### [Appendices]

- 1 . Member List of the Study Team
- 2 . Study Schedule
- 3 . List of Parties Concerned in the Recipient Country
- 4 . Minutes of Discussions
- ${\bf 5}~$  . Minutes of stake Holder Meeting and EIA Certificate Letter
- ${\bf 6}~$  . Other relevant Data
  - 1) Bench Mark data of the Topographic Survey
  - 2) Result of the Soil Investigation
  - 3) Temperature, Precipitation, Wind Velocity
  - 4) Calculation of the Pavement design
  - 5) Result of the Traffic Survey
  - 6) Result of the Axle Load Survey

# 1. Member list of the Study Team

# (1) Field Survey

Name	Job Title	Occupation	
Mr. Hiroyuki HAYASHI	Leader	Senior Project Administration	
		Officer, Transportation and	
		Electric Power Team, Project	
		Management Group I, Grant Aid	
		Management Department	
Mr. Hisashi MUTO	Chief Consultants / Road Traffic	Japan Engineering Consultants	
	Planner	Co., Ltd	
Mr. Motoki OGAWA	Road Designer / Environment	-ditto-	
	and Social Consideration		
Mr. Shinsuke MORI	Natural Condition Survey	y -ditto-	
	(Topographical / Geological)		
Mr.Hiroaki TAKAHASHI	Construction Planner / Cost	-ditto-	
	Estimation		

# (2)BD Explanation

Name	Job Title	Occupation
Mr. Kyoji MIZUTANI	Leader	Representative of JICA Malawi
		Office
Mr. Hidetaka HASEBE	Project Coordinator	Senior Project Administration
		Officer, Transportation and
		Electric Power Team, Project
		Management Group I, Grant Aid
		Management Department
Mr. Hisashi MUTO	Chief Consultants / Road Traffic	Japan Engineering Consultants
	Planner	Co., Ltd
Mr. Motoki OGAWA	Road Designer / Environment	-ditto-
	and Social Consideration	

# 2. Study Schedule

# (1)Field Work

			Leader	Chief Consultants /Road Traffic Planner	Road Design/Environment and Social Consideration	Natural Condition Survey (Topographic and Geographic)	Construction Planner /Cost estimation	
	Mr. Hiroyuki HAYASHI Mr. Hisashi MUTO Mr/ Moto		Mr/ Motoki OGAWA	Mr. Shinsuke MORI	Mr. Hiroaki TAKAHASHI			
1	2006/11/18	Sat		Tokyo to Hong I Hong Kong to Johan	inesburg (SA287)			
2	2006/11/19	Sun		Johannesburg to Li AM Meeting with JI				
3	2006/11/20	Mon		Arrangement of Su				
4	2006/11/21	Tue	Tokyo to Hong Kong (JL735)	Lilongwe to Blantyre	Arrangement of Subcontract at Site			
5	2006/11/22	Wed	Hong Kong to Johannesburg (SA287) Johannesburg to Blantyre (SA172)	Discussion with Blantyre City Assembly Internal Meeting	Lilongwe to Blantyre			
6	2006/11/23	Thu						
7	2006/11/23	Fri		Meeting with Blantyre Assemb	bly			
8	2006/11/25	Sat		Site Survey		Tokyo to Hon	g Kong (JL735)	
9	2006/11/26	Sun	D	ocument arrangement / Site Su	IFVAV	Hong Kong to Joh	annesburg (SA287)	
9	2000/11/20	Sun		č			Lilongwe (SA170)	
10	2006/11/27	Mon		eting with Blantyre Assembly			ngwe to Blantyre	
				lantyre to Lilongwe CA Malawi Office	Concrete	, Asphalt, Aggregate plant	site view	
11	2006/11/28	Tue		of Local Government				
			Move from	Move from Lilongwe to	Supporting EIA	Topographic and	Collect Information of	
12	2006/11/29	Wed	Lilongwe to Lusaka	Blantyre	procedures		Geological Survey	the Material Plant
12	2000/11/29	wed	Report to EOJ	Preliminary Survey review and index of Result				
13	2006/11/30	Thu	Move from Lusaka to Uganda	Γ	Prainage and Pavement and	Land acquisition survey		
14	2006/12/1	Fri						
15	2006/12/2	Sat			Site Sur			
16	2006/12/3	Sun			Document arr	angement	<b>X 1 .</b>	
17	2006/12/4	Mon		Organization, system of Blantyre City Assembly, Activities of other donors, National Plan	Plan of General Plan Preparation of Traffic survey		Local contractor survey Preparation of Traffic Survey	
18	2006/12/5	Tue		Traffic survey		Topographic and	m ( ) )	
19	2006/12/6	Wed		Organization, system of	Traffic survey / Axle Load Survey	Geological Survey	Traffic Survey / Axle	
20	2006/12/7	Thu		Blantyre City Assembly,	Load Survey		Load Survey	
21	2006/12/8	Fri		Activities of other donors, National Plan	Rearrangement of Traffic Survey Result		Construction Method	
22	2006/12/9	Sat			Site Sur	vey		
23	2006/12/10	Sun			Document arr	angement		
24	2006/12/11	Mon			Preparation of M			
25	2006/12/12	Tue		Move from Blantyre to	Aeeting and discussion with		ntyre to Lilongwe	
26	2006/12/13	Wed		Lilongwe Report to JICA Malawi Office	Site/Draining/Bus Operation Circumstance Survey	Progress verification of geological survey	Collect Information of Procurement Price	
				Report to Min.of Local		Move from Lilo	ngwe to Blantyre	
27	2006/12/14	Thu		Move from Lilongwe to Lusaka procedure		Topographic and	Collect Information of	
$\vdash$				Report to EOJ Move from Lusaka to	Preparation of Site	Geological Survey	Procurement Price	
28	2006/12/15	Fri		Johannesburg(SA081)	Survey Report (Draft)			
29	2006/12/16	Sat		Johannesburg to Hong Kong(SA286) Johannesburg to Johannesburg (SA173), Site Survey			Survey	
30	2006/12/17	Sun			Johannesburg to Hong Kong (SA286), Hong Kong to Tokyo(JL732)		ation at Blantyre	
31	2006/12/18	Mon				Topographic and	Collect Information of	
32	2006/12/19	Tue				Geological Survey	Procurement Price	
33	2006/12/20	Wed					Move from Blantyre to Johannesburg(SA173)	
34	2006/12/21	Thu					Collect Information of	

35	2006/12/22	Fri				construction circumstance at Johannesburg
36	2006/12/23	Sat			Move from Blantyre	
37	2006/12/24	Sun			to Johannesburg (SA173) Johannesburg to Hong Kong(SA286) Hong Kong to Tokyo(JL732)	Move from Johannesburg to Hong Kong(SA286) Hong Kong to Tokyo(JL732)
			Conference	Move	Field Work	

# (2)BD Explanation

			Leader	Project Coordinator	Chief Consultants /Road Traffic Planner	Road Design/Environment and Social Consideration	Natural Condition Survey (Topographic and Geographic)	Construction Planner /Cost estimation
			Kyoji	Hidetaka			Mr.	
			MIZUTANI	HASEBE	Mr. Hisashi MUTO	Mr/ Motoki OGAWA	Shinsuke MORI	Mr. Hiroaki TAKAHASHI
1	2007/4/9	Mon			Tokyo - Johani	nesburg - Lilongwe		
2	2007/4/10	Tue	Meeting with JICA Malawi Office		Meeting with JICA Malawi Office			
3	2007/4/11	Wed	Explanation and meeting with Blantyre Assembly		Explanation and meeting with Blantyre Assembly			
					Move from Li	longwe to Blantyre		
4	2007/4/12	Thu			Meeting with	Blantyre Assembly		
5	2007/4/13	Fri						
6 7	2007/4/14 2007/4/15	Sat Sun		Tokyo - Johannesburg - Lilongwe	Site Survey / Document arrangement Move from Blantyre to Lilongwe			
					Internal Meeting			
8	2007/4/16	Mon		ith JICA / Meeting and				
9	2007/4/17	Tue		eting and discussion with				
10	2007/4/18	Wed	Finalization and signing of M/D / Meeting with JICA					
11	2007/4/19	Thu	Move from Lilongwe to Lusaka Report to EOJ					
12	2007/4/20	Fri		Lusaka -				
13	2007/4/21	Sat	Move from Lusaka to Lilongwe	Johannesburg - Singapore - Tokyo	Lusaka - Johannesburg - Hong Kong - Tokyo			
			Conference		Move		Field Work	

#### 3. List of Parties Concerned in the Recipient Country

### **POSITION**

Ministry of Finance	
1. Hon.G. Gondwe	Minister
2. T.A.Kalebe (MP)	Deputy Minister
3. R.P. Mwadina	Secretary to the Treasury
4 C.C. Kulemeka	Director, Revenue Dept.
5. Dr. Naomi Ngwira	Director, Debt and Aid Dept.
6. Lowis Loti	Principal Debt and Aid management officer

#### **Ministry of Local Government and Rural Development**

1.	W.W.Samute	Principal Secretary
2.	G.C.Mkondiwa	New Principal Secretary
3.	S.N.M.Ligomeka	Director of Local Government Services
4.	Lucky Sikwese	Deputy Director of Planning

### **Ministry of Transport and Public Works**

1. Jeremy Martin Technical Assistant to the Planning Department

Zone Engineer

Acting Chief Executive Officer

Urban & District Senior Engineer

#### **Department of Environment Affairs**

1.	J.J Shibale(Mrs)	Executive Officer (EIA)
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### **National Road Authority**

1.	Y. Kachiwala

- 2. Amos Phiri
- 3. Emmuanuel J. Mataka

#### **Blantyre City Assemby**

1.	S.M.Kalimba (Ms.)	Chief Executive, Blantyre City Assembly
2.	K.Kantwela	Director of Engineering Services
3.	C.Chanza	Chief Town Planning Officer
4.	G. Kidega (Ms.)	Asst. Director of Engineering Services
5.	S.M.Kuyeli	Asst. Director of Engineering Services
6.	M.A.Phiri	Civil Engineer
7.	Y.M Nyienda	Civil Engineer
8.	H.C.Kumwenda	Road Supervisor
9.	J.Kawa (Ms.)	Road Supervisor

#### ESCOM Ltd.(Electric Supply Corporation)

1. Peter C. Mtonda	Regional Manager
1. Peter C. Mtonda	Regional Manager

#### Water Board

1. M. M. Chipanthenga

Controller of Project

#### **Malawi Telecommunication Limited**

1. Bob Masache

Walter Senger

Controller of Projects Consultant Networks

# European Union (EU)

1. Dr.Chris Ingelbrecht

First Counselor (Infrastructure)

### 4. Minutes of Discussion

Minutes of Discussions are attached on the following pages.

# Minutes of Discussions on the Basic Design Study on the Project for the Improvement of Blantyre City Roads in the Republic of Malawi

Referring to the results of Preliminary Study conducted in July 2006, the Government of Japan decided to conduct a Basic Design Study on the Project for the Improvement of Blantyre City Roads (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Malawi the Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Hayashi Hiroyuki, Senior Project Administration Officer, Transportation and Electric Power Team, Project Management Group I, Grant Aid Management Department of JICA, and is scheduled to stay in the country from November 18 to December 23, 2006.

The Team held discussions with the concerned officials of the Government of Malawi. In the course of the discussions, both sides have confirmed the main items as described in the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Blantyre, November 24, 2006

Hayashi Hiroyuki Leader Basic Design Study Team Japan International Cooperation Agency Japan sulkal 6

S. M. Kalimba (Ms.) Chief Executive Blantyre City Assembly The Republic of Malawi

Witness:

R. P. Mwadiwa Secretary to the Treasury Ministry of Finance The Republic of Malawi

W. W. Samute Principal Secretary Ministry of Local Government and Rural Development The Republic of Malawi

### ATTACHMENT

#### 1. Objective of the Project

The objective of the Project is to improve the trunk roads in Blantyre and Limbe areas to ensure safe and smooth traffic flow in the city.

#### 2. Project Site

The site of the Project is shown in Annex-1.

#### 3. Responsible and Implementing Organizations

3-1. The responsible Ministry is Ministry of Local Government and Rural Development (MLGRD). The organization chart of the responsible Ministry is shown in Annex-2.

3-2. The implementing organization is Blantyre City Assembly (BCA). The organization chart of the implementing organization is shown in Annex-3.

#### 4. Items requested by the Government of Malawi

After discussions with the Team, the items described below were requested by the Malawian side;

To improve Chipembere Highway (6.55km) and Livingstone Avenue (0.92km) including the following components;

- Widening of the existing roads from 2-lane to 4-lane,
- Rehabilitation of existing roads and service roads.
- Replacement of traffic signal intersections with roundabout intersections (Mahatma Gandhi and Johnstone intersections),
- Improvement of 6 roundabout intersections (Larji Kurji, Clock Tower, Chichiri, Maselema, Yianikis, Illovo intersections)
- Improvement of the drainage system along the roads,
- Installation of bus lay bye (about 15 points),
- Installation of pedestrian walkway,
- Installation of kerb stones.
- Installation of traffic signs and road markings,
- Installation of street lights.
- Installation of pedestrian crossings (at school, college, hospital and shopping centers),
- Installation of pedestrian crossings signals, and
- Training of staff in the management and maintenance of the infrastructure.

JICA will assess the appropriateness of the request and will report its findings to the Government of Japan.

#### 5. Japan's Grant Aid Scheme

- 5-1. The Malawian side understands the Japan's Grant Aid scheme (for General Project) explained by the Team, as described in Annex-4.
- 5-2 The Malawian side will take the necessary measures, as described in Annex-5, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

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#### 6. Schedule of the study

- 6-1. The Team will proceed with the study in Malawi until December 23, 2006.
- 6-2. JICA will prepare the draft report in English and dispatch a mission to Malawi to explain its contents around the middle of April 2007.
- 6-3. In the case that the report is accepted in principle by the Government of Malawi, JICA will complete the final report and send it to the Government of Malawi by June 2007.

#### 7. Other Relevant Issues

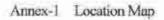
- 7-1. Both sides agreed that the Malawian side should conduct the necessary procedure concerning the environmental impact assessment (EIA) including stakeholder meetings for effective public participation about the outline of the Project based on the Environmental Management Act (EMA) of Malawi and obtain its approval and/or certificate from the Department of Environmental Affairs (DEA) by the end of March 2007. The Malawian side should inform the Team of the detailed procedure(s) and schedule for the above-mentioned EIA by December 15, 2006.
- 7-2. Both sides agreed that the Malawian side shall secure the land necessary for the Project in due process stipulated in the Land Acquisition Act of Malawi by the end of September 2007.
- 7-3. Both sides agreed that the following undertakings shall be taken by the Malawian side at the Malawian expenses:
  - Land acquisition for both temporary and permanent use of lands,
  - Relocation of existing utilities (power lines, telecommunication lines, and water & sewer lines).
  - Necessary arrangement for vehicles to make a detour or set up a diversion at necessary sections during the construction of roads including obtaining necessary permissions from local police,
  - Budget allocation for the tax exemption of imported materials.
  - Securing of temporary yard(s).
  - To identify and facilitate access to borrow pit(s) and quarry site(s).
  - To identify site(s) for waste disposal, and
  - Maintaining the security at the sites and yards for the Project including police patrol.
- 7-4. The Malawian side shall secure enough budget and personnel necessary for the operation and maintenance of the facilities implemented by the Project, including the periodical maintenance work after the completion of the Project.

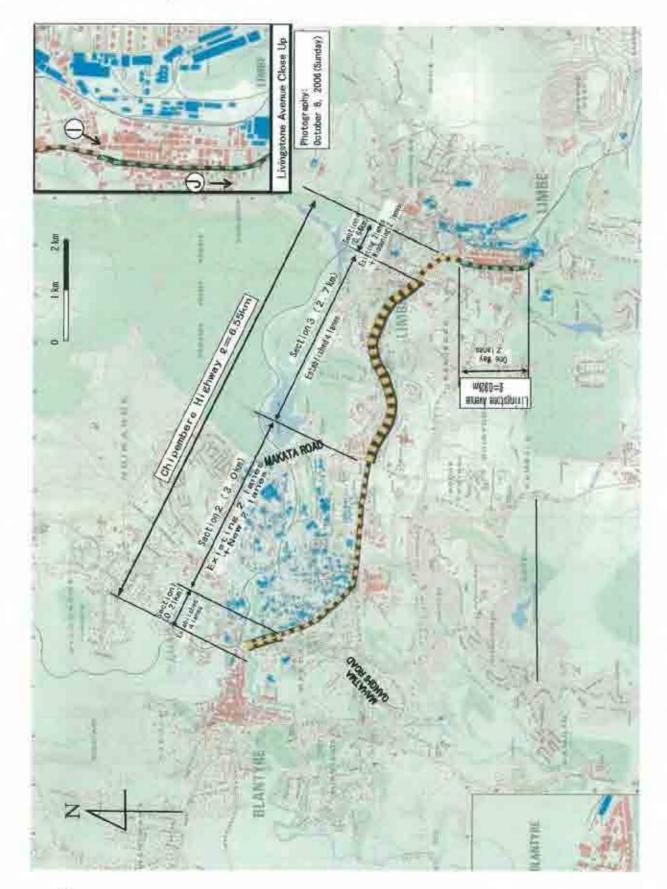
7-5. Both sides agreed that the Malawian side should establish suitable measures including instruction seminars for traffic safety to control the traffic violators, especially overloading, which are essential for appropriate operation and maintenance of the roads improved by the Project.

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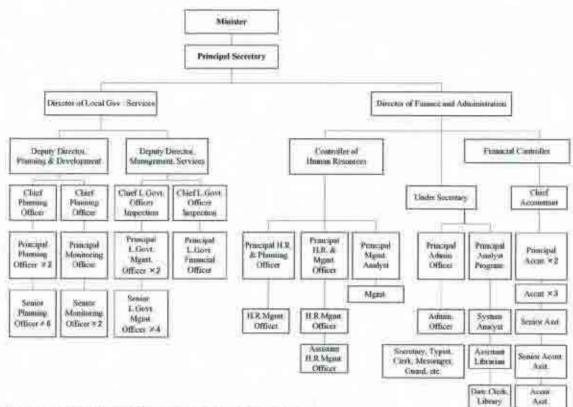


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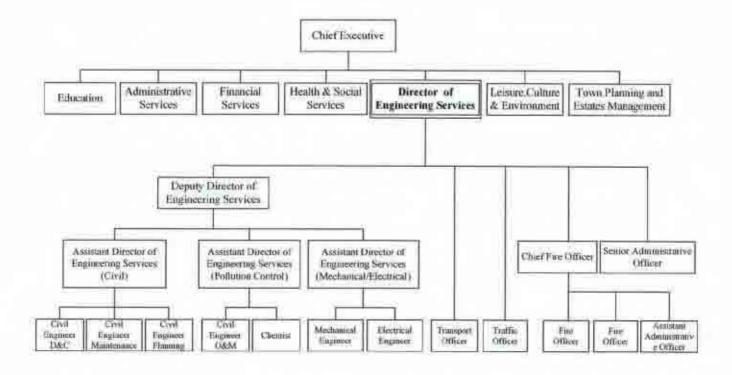
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Appendix-10



#### Annex-2 Organization Chart of Ministry of Local Government and Rural Development

Annex-3 Organization Chart of Blantyre City Assembly



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#### Japan's Grant Aid Scheme for General Project

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

Japan's Grant Aid Scheme is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of	(The Notes exchanged between the Governments of Japan
Implementation	and the recipient country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the smooth implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- 13- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- # Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view;
- 3 8- Confirmation of items agreed upon by both parties concerning the basic concept of the Project.

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5- 6- Preparation of a basic design of the Project.

57 7- Estimation of cost of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For smooth implementation of the Study, JICA uses registered consulting firms. JICA selects firms based on proposals submitted by interested firms. The firms selected carry out a Basic Design Study and write a report, based upon terms of reference set by JICA.

The consulting firms used for the Study are recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

#### 3. Japan's Grant Aid Scheme

1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as natural disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

 Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

#### 4) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the

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Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese laxpayers.

5) Undertakings required to the Government of the recipient country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as the following:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the Project,
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expense and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the verified contracts,
- (6) To accord Japanese nationals, whose services may be required in connection with supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.
- 6) "Proper Use"

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

7) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

#### 8) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.

#### 9) Authorization to pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

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No.	Items	To be covered by Grant Aid	To be covered by Recipient Country
1	To secure land		
2	To clear, level and reclaim the site when needed		
3	Relocation, improvement and/or repair of existing utilities (power lines, telecommunication lines, water lines, etc.), if necessary.		٠
4	To bear the following commission to the Japanese bank for the banking services based upon the B/A		
	1) Advising commission of A/P		۲
	2) Payment commission		۲
5	To ensure prompt unloading and customs clearance at port of disembarkation in recipient country		
	<ol> <li>Marine (Air) transportation of the products from Japan to the recipient country</li> </ol>	•	
	<ol> <li>Tax exemption and custom clearance of the products at the port of disembarkation</li> </ol>		•
	<ol> <li>Internal transportation from the port of disembarkation to the project site</li> </ol>	•	
6	To accord Japanese nationals ,whose services may be required in connection with the supply of the products and the services under the verified contract ,such facilities as may be necessary for their entry into Malawi and stay therein for the performance of their works		•
7	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Malawi with respect to the supply of the products and services under the verified contracts		
8	To maintain and use properly and effectively the facilities constructed and equipment provided under the Japan's Grant		٠
9	To bear all the expenses, other than those to be borne by the Japan's Grant, necessary for construction of the facilities		٠

# Major Undertakings to be taken by Each Government

(B/A: Banking Arrangement, A/P: Authorization to Pay)

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#### ATTACHMENT

### Minutes of Technical Meeting -Blantyre City Assembly and JICA Basic Study Team for the Project for the Improvement of Blantyre City Roads in Blantyre

- 1. Typical Cross Section
  - 1) Existing 4 lane section of Chipembere Highway will be the existing width.
  - 2) Livingstone Avenue will follow the existing width
  - Existing 2 lane section of Chipembere Highway between Clock Tower RA and Chichiri RA will be as shown on Fig-1.
  - Existing 2 lane section of Chipembere Highway between Yianakis RA and Stanbic IC will be 3 lanes as shown on Fig-2.

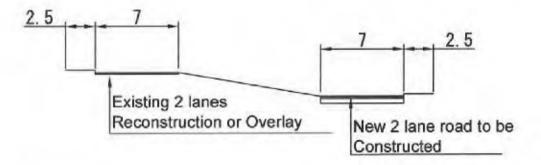


Fig-1 Typical Cross Section of Chipembere Highway (between Clock Tower to Chichiri RA) (All measurements in meters)

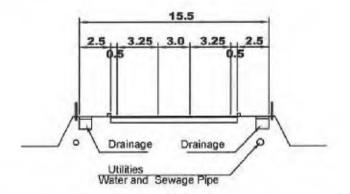


Fig-2 Typical Cross Section of Chipembere Highway (between Yianikis RA to Stanbic IC) (All measurements in meters)

- 2. Drainage
  - 1) Drainage water will be discharged at end of flow indicated on Fig-3.
  - 2) Drainage will be lined with concrete to avoid erosion.

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- 3) Drainage will be basically placed at both sides along the entire road.
- 3. Bus Lay Bye (refer Fig-3)
  - 1) Existing Bus Lay Byes including those indicated below will be improved as necessary.
    - Kristwick
    - · Ginnery Corner
    - Polytechinic
    - Shoprite
    - Toyota Malawi
    - Yanakis
  - 2) Establish New Bus Lay Bye at location indicated below
    - Hellenic Community
    - Kriss and Co
    - Lotus Moters
- 4. Kerb Stone
  - 1) Kerb Stone will be established along both sides of the entire section.
  - Existing Kerb Stone which is in good condition will be re-used and not replaced by the new one.
  - 3) Pedestrian walkway will be established on entire length with the width of 2.5m to accommodate cycle traffic as well.
- 5. Intersection
  - 1) Mahatma Gandhi Intersection and Johnstone Intersection will be replaced with roundabout instead of traffic signals.
  - 2) Existing Roundabouts mentioned below will be improved as necessary as pavement, drainage and traffic safety measures.
    - Lalji Kurji
    - · Clock Tower
    - Chichiri
    - Maselema
    - Yianikis
    - Illovo
- 6. Traffic Signs and Road Marking
  - 1) Missing traffic signs will be replaced.
  - 2) New traffic sign will be placed along the new carriageway at proper location.
  - 3) Road marking such as center line, shoulder line, pedestrian crossing is needed including Kerb painting.
  - 4) Place reflectors at proper location.
- 7. Street Light
  - 1) Street light will be installed for traffic safety where people are concentrated such as Bus Lay Bye, Intersection, Hospital, Church, School, etc

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- Re-Positioning of existing poles which will be affected by the construction will be considered after repair.
- 8. Pedestrian Crossing
  - 1) Installation of Pedestrian Crossings at schools, Hospitals, Colleges, Shopping Centre will be provided.
  - 2) Speed reduction measures will be provided such as traffic signs, humps and rumble strips.
- 9. Pavement
  - Surface of the carriageway will be covered with hot mix asphalt.
  - Semi-flex pavement will be considered at Roundabouts, Bus Lay Bye and Steep Slope Sections.
  - 3) Pedestrian footpath/cycle track will be paved.
- 10. Design period and Design speed
  - 1) Design period will be 15 to 20 years.
  - 2) Design speed will be 60km/hr basically.
- 11. Design Standards

Regarding the design Standards, determination will be done by comparing between Southern Africa Development Committee (SADC), Japanese and National Road Authority (NRA) standards.

12. Rehabilitation of Existing Roads and Service Roads

Either Re-Construction or Rehabilitation will be considered on the service road.

- 13. Alignment
  - 1) Existing Road and Roundabout will follow the existing alignment basically.
  - 2) New carriageway will be dictated by the topographic and existing structure along the road.
  - 3) Shire Bus Line will not be included as the control point of the design.
- 14. Training of Maintenance Staff

On the Job Training during the project implementation and the Training on the Maintenance programming either in Japan or in the third countries will be requested to obtain management, technical and operational skills for road maintenance and rehabilitation to keep Blantyre City Roads in good condition after the construction is completed.

As regards the general obligations of the recipient Government, Blantyre City Assembly (BCA) agrees as follows:

1. Land Acquisition

BCA will acquire the necessary land for implementation of the Project by the end of September 2007.

2. Security

BCA with assistance of Malawi Police Service will ensure the safety of the Consultants/Contractors

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workers and equipments during the implementation of the Project.

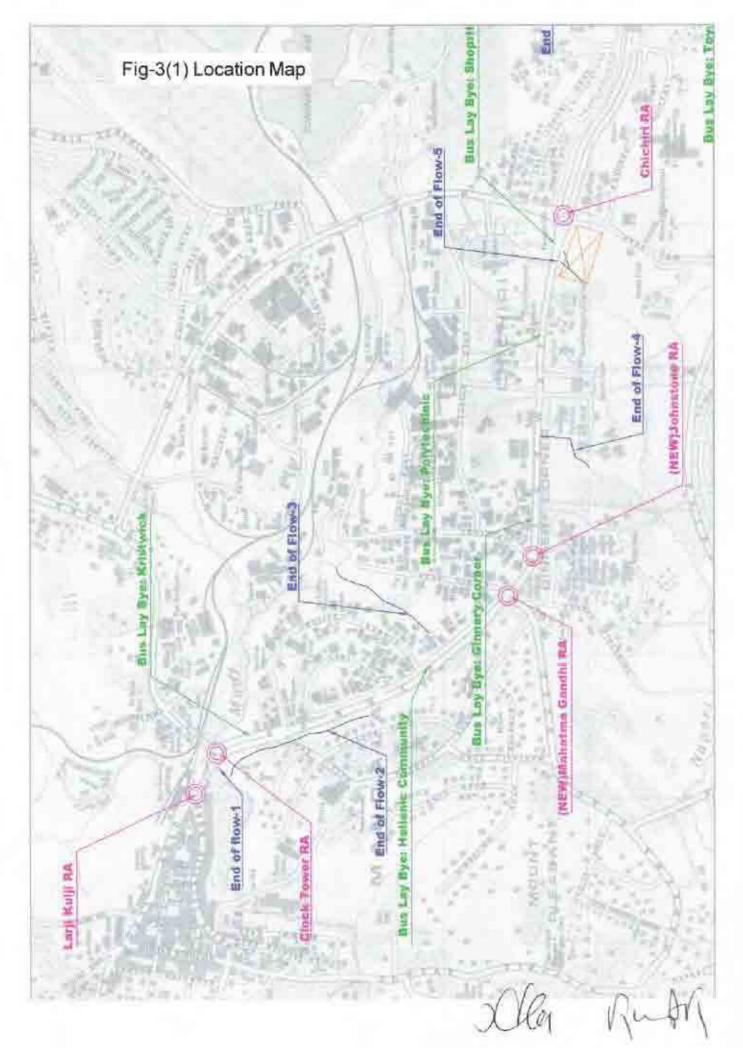
- Secure land for construction yard and to establish Asphalt Plant BCA will secure land for construction yard and to establish asphalt plant.
- Relocation of existing utilities BCA will relocate or reinforce the affected utilities by the end of September 2007.
- Budget allocation for the tax exemption of imported materials
   BCA will take necessary measures for exemption of VAT and imported materials during the Project.
- 6. EIA time table

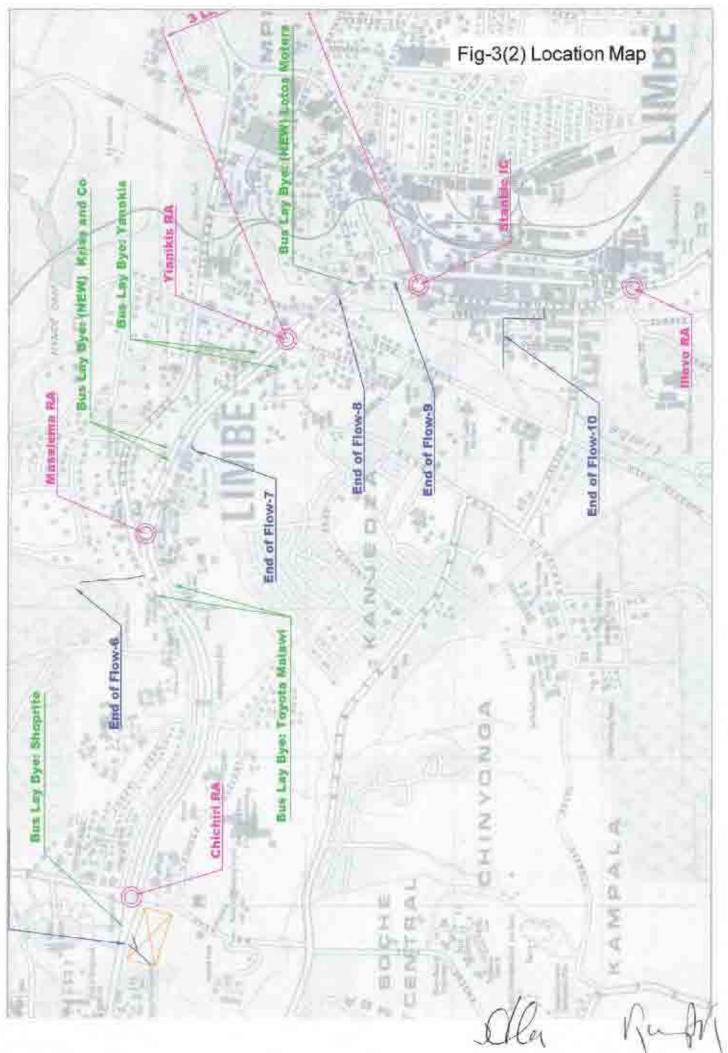
Regarding the Environment Impact Assessment (EIA), BCA will take necessary activities to get the certificate from EAD (Environment Affairs Department) by the schedule as shown on the attached letter.

7. Stake holder meeting and Acceptance

BCA will conduct Stake holders meeting as indicated below to get the acceptance from the Stake holders.

Date	Instruction
8 <sup>th</sup> January, 2007	
10::00am -12:00 noon	Media House <ul> <li>Radio</li> <li>Television</li> <li>Print Media</li> </ul>
2:30pm -4:30pm	Public Institutions <ul> <li>Hospital</li> <li>Churches</li> <li>Educational Institutions</li> </ul>
9th January, 2007	
10:00am -12:00 noon	People Living Along the main road <ul> <li>Business</li> <li>Residents</li> </ul>
2:30pm -4:30pm	Opinion Leaders     Members of Parliament     Chiefs     Community Development Committee
10th January, 2007	
9:00am -12:00 noon	Public Utility Services <ul> <li>Electricity</li> <li>Water</li> <li>Communication</li> <li>Sewer</li> </ul>
11th January, 2007	
	Road Users         • Minibus association of Malawi         • Truck Companies         • Road Traffic Department         • Road Safely Council         • Traffic Police         • Ministry of Works and Public Affairs         • Consumer Association of Malawi





Appendix-21



# The City Assembly of Blantyre

All correspondences to be addressed av-

THE CHIEF EXECUTIVE TELEPHONE No. 670 211 TEL ADDRESS "CITY" TELEX No. 44530 FAX No. 265 670 417 # December 2005

Ref: EAA/36/1

THE SECRETARIAI TOWN HALL CIVIC CENTRE PRIVATE BAG 67 HLANTYRE MALAWI

The Chief Consultant, Blantyre City Road Basic Design Study Team. Blantyre.

Dear Sir.

#### SCHEDULE OF EVENTS FOR EIA STUDY ON BLANTYRE CITY ROADS IMPROVEMENT PROJECT.

Please find attached the schedule of activities which in essence is a procedure for us to get a certificate from the government on environmental impact assessment for the Blantyre city roads improvement project (Chipembere highway and Livingstone Avenue).

I hope you will find the above in order.

whette. K.L.A. Kantwein

Director of Engineering Services For: Chief Executive

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#### SCHEDULE OF EVENTS FOR EIA STUDY ON BLANTYRE CITY ROADS MPROVEMENT (CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

Item No.	Activity	Time frame	Expected Dateline
1	Preparation and submission of project brief	1 week	18/12/06
2	Feedback on the project brief review from EAD	1.5 Weeks	29/12/06
3	EIA study and submission	4 Weeks	30/01/07
4	Feedback for EIA study review by EAD	3 Weeks	20/02/07
5	Incorporation of comments from EAD as a revision of EIA report	1 Week	27/02/07
ĥ,	Resubmission of the revised EIA report to EAD	1 Week	6/03/07
7	Approval and certification of EIA study by Malawi National Council for the environment.	3 Weeks	28/03/07

Note: EAD stands for Environmental Affairs Department.

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### ATTENDANCE LIST

## NAME

### POSITION

Blantyre City Assembly

1. S.M.Kalimba (Ms.)	Chief Executive, Blantyre City Assembly
2. K.Kantwela	Director of Engineering Services
3. C.Chanza	Chief Town Planning Officer
4. G Kidega (Ms.)	Asst. Director of Engineering Services
5. S.M.Kuyeli	Asst. Director of Engineering Services
6. M.A.Phiri	Civil Engineer
7. Y.M Nyienda	Civil Engineer
8. H.C.Kumwenda	Road Supervisor
9. J.Kawa (Ms.)	Road Supervisor

JICA Basic Study Team (Japan Engineering Consultants Co., Ltd)

1.	MUTO Hisashi	Chief Consultant, Road Traffic Planner
2.	OGAWA Motoki	Road Designer, Environment and Social Consideration
3.	MORI Shinsuke	Natural Conditions Surveyor (Topographic, Soil)
4.	TAKAHASHI Hiroaki	Construction Planner, Cost Estimator

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# Minutes of Discussions on Basic Design Study on the Project for the Improvement of Blantyre City Roads in the Republic of Malawi (Explanation of Draft Report)

In November 2006, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on the Project for the Improvement of Blantyre City Roads in the Republic of Malawi (hereinafter referred to as "the Project") to the Republic of Malawi (hereinafter referred to as "Malawi"), and through discussions, field survey and technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain and to consult with concerned officials of the Government of Malawi on the contents of the draft report, JICA sent to Malawi the Basic Design Explanation Team (hereinafter referred to as "the Team"), which was headed by Mr. Kyoji Mizutani, Resident Representative, JICA Malawi Office, from April 10 to April 19, 2007.

As a result of discussions, both sides confirmed the main items described in the attached sheets.

Lilongwe, April 18, 2007

Kyoji Mizutani

Leader Basic Design Explanation Team Japan International Cooperation Agency

S. M. Kalimba (Ms.) Chief Executive Blantyre City Assembly The Republic of Malawi

R. P. Mwadiwa Secretary to the Treasury Ministry of Finance The Republic of Malawi

G. C. Mkondiwa<sup>4</sup> Principal Secretary Ministry of Local Government and Rural Development The Republic of Malawi

#### ATTACHMENT

#### 1. Components of the Draft Report

The Malawian side agreed and accepted in principle the contents of the draft report of Basic Design Study explained by the Team.

The Malawian side, however, requested the following items on the contents of the design.

#### 1-1. Access Points on 4-lane section

Regarding the access points near industrial and institutional areas, the Malawian side requested that the final points should be modified based on the consultations by Blantyre City Assembly (hereinafter referred to as "BCA") with stakeholders involved. Both sides confirmed that the Malawian side would hold the stakeholder meetings in two weeks' time, and inform the results to JICA Malawi Office by May 3, 2007. JICA will examine its appropriateness and reflect it in the Final Report.

#### 1-2. Improvement and/or Rehabilitation of the Existing Roundabouts

#### (1) Mahatma Gandhi Roundabout

Regarding Mahatma Gandhi Roundabout, the Malawian side requested to add one more storage lane for right turning to ensure smooth traffic flow at this roundabout. The Team will bring this request to the JICA HDQ, and JICA would examine its appropriateness.

#### (2) Lalji Kurji Roundabout

Regarding the Lalji Kurji Roundabout, the Malawian side requested to modify the shape, which would change the existing function as a Roundabout, for the introduction of new one way system within the city center in Blantyre. The Team pointed out that stakeholders had not yet been informed about this change. Consequently the Team answered that this request could not be acceptable. In case the new traffic system will be introduced, the Malawian side will control traffic flow at this interchange by installation of fences and/or barriers, deployment of traffic Police, etc.

#### 2. Japan's Grant Aid Scheme

The Malawian side reconfirmed the Japan's Grant Aid scheme and the necessary measures to be taken by the Malawian side as explained by the Basic Design Study Team and described in the Annex-4 and 5 of the Minutes of Discussions signed by both sides on November 24, 2006.

#### 3. Schedule of the Study

JICA will complete the Final Report in accordance with the confirmed items and send it to the Malawian side by the end of June 2007.

#### 4. Other Relevant Issues

- 4-1. Both sides agreed that the draft report and the final report of the Basic Design Study are confidential and should never be duplicated or released to any outside parties before the signing of all the Contract(s) for the Project.
- 4-2. Through the Preliminary Study and Basic Design Study for the Project, both sides agreed that the Project would have no significant environmental and social impact. Based on the results, BCA submitted a Project Brief to Environmental Affairs Department of Malawi (hereinafter referred to as "EAD") on January 25, 2007, and explained the above-mentioned condition. In response to the Project brief, EAD presented the view that the approval of EIA was required for the implementation of the Project with the letter issued on February 16, 2007, attached as Annex-1.

In response to the letter, BCA had discussions with EAD and consequently decided to conduct an

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EIA and explained the current condition and the plan for the approval as follows:

- (1) BCA prepared EIA Report and submitted it to EAD on April 11, 2007.
- (2) EAD will hold a Technical Committee on Environment meeting for the Project (hereinafter referred to as "TCE") on April 25, 2007, which has already been arranged and fixed.
- (3) After the TCE meeting is held, EAD will give notice of the results to BCA and to JICA Malawi Office as carbon copy immediately.
- (4) If the TCE meeting concludes that the Project is recommended, EAD will hold a National Council on Environment meeting for the Project within 2weeks and issue a letter for the approval of EIA for the Project by the beginning of May, 2007.

The Team indicated that in case the progress of the EIA procedure was delayed, the appraisal by the Government of Japan would be delayed consequently.

- 4-3. The Malawian side shall secure the land necessary for the Project (including the land for temporary yards and parking, detour during the construction etc.) based on the contents of Draft Report by the end of September, as attached Annex-2.
- 4-4. The Malawian side shall relocate the existing utilities (power lines, telecommunication lines, water lines, etc.), existing obstacles necessary for the Project based on the contents of Draft Report. Tentative schedule for these activities is shown on Annex-3.
- 4-5. Both sides confirmed that the following undertakings should be taken by the Malawian side at the Malawian expenses.
  - Improvement and/or repair of existing utilities (power lines, telecommunication lines, water lines, etc.), where necessary.
  - (2) Necessary arrangement for vehicles to make detour or set up a diversion at necessary sections in consultation with contractor.
  - (3) Necessary arrangement for the tax exemption of import materials and equipment and timely refunding for the exemption of VAT for purchase of local products and services.
  - (4) Clearance of the site.
  - (5) Securing of site for disposal of waste.
  - (6) Maintaining the security at the sites for the Project.
  - (7) Public relations and dealing with any complaints raised by affected persons.
  - (8) Identification of underground utilities located within the site and exemption of contractor's responsibility in case of occurrence of any damage against unidentified utilities.
  - (9) Coordination to relevant agencies regarding traffic control during construction.
  - (10) Necessary arrangement and assistance for issuing of VISA for concerned persons.
- 4-6. The Malawian side shall secure enough budget and personnel necessary for the operation and maintenance of the facilities improved by the Project, including the periodical maintenance work after the completion of the Project.
- 4-7. Both sides confirmed that it is necessary to control over-loaded vehicles in order to make road maintenance rational, and accordingly both sides reconfirmed that the Malawian side should establish suitable measures for traffic safety and control especially overloading traffic, which are essential for appropriate operation and maintenance of the roads improved by the Project.

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4-8. The Malawian side requested the Team to carry out the counterpart training in Japan or Third County on road management and maintenance as a technical cooperation by JICA. Both sides agreed that another official request will need to be submitted by the Malawian side to the Government of Japan through JICA Malawi Office.

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(Annex-1)

Telephone: 01 771 111 Telefax No.: 01 773 379 Our Reference No.: EAD/99/7/5 Your Reference No.....

Communications should be addressed to: The Director of Environmental Affairs



ENVIRONMENTAL AFFAIRS DEPARTMENT LINGADZI HOUSE CITY CENTRE PRIVATE BAG 394 LILONGWE 3 MALAWI

16th February 2007

The Chief Executive Blantyre City Assembly P/Bag 67 Blantyre

Dear Sir,

#### REVIEW OF PROJECT BRIEF FOR CHIPEMBERE HIGHWAY AND LIVINSTONE AVENUE

Following the submission of your Project brief for Chipembere Highway and Livingstone Avenue to Environmental Affairs Department, and subsequent review of the same by the Technical Committee on Environment (TCE) on 13<sup>th</sup> February 2007, I wish to advise you that Environmental Impact Assessment (EIA) is required for the proposed project.

You are therefore advised to prepare your EIA report based on the attached Terms of Reference (TORs). You are welcome to contact the Department on any clarification that you may require.

We look forward to your continued cooperation on the matter.

Yours Sincerely,

Dr. A.M. Kamperewera For: THE DIRECTOR OF ENVIRONMENTAL AFFAIRS

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#### TERMS OF REFERENCE FOR THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) OF THE PROPOSED BLANTYRE CITY ROADS (CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

- 1. Provide a full description of the nature of the project with respect to the name of the proponent, the postal and physical address, the spatial location of the site for the project, the estimated cost of the project, the length of the road, the number of people to work on the area, the lifespan of the project.
- 2. Examine the existing physical and socio-economical conditions of the proposed area by identifying and analyzing:
  - Geology and soil conditions of the area;
  - Site topography and drainage systems ;
  - Temperature and rainfall pattern;
  - · The scope of vegetative resources of the area;
  - The scope of fauna within the area;
  - · Existing human land uses (e.g. existing building, commercial and institutional uses, traffic volume etc)
- 3. Provide a site-specific map of the area (Scale 1:25,000) showing the proposed project site and scale of (1:5,000) showing existing establishments in the proposed area and surrounding areas. A site plan for the project should also be provided.
- 4 Describe the major activities to be undertaken during preconstruction, construction (including improving the drainage, bus stops, pedestrian walkway and pavements) operation and decommissioning.
- 5 Identify the potential environmental impacts associated with the proposed project, focusing on both the positive and negative effects as well as effects to the biophysical, social, economic and cultural components of the environment. The potential impacts to be assessed to include those related to:
  - · Project location (e.g. demolition of existing buildings within the road reserves impact on cultural sites);
  - · Construction works (e.g. soil erosion, traffic jams, blocking of foot paths disposal of construction spoils); and
  - Project operation
- Prescribe appropriate measures /strategies to eliminate, reduce, reverse 7 or mitigate the identified negative impacts/effects identified in 6 above including the measures to enhance the positive effects.
- 8 Propose an Environmental Management Plan (EMP) which should be in tabular form which should specify the predicted impacts, mitigation measures/enhancement measures, schedule of these measures, costs to undertake these measures, and responsible persons and institutions and monitoring plan for the project.

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- 9 Propose an Environmental Monitoring Plan by which all mitigation measures recommended in EMP will be monitored. The plan should include activities, the frequency of monitoring, the key monitoring indicators and the authorities responsible for monitoring.
- 10 Undertake public consultation to ensure that all interested and affected stakeholders are involved in the EIA process and incorporate their views into the EIA report. Evidence of consultation should be provided in the report.
- 11 Outline the relevant policy and legal framework pertaining to the project and their implication on the project. Reference should be made but not limited to Environmental Management Act, National Environmental Action Plan, Roads Act, Public Streets Act, Town and Country Planning Act, Local Government Act, National Environmental Policy and other relevant legislation.

#### PROPOSED TEAM OF CONSULTANTS

To adequately address the core issues of the study, it is advisable that the team should at least be composed of:

- EIA Expert
- Civil Engineer/Transport Planner/Municipal Engineer
- Town Planner

#### RECOMMENDED FORMAT /LAYOUT OF THE EIA REPORT

It is recommended that the preparation, presentation, structure of EIA report should as much as possible follow the format in the Guidelines for Environmental Impact Assessment in Malawi (December 1997)Pages 53-59.

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No.				Schedule	Schedule in Months		
	Activities			20	2007		
		Apr	May	Jun	Jul	Aug	Sep
1 Con	Confirmation of the Area to be secured for the Project	*					
2 Iden	Identification of Land and Propoerty owners						
3 Publ	Public Notice						
4 Ass	Assessment of the cost of Land and property						
5 Seno	Sending of the Evaluation Report to Central Government						
6 Exa	Examination by Central Government						
7 Fina	Finance Disbersment by Central Government						
8 Con	Conpensation for land and property owners						
9 Con	Completion of Land Securing						•

The Project for the Improvement of Blantyre City Roads Schedule for the Land Securing

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					Schedule in Months	Months			
No.	Activities				2007	7			
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
-	Confirmation of utilities to be affected by the Project	*							
5	Identification of Public Utilitiy owners		and the second						
3	Communication to owners of Public Utility								
4	Replacement Valuation for relocations								
5	Sending of the Valuation Report to Central Government			ALC: NO					
9	Examination of Valuation Report by Central Government								
7	Finance Disbersment by Central Government								
∞	Work for Relocation				Waiting for the				
6	Completion of the Relocation				Comprenon of Land				

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Appendix-33

(Annex-3)