



*Bihawana – Chididimo road: Location requiring drainage structure (Ch. 3+600)*



***Bihawana – Chididimo road: Section of road not being maintained properly (vegetation control not done Ch. 15+900)***



***Zuzu – Nala road: Section of road not being maintained properly (vegetation control not done Ch. 3+300)***



***Nala – Veyula road: Sections of road that are being properly maintained (LHS – Ch. 1+500 and RHS - Ch 8+400)***



***Nala – Veyula road: LHS – un de-silted culvert (Ch.3+600), Centre - vegetation control not done (Ch. 25+200) and RHS – point requiring drainage structure (Ch. 26+600)***

### **4.3 Planned activities April – June 2012**

The planned activities for the next three months – April to June 2012 are:-

- Supervise the ‘maintenance works’ and conduct end of month inspections for preparation of monthly payment certificates;
- Educate the contractor’s personnel on the maintenance requirements;
- Sensitise the Council management team and councillors on the PMMR concept.

## **5 MONITORING EFFECTIVENESS**

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The effect of the improved roads on social-economic activities in the areas that the roads are located will be assessed later as these take time to become noticeable. This will be carried out towards the end of the study.

## 6 ISSUES AND CHALLENGES

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Issues and challenges during this reporting period are as follows:-

**Bahi District:** The quality of some of the drainage works has been found to be unsatisfactory and more quality control is necessary. The absence of a qualified District Engineer is still a major issue. Due to low budgets, the Council is reluctant to engage consultants to assist with supervision. It will be difficult for the technicians available in the DEO to effectively supervise works and prepare the work orders on time.

**Mpwapwa District:** The delay in awarding of contracts (both framework and community) have resulted in failure to undertake the necessary 'before rains' maintenance works and has caused the roads, especially those in the hilly terrains, to be in a bad state after the rains. More works will have to be undertaken beyond what had been planned. It might be necessary to re-assess what the communities could be able to do and where possible assist them. Shortage of staff including lack of a qualified District Engineer is still a challenge and will greatly affect the Study in terms of supervising the works now that the contracts are about to commence.

**Dodoma Municipality:** The Contractor has not been doing the 'maintenance works' to the performance levels set and it appears that the site staff are not well conversant with maintenance requirements. The MEO staff needs to follow up closely the 'maintenance works' by regularly visiting the site and holding site meetings.

Efforts to conduct a PMMR sensitisation forum for the Council management team have not been successful due to repeated postponement by the Council. The Municipal Engineer has not yet been able to set another date after postponement of the planned 15<sup>th</sup> February meeting.

**Study End Date:** Because of the prolonged delay by the Councils in procuring the contracts, these will not now be completed until October 2012. This will delay the end date of the Study including the preparation of the Manual. A Bar Chart showing the start and end dates for the contracts in each district is appended as **Annex 6**. An extension of time to December 2012 will be required for the Consultants to complete the Study. No extension of the budget will be required. An official request for an extension of time is about to be submitted to the Client.

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## *Annexes*

### Annex 1 - Bahi District Map





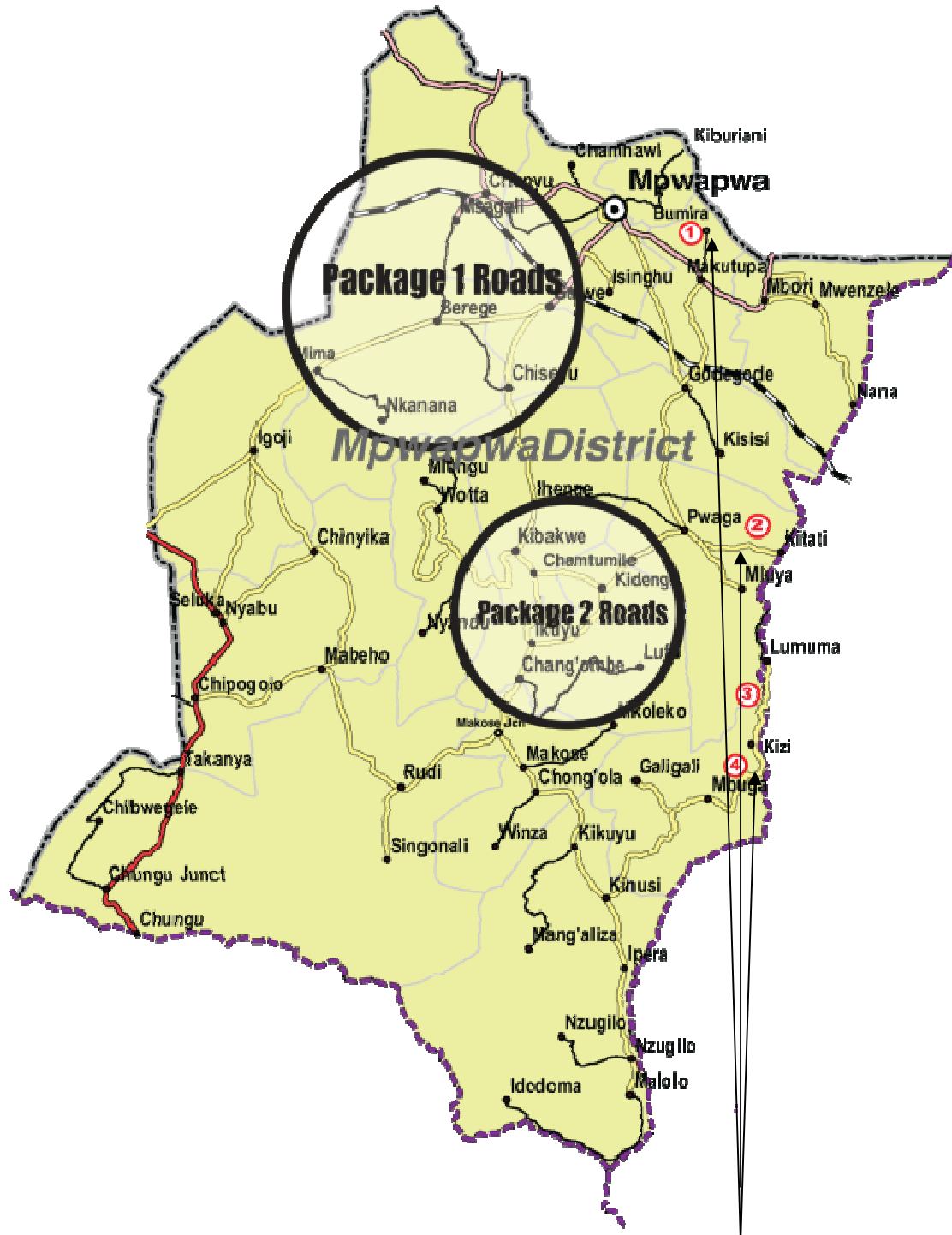
### Annex 2 – 1<sup>st</sup> Work Order for Chigongwe – Chipanga road

<b>SITE INSTRUCTION No: 1</b>		<b>Date: 23 JANUARY 2012</b>		<b>DISTRICT: BAHI DISTRICT COUNCIL</b>	
ROAD CODE:		ROAD NAME: CHIGONGWE CHIPANGA		ROAD SECTION: 0KM TO 26.4KM	
CONTRACT NO: BDC/LGA/024/2011 - 2012/M/03		CONTRACTOR: MASAIA INVE. BUILD. & CIVIL ENG. CONTRACTOR			
Act No.	Activity name	Work Unit	Work location	Detailed work description	Quantity scheduled
1	Spot Graveling	M <sup>3</sup>	1 + 600, 2 + 300, 2 + 900, 3 + 300, 3 + 800, 4 + 700 - 4 + 500, 4 + 700 - 4 + 800, 5 + 300, 5 + 400, 5 + 700, 9 + 100, 18 + 700	Graveling on trouble spots and fill pot holes and gullies	220
2	Bush clearing	M <sup>2</sup>	0 + 300 - 4 + 700, 5 + 600 - 6 + 200	Bush clearing; clearing 1.5m from both sides of the road edge	30,000
3	Construction of 90cm dia. Culvert	LM	9 + 400	As shown in the drawing	6
4	Excavation of side drain	M <sup>3</sup>	1 + 400 - 1 + 600(Both Sides), 3 + 500(RHS), 4 + 500 ( RHS Catch), 4 + 800(RHS), 5 + 900(RHS), 21 + 200(LHS)	Excavate side drains 0.6m height x 0.5m width including trimming up to slope	
5	Drift Repair	No	24 + 000	As stated in the BoQ	1
<b>WORK SCHEDULE ISSUED BY ENGINEER:</b>		<b>Signature:</b>			
Name: Chizelema, F.A		<b>Position: Ag. District Engineer</b>			
<b>WORK SCHEDULE RECEIVED BY</b>		<b>Signature:</b>			
CONTRACTOR: Name: Prosper Manuka		<b>Position: Director</b>			

**Annex 3 – Work programme for 1<sup>st</sup> Work Order for Central Package**

S/N	JOB ACTIVITY	MONTH	FEBRUARY			MARCH			APRIL		
		DAYS	10	20	30	40	50	60	70	80	90
<b>A</b>	<b>Mobilisation</b>		—								
<b>B</b>	<b>Chigongwe-Chipanga road</b>										
<b>B-1</b>	<b>Spot Gravelling</b>		—								
<b>B-2</b>	<b>Bush clearing</b>			—							
<b>B-3</b>	<b>Construction of 900mm diam culvert</b>			—	—						
<b>B-5</b>	<b>Drift repair</b>			—	—	—					
<b>C</b>	<b>Bahi Sokoni/Makulu – Chimendele road</b>										
<b>C-1</b>	<b>Spot Gravelling</b>						—				
<b>C-2</b>	<b>Bush clearing</b>						—	—			
<b>C-3</b>	<b>Excavation of side drains</b>							—			
<b>C-4</b>	<b>Desilt of culverts</b>							—			
<b>C-5</b>	<b>Desilt of drains</b>								—		
<b>D</b>	<b>Uhelela – Nagula – Bahi road</b>										
<b>D-1</b>	<b>Spot Gravelling</b>									—	
<b>D-2</b>	<b>Excavation of side drains</b>									—	
<b>E</b>	<b>Msembeta – Mindola road</b>										
<b>E-1</b>	<b>Spot Gravelling</b>									—	
<b>E-2</b>	<b>Bush clearing</b>									—	
<b>E-3</b>	<b>Excavation of side drains</b>									—	
<b>E-4</b>	<b>Construction of 600mm diam culvert</b>									—	—
<b>E-5</b>	<b>Construction of retaining wall</b>									—	—
<b>E-6</b>	<b>Construction of 900mm diam culvert</b>										—
<b>F</b>	<b>Demobilisation</b>										—

### Annex 4 - Mpwapwa District Map



Roads for community contracts are numbered 1 to 4  
Two frameworks contracts are for roads in Package Nos 1 and 2

### Annex 5 - Dodoma Municipal Map



### Annex 6 – Timing of Contracts in all districts

s/n	District / Municipal	2011		2012											
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct		
1	Bahi District				—————										
2	Dodoma Municipal	—————													
3	Mpwapwa district							—————							