

PD-ABP-042  
93886

UNCLASSIFIED

PROJECT PAPER  
ZIMBABWE  
URBAN UPGRADING AND COMMUNITY FACILITIES  
(613-HG-002)

UNCLASSIFIED

A

APPENDIX 3A, Attachment 1  
Chapter 3, Handbook 3 (TM 3:43)

<b>AGENCY FOR INTERNATIONAL DEVELOPMENT</b>		<b>1. TRANSACTION CODE</b>		<b>DOCUMENT CODE</b>					
<b>PROJECT DATA SHEET</b>		<input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete		Amendment Number					
COUNTRY/ENTITY ZIMBABWE		3. PROJECT NUMBER 613-0225 (613-HG-002)		3					
4. BUREAU/OFFICE AFRICA		5. PROJECT TITLE (maximum 40 characters) EPWORTH LOW COST SHELTER							
6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 1   2   3   1   8   7		7. ESTIMATED DATE OF OBLIGATION (Under "B" below, enter 1, 2, 3, or 4) A. Initial FY 8   5   B. Quarter <input checked="" type="checkbox"/> C. Final FY 8   5							
<b>8. COSTS (\$000 OR EQUIVALENT \$1 = )</b>									
<b>A. FUNDING SOURCE</b>		<b>FIRST FY 85</b>		<b>LIFE OF PROJECT</b>					
		B. FX	C. L/C	D. Total	E. FX				
AID Appropriated Total		375	25	400	375				
(Grant) ESF		( 375 )	( 25 )	( 400 )	( 375 )				
(Loan) HG					( 14,000 )				
Other U.S.									
Host Country									
Other Donor(s)									
<b>TOTALS</b>		375		400	14,375				
					14,400				
<b>9. SCHEDULE OF AID FUNDING (\$000)</b>									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ESF	720	860		NONE		400		400	
(2) HG	720		860		NONE		14,000		14,000
(3)									
(4)									
<b>TOTALS</b>						400	14,000	400	14,000
10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)						11. SECONDARY PURPOSE CODE			
		850	867	865					
12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)									
A. Code		BU		ENV					
B. Amount									
13. PROJECT PURPOSE (maximum 430 characters)									

To improve the quality of life for lower income people living in urban areas through urban upgrading.

14. SCHEDULED EVALUATIONS				15. SOURCE/ORIGIN OF GOODS AND SERVICES				
Interim	MM YY	MM YY	Final	MM YY	<input checked="" type="checkbox"/> 000	<input type="checkbox"/> 941	<input checked="" type="checkbox"/> Local	<input type="checkbox"/> Other (Specify)
	0   2   8   6	0   2   8   7		0   2   8   8				
16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)								

17. APPROVED BY	Signature <i>Roy A. Stacy</i>	Date Signed MM DD YY 0   5   3   0   8   4	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION MM DD YY 
	Title Director, USAID Mission ZIMBABWE		

B

URBAN UPGRADING AND COMMUNITY FACILITIES  
PROJECT - ZIMBABWE

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ACTION MEMORANDUM FOR THE ACTING ASSISTANT ADMINISTRATOR FOR AFRICA

FROM: AFR/PD,  Norman Cohen

SUBJECT: Authorization of the Urban Upgrading and Community Facilities Project for Zimbabwe

**Problem:** Your approval is requested for a \$14 million Housing Guaranty (FY'84) and a \$400,000 Economic Support Fund grant (FY'85) for the Government of Zimbabwe in support of the subject project.

**Project Description:** The U.S. \$14 million in HG loans and U.S. \$400,000 in grant funds will be used to plan, develop and implement the first urban upgrading project in Zimbabwe. The purpose of this project is to upgrade Epworth - a squatter settlement, and to provide a learning experience for the Ministry of Local Government and Town Planning and City of Harare to enable them to develop a more appropriate response to squatter problems. Presently, the GOZ takes adverse action against squatting by bulldozing. However with AID's assistance, the GOZ recognizes that informal settlements such as Epworth may represent useful additions to their housing stock.

The HG loan funds will be used to upgrade existing systems of water supply, sanitation, roads, electricity, and community facilities, and to generate employment and provide home improvement loans. Some families will be relocated from currently unsatisfactory areas to more suitable locations within Epworth. Facilities will be upgraded to the level affordable by the current residents. However, the layout and planning will be carried out in a manner to allow for further upgrading of all facilities and services as people's incomes increase over time.

The Ministry of Local Government and Town Planning (MLGTP) has established a Coordinating Committee to oversee the upgrading of Epworth. This Committee is chaired by MLGTP and includes the Ministry of Construction and National Housing (MCNH) and the Harare City Council (HCC).

At the outset MLGTP will appoint a full time Project Manager with a core staff. The core staff will be supplemented by other officials of the Ministry and the City of Harare (COH). The MLGTP will have the lead responsibility for planning and implementing the project, in close coordination with the COH.

In addition to the HG loan funds, \$400,000 of grant funds will be utilized for long term and short term training and technical assistance to implement the project and provide both institutional development and policy development support. One long term advisor will be needed for two years, to provide assistance in community organization, project planning and to carry out studies to understand better the squatter issues of Zimbabwe.

It is anticipated that at the end of the project the following will result:

1. Improvement in the living conditions of approximately 25,000 residents of Epworth.
2. Individual water connection for each household.
3. "Blair" modified septic sanitation system for all households in Epworth.
4. Tarred major and minor distribution roads for bus and other vehicle traffic plus limited access streets to some plots.
5. Community facilities including one police station, one health clinic, community hall, administrative office, one secondary school, bus shelters and markets and a post office.
6. Electrical power supply to community facilities and security lighting to all residents.
7. Resettlement loans for approximately 500 families.
8. Home Improvement Loans on approximately 1,500 plots.
9. Loans to build Blair toilets on approximately 3,500 plots.
10. Studies to better understand squatter upgrading phenomenon in Zimbabwe.
11. Ministry and City experience with implementation of an urban upgrading project.
12. Small enterprise plots and loans for employment generation.
13. Institutional Capacity and Policy Framework to develop an appropriate response to the squatter issue in Zimbabwe.

#### Project Management and Implementation

The Regional Housing and Urban Development Office for East and Southern Africa RHUDO/E&SA, in Nairobi, will be responsible for implementation of this project. Raj Chanda RHUDO/E&SA has been designated the Project Officer.

#### ECPR - Review of the Project

The ECPR meeting was held on June 14, 1984, and chaired by AFR/PD L. Hausman. The Project Review Committee meeting was chaired by AFR/PD Morgan Gilbert on June 12, 1984, and the following issue arose:

PPC's view is that the current onlending interest rate 9.75% to be offered to Epworth beneficiaries is low in comparison to the inflation rate (est. 12-14%) and suggested that a government subsidy exists to the beneficiaries. PPC requested a confirmation, that the 9.75% rate is consistent with other interest rates in Zimbabwe and appropriate for this project.

In response to this issue, PRE/H and USAID/Zimbabwe reported the actual GOZ Treasury borrowing costs to be 8.75% and that a spread exists of one percent for the GOZ Treasury. In addition, the City of Harare will charge Z\$3.00 per month per loan to cover its own cost of administering the loan. It was further clarified that the interest rates are adjusted annually to reflect the cost of money to the GOZ Treasury and the costs are passed onto the borrowers. All housing programs domestically and donor-originated utilize the present rate of 9.75%, which is a full percentage point above the Treasury's cost of borrowing. The ECPR concluded that even though the interest rate is less than Zimbabwe's overall rate of inflation (now about 12 percent), the inflation rate is strongly influenced by the high cost of foreign exchange. Therefore, the 9.75% rate as it relates to housing investments, which involve very little foreign exchange, is not considered a subsidized rate.

The Initial Environmental Examination performed in accordance with AID Regulation 16, recommended a negative threshold decision.

Recommendation: That you sign the attached (a) Housing Guaranty Authorization, (b) grant authorization for the technical assistance component.

Clearances: AFR/PD, L Hausman

DAA/AFR/ESA, R Carlson

GC/AFR, MA Kleinjan

AFR/DP, DWilson

AFR/SA, RWrin

AFR/PD/SAP, MGilbert

GC/H, BVeret

PRE/H DOLinger

Attachments:

- (a) Housing Guaranty Authorization
- (b) Grant Project Authorization
- (c) Initial Environment Examination
- (d) Project Paper

II. AUTHORIZATIONS

A. GUARANTY AUTHORIZATION

PROJECT 613-HG-002

Provided From: Housing Guaranty Authority

For: The Government of Zimbabwe

Pursuant to the authority vested in the Assistant Administrator, Bureau for Africa, by the Foreign Assistance Act (FAA) of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed fourteen million dollars (US\$14,000,000) in face amount, assuring against losses (of not to exceed one hundred per cent (100%) of loan invested and interest) with respect to loans, including any refinancing thereof, by eligible U.S. Investor(s) acceptable to AID and made to finance urban upgrading and community facilities projects in Zimbabwe.

These guaranties shall be subject to the following terms and conditions:

1. Term of Guaranty: The loans may extend for a period of up to thirty (30) years from the date of disbursement and may include such terms and conditions as shall be acceptable to AID. The guaranty of the loans shall extend for a period beginning with the first disbursement of the loans and shall continue until such time as the Investor(s) has been paid in full, pursuant to the terms of the loans.
2. Interest Rate: The rate of interest payable to the Investor(s) pursuant to the loans shall not exceed the allowable rate of interest prescribed, pursuant to Section 223(f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans made in the long term U.S. capital markets.
3. Government of Zimbabwe Guaranty: The Government of Zimbabwe shall provide for a full faith and credit guaranty to indemnify AID against all losses arising by virtue of AID's guaranty to the Investor or from non-payment of the guaranty fee.
4. Fee: The fee of the United States shall be payable in dollars and shall be one-half percent (1/2%) per annum to the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent (1%) of the amount of the loans authorized or any part thereof, to be paid as AID may determine upon disbursement of the loans.
5. Other Terms and Conditions: The guaranties shall be subject to such terms and conditions as AID may deem necessary.

9-9-27  
Date:

Walter S. ...  
Assistant Administrator for Africa  
(Acting)

B. GRANT PROJECT AUTHORIZATION

Name of Country: Zimbabwe  
Name of Project: Epworth Urban Upgrading and Community Facilities  
Project No. 613-0225

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Urban Upgrading and Community Facilities Project involving planned obligations of not to exceed US\$ 400,000 (Four hundred thousand dollars), in grant funds over a two year period from the date of authorization, subject to the availability of funds in accordance with the AID OYB/allotment process to assist in financing the foreign exchange and local currency costs for the project. The planned life of the project is three years from the date of initial obligation.
2. This project will provide technical assistance, training and related commodities to support the government of Zimbabwe's (GOZ) efforts in the upgrading of Epworth and to help GOZ gain a better understanding of problems of squatters and the upgrading process. The grant funds will be used to complement a US\$ 14.0 million Housing Guaranty Program to the government of Zimbabwe. These grant funds will be used to provide one long term advisor to the project to assist in various aspects of the implementation of US\$ 14.0 million HG program, bringing about a better understanding of the squatter problems and the development of a comprehensive and appropriate policy response to the problems. In addition, funds will be made available for short term consultants, local and overseas training for appropriate Zimbabwean officials, and a limited amount commodities in support of project implementation. A limited amount of grant funds will also be used to procure the services of an engineer and a Deputy Project Manager with some knowledge and interest in urban upgrading. These two persons will be hired on local terms.
3. The Project Agreement, which may be negotiated and executed by the officers to whom such authority is delegated in accordance with AID Regulations and Delegation of Authority, shall be subject to the following essential terms, covenants and conditions, together with such other terms and conditions as AID may deem appropriate:

(a) Source and Origin of Goods and Services

Except as provided herein or as AID may otherwise agree in writing, commodities financed by AID under the project shall have their source and origin in Zimbabwe or in the United States. Except for ocean shipping, the suppliers of

commodities or services shall have Zimbabwe or the United States as their place of nationality, except as AID may otherwise agree in writing. Ocean shipping financed by AID under the project shall, except as AID may otherwise agree in writing, be financed only on flag vessels of the United States.

(b) Conditions and Covenants

Prior to any disbursement or the issuance of any commitment of funds document under the Project Agreement to finance assistance to the government of Zimbabwe, the cooperating country shall furnish in form and substance satisfactory to AID, except as AID may otherwise agree in writing:

- (i) An evidence that the government has developed a staffing plan to implement this project.
- (ii) An evidence that the government has agreed to provide adequate office space, local transportation, secretarial support services and related equipment and supplies for the proposed long term advisor.

9-9-77  
Date:

Michael S. Goldman  
Assistant Administrator for Africa  
(Acting)

III. SUMMARY AND RECOMMENDATIONS

A. Grantee or Borrower

Under the proposed program the Minister of Finance, Economic Planning and Development (MFEED) will borrow funds from a U.S. private lender. AID will issue a full faith and credit guaranty of the U.S. Government to the U.S. lender and receive a full faith and credit guaranty from the MFEED. MFEED will pass on an equivalent amount in Zimbabwe dollars to the Ministry of Local Government and Town Planning (MLGTP) for the project implementation. The agreement for the use of Development Grant funds will be signed jointly by the MFEED and MLGTP. All financial matters dealing with Housing Guaranty (HG) loan will be handled by the MFEED. All technical and program matters, as well as the use of technical assistance, will be the responsibility of MLGTP.

B. Implementing Agency

The implementing agency will be the Ministry of Local Government and Town Planning (MLGTP). Urban upgrading is within the jurisdiction of this Ministry. The City of Harare will assist MLGTP in the implementation of the project as well as be responsible for the cost recovery aspects of the project. The proposed project involves primarily provision of infrastructure, community facilities and services which have traditionally been within the jurisdiction of MLGTP. Home improvement loans will be a relatively small part of the proposed project. Since this is the first urban upgrading project ever to be undertaken in Zimbabwe, MLGTP has established a Project Management Unit, with full time staff and responsibility to carry out the project. The Project Manager will report to the Director of Physical Planning, who in turn reports to the Permanent Secretary, MLGTP. The Project Management Unit will be assisted by one long term Resident Advisor and short term consultants to be provided by AID.

C. Financial Plan and Term of Project

It is anticipated that the proposed project will provide US\$14.0 million in Housing Guaranty (HG) resources. The loan funds will come from the U.S. capital market for a term of 30 years, with up to 10 years grace period on repayment of principal. The rate of interest will reflect the rate for similar debt securities guaranteed by the U.S. government.

A sum of US\$400,000 in grant funds will be provided to assist MLGTP in effective and efficient implementation of the project, carrying out of studies to fully understand squatter problems in Zimbabwe, and developing appropriate policy response. Some of these funds will also be used for local and overseas training in shelter and upgrading related areas.

The local contribution will come from the staff resources of the MLGTP and City of Harare and the residents of Epworth. These contributions will include cost of land, land surveying and registration, and building of two primary schools.

Loan funds will be repaid by the residents of Epworth and the city-wide rate structure to the City of Harare. The City of Harare will pay back to MLGTP. It is expected that the HG funds will be authorized in FY 84 and grant funds will be available from FY 85, and project implementation will begin immediately. The full life of this project is three years. No additional funding is anticipated for this project.

D. Purpose of Project

The goal of the project is to improve the quality of life for the lower income people living in urban areas. The purpose of the project is to upgrade Epworth and to provide a learning experience for the Ministry and the City to enable them to develop a more appropriate policy response to the squatter problems.

E. Background of Project

Zimbabwe has experienced rapid urbanization within the last two decades. The percentage of the population living in the main urban areas rose from 17.6% to 23.0% between 1969 and 1982, increasing the urban population from 898,890 to a figure of about 1,732,600 people. About half of the total increase in the urban population was in Harare.

House construction has not kept pace with population growth in Harare. It is estimated that there is a backlog of at least 52,000 units. Although GOZ has begun an ambitious housing program, it will not meet the needs of all sections of the population in terms of the number of units to be provided or the level of monthly charges required to pay for them.

Individuals requiring houses are presently living either in severely overcrowded conditions in authorized housing stock, or have been building in squatter settlements. The largest of these is Epworth, which lies just outside Harare. This community is beset with numerous problems. Water is taken from shallow wells, often dangerously close to pit latrines. There is no road network, and community facilities are severely lacking. Furthermore there is concern that stormwater runoff risks polluting Harare's main water supply. The 5,800 families living in Epworth represent a significantly poorer section of the population than those

living in the rest of the City. Approximately ninety percent of the households are below the median income for Harare which is estimated at Z\$193 (US\$168) in April 1984. <sup>1/</sup>

GOZ has generally taken strong action against squatting, but is recognizing that in certain circumstances, informal settlements such as Epworth may represent useful additions to the housing stock.

In 1982 the government announced its intention of upgrading Epworth, and residents have been informed of the fact. Several activities have already taken place within Epworth, and discussions have been held with the Harare City Council with a view to having Epworth incorporated within the City boundaries.

Upgrading has not yet been identified for general application. This is due to a natural caution that upgrading might result in a decline in housing standards ("slums") and further encourage continued migration to and settlement of such areas. However, a successful upgrading project could demonstrate that controlled government support for the informal sector can provide an effective and an affordable means of providing adequate shelter and, therefore, open the way for upgrading as part of national housing policy. There are settlements in other major towns of Zimbabwe which might lend themselves to upgrading in the future.

F. Description of Project

This project will provide US\$14.0 million in HG loan funds and US\$400,000 in grant funds. The HG loan funds will be used to upgrade existing systems of water supply, sanitation, roads, electricity, and community facilities, and to generate employment and provide home improvement loans. Some families will be relocated from currently unsatisfactory areas to more suitable locations within Epworth. Facilities will be upgraded to the level affordable by the current residents. However, the layout and planning will be carried out in a manner to allow for further upgrading of all facilities and services as people's incomes increase over time.

The MLGTP has established a Coordinating Committee to oversee the upgrading of Epworth. This Committee is chaired by MLGTP and includes Ministry of Construction and National Housing (MCNH) and Harare City Council (HCC).

<sup>1/</sup> US\$1.00 = Z\$ .875. This conversion rate has been used throughout the Project Paper.

At the outset MLGTP will appoint a full time Project Manager with a core staff. The core staff will be supplemented by other officials of the Ministry and the City of Harare (COH). The MLGTP will have the lead responsibility for planning and implementing the project, in close coordination with the COH.

The MLGTP and COH officials will provide the guidance and do all the technical work, while the residents will participate in the decision making process. When the upgrading of Epworth begins the actual process of incorporating Epworth within COH limits will be carried out. There is already an agreement in principle to incorporate Epworth and COH will be an active participant in upgrading efforts. No difficulties are envisaged at this stage. After Epworth becomes a part of Harare, the COH will have complete responsibility for provision and maintenance of community facilities and services as well as for collection of all payments for loans, services and taxes. The project site will simply become the Epworth neighbourhood of the City of Harare.

G. Summary Findings (Technical, Financial and Economic)

A detailed feasibility study was carried out jointly by MLGTP and USAID (RHUDO/E&SA) in October, 1983. Additional analyses were carried out during the preparation of the PID and this Project Paper. The major findings are the following:

Technical

Epworth upgrading project is technically feasible. The principal problem is that approximately 15% of the houses are on ground that is rocky and wet (or liable to be flooded); consequently, sanitary waste disposal is difficult. However, densities are low and the affected households can be relocated easily to where it is possible to have on-site sanitation methods, which can be upgraded as the people's incomes increase. Furthermore the soils are firm enough for minor access roads to be built easily and still porous enough for good drainage. Therefore no technical difficulties are anticipated in carrying out this project.

Financial

The project is financially feasible. An affordability analysis was carried out based on full cost recovery, in accordance with the current practices of the MLGTP and COH. It is concluded that the required monthly charge for the upgraded site is affordable by the residents of Epworth. In addition, some families will be able to afford a fully serviced plot with individual water connection and the Blair modified septic system as well as a home improvement loan. The amount of loan approved for a household will depend on the household income and the interest rate to be charged.

The interest rate will be determined by the economic cost of funds to the GOZ Treasury.

#### Economic

The project is economically viable and has strong macro-economic justification. Almost 98 percent of the cost of building and infrastructure for the proposed project will be in local currency; therefore US\$13.7 million will have an impact of balance of payment support to the government. Given prudent economic policies of the government, these funds can be used to procure priority items needed for the economic development of the country. While the macro-economic benefits will be derived during current difficult economic situations, the loan repayment will be over a 30 year period, with 10 years grace on repayment of principal amount.

The untied dollars and very long repayment periods are especially helpful in servicing Zimbabwe's short-term external debt. In addition, HG loan's interest and the repayment terms are well below the marginal rates and terms presently available to Zimbabwe.

The total debt service will increase by approximately US\$1.47 million per year, and the debt service ratio will increase by approximately 0.40% in 1986, 0.37% in 1987, 0.41% in 1988 and perhaps lower in future years. With improving balance of payment situations and increasing exports, the increased debt service burden will be minimal and will not significantly alter debt service ratio to exports.

#### H. Project Issues

There are no Project Paper issues that need resolution by AID at this time. However, the issues that were raised at the PID review, that resulted in the guidance cable State 113720 (Annex A), have been addressed in the relevant sections of this Project Paper. The response to the issues raised in the cable can be found in the following sections of this Project Paper.

1. The Economic Analysis Section of the Project Paper (PP) specifically addresses the GOZ balance of payments situation, debt servicing, the impact of the HG loan on the debt servicing, and the overall macro-economic impact of the HG loan on GOZ economic development. The Economic Analysis Section also discusses the method used by the GOZ Treasury to determine internal interest rates, and the GOZ's policy to keep the interest rates positive in real terms.
2. While USAID/Zimbabwe has not earmarked the proposed \$400,000 Technical Assistance Grant funds,

USAID/Zimbabwe will make provision in its FY 85 submissions. PRE/H and RHUDO/E&SA will use their own funds to provide short term T.A. needed during FY 84 and early FY 85 to begin the project implementation.

3. Environmental issues have been discussed in the amended IEE attached as Annex E, as well as in the Technical Analysis of this PP. This project gives highest priority to individual water connections, Blair toilets and community facilities, and lower priority to roads and electricity.
4. GOZ policies towards upgrading, as well as provision of shelter to lower income families, have been discussed under "Host Country Priorities and Programs" and project "Sustainability and Replicability".
5. AS recommended by ECFR, this PP includes the discussion and cost of Epworth project only. No funds are requested for any project other than Epworth.

I. Small, Disadvantaged and Women-Owned Firms

The project will make use of small, disadvantaged and women-owned firms in carrying out various short term consulting assignments under this project. The PRE/H IQCs with various firms will be the primary source of such consultants. Small, disadvantaged and women-owned firms are included in the current IQC list of PRE/H.

J. Waivers Required

The project includes funding for two vehicles, training material and miscellaneous items. It is expected that these commodities will be procured in Zimbabwe or another free world country in the region. Thus source and origin waiver for these commodities will be requested.

K. Major Conditions Precedent and Covenants

Prior to AID's authorization of the First Disbursement under the loan, the government shall, except as AID may otherwise agree in writing, deliver to AID in form and substance satisfactory to AID:

- A legal opinion of the principal legal authority of the government of Zimbabwe attesting to the validity and enforceability of the Zimbabwe Guaranty Agreement and stating that such Agreement has been duly authorized, executed and delivered and constitutes a legal, valid and binding obligation of the government of Zimbabwe.

- Legal opinion of counsel satisfactory to AID attesting to the validity of the Loan Agreement, the Paying and Transfer Agency Agreement, Program Implementation Agreement, and stating that such Agreements have been duly authorized, executed and delivered by the Government of Zimbabwe and constitute legal, valid and binding obligations of the Host Country Parties.
- A Master Project Delivery Plan which shall include current cost estimates, cash flow schedules for the program, updated affordability analysis, schedule of contracts, project management and other information as AID may reasonably request.
- An evidence that MLGTP and Harare City Council have taken appropriate steps to ensure that Epworth will be incorporated in the City of Harare and Harare City Council will provide the necessary services to Epworth.

The Project Grant Agreement shall be subject to the following terms, conditions and covenants:

- An evidence that the government has developed a staffing plan to implement this project.
- An evidence that the government has agreed to provide adequate office space, local transportation, secretarial support services and related equipment and supplies for the proposed long term advisor.

L. Project Team Members

The project paper was prepared by the Regional Housing and Urban Development Office for East and Southern Africa (RHUDO/E&SA) with close coordination and support of USAID/Zimbabwe and the Government of Zimbabwe Ministry of Local Government and Town Planning. The Project Paper Team Leader was Raj Chanda, RHUDO/E&SA Project Officer for Zimbabwe Housing Programs. Team Members were Peter Feiden, Regional Housing Officer, RHUDO/E&SA; Denis Light, Engineer, REDSO/EA; and Richard Martin, Architect/ Planning Advisor at RHUDO/E&SA. Policy guidance and program support were provided by John Hicks, Deputy Director, USAID/Zimbabwe.

IV. PROJECT RATIONAL AND DESCRIPTION

A. Rational

1. Overview

Unlike other countries in Africa, Zimbabwe at the present time does not have a serious squatter problem. However, since independence the squatter settlements are growing with increasing frequency. The GOZ present policy calls for removal of squatters and bulldozing of the illegal settlements after sufficient notice. This policy has generated a mixed response from the public. However, the government has decided to try out upgrading the existing settlement of Epworth. This will be the first upgrading project to be undertaken in Zimbabwe. This pilot project will be utilized by Zimbabwe officials to learn more about squatter problems and the urban upgrading process. The government is likely to use the experience of this project as a basis for determining future policy towards urban upgrading.

Zimbabwe had a population of about 7.5 million at the time of the 1982 census and has an annual population growth rate of 3.2% per annum.<sup>1/</sup> Like most African countries it has been experiencing rapid urbanization. The percentage of the population living in the main urban areas rose from 17.6% to 23.0% between 1969 and 1982, increasing the urban population from 898,890 to a figure of about 1,732,600 people. About half of the total increase in the urban population was in Harare, bringing its population up from 386,040 to 828,600. The period of rapid growth started during the freedom struggle in the late 1970's and continues today in response to aspirations generated by the coming of independence.

House construction has not kept pace with population growth in Harare, and it is estimated that there is a backlog of at least 52,000 units needed in Harare. Families requiring houses are presently living either in severely overcrowded conditions in authorized housing stock, or have been building squatter settlements. GOZ has generally taken strong action against squatting, but is recognizing that in certain circumstances, informal settlements can represent useful additions to the housing stock and should be recognized accordingly.

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<sup>1/</sup> Source of all population and growth data, Zimbabwe Monthly Digest of Statistics.

The first settlement to receive this recognition is Epworth, which lies just outside Harare. Epworth was the property of a Methodist mission which was founded in the last part of the 19th century, on land given to it by Cecil Rhodes. The Methodist Mission followers settled and farmed the land, and over the years, bought two more farms, bringing the total land area to 3,817 hectares. Until the 1960's there were only about 500 families living there, but since then this has expanded to over 5,800 families. These families were tenants of the mission until late 1982. At that time the GOZ announced its intention of upgrading Epworth and took over the majority of the land.

Although Epworth had been an agricultural settlement its character was greatly changed by the rapid influx of newcomers, and it is generally labelled a squatter settlement, although legally speaking it is not.

Epworth's residents represent a significantly poorer section of the population than those living in officially recognized housing. Ninety percent of the families in Epworth have incomes less than the median income of Harare which is estimated to be Z\$193 (US\$168) per month. The majority of the workers are employed in Harare.

Although a publicly maintained road bisects the settlement there is no road system within the settlement. Epworth is very disadvantaged in community facilities. Through their own efforts, the residents have erected schools. However, there is no health clinic, police station, post office, public telephone, or meeting hall.

Conditions in Epworth are, in certain respects, a risk to public health. Water is taken from shallow wells, many of which are dangerously close to pit latrines. Concern has been expressed that stormwater runoff from Epworth is reaching Prince Edward Dam, ten kilometers away, and causing pollution to the primary source of Harare's water supply. Another problem to be faced at Epworth is that approximately 15% of the houses are located on wet or rocky soils which are not suitable for permanent development.

It is likely that urbanization pressures will continue, and although GOZ has begun an ambitious housing program,<sup>1/</sup> it will not meet the needs of all sections of the population in terms of the number of units to be provided or the level of monthly charges required to pay for them.

<sup>1/</sup> GOZ is currently implementing a housing program with the assistance of AID's US\$50 million HG to build 10,000 housing units in Harare, Kadoma, Marondera and Chinhoyi. In addition, AID is providing US\$2.5 million in CIP resources to build 1,200 housing units in Kwe Kwe and Gutu. This is a jointly funded project by AID, UN HABITAT and Private Sector Beverly Building Society in Zimbabwe.

New solutions are required which will answer the needs of greater numbers at lower unit costs. Because of limited GOZ resources, such solutions should minimize GOZ input and take advantage of individual and private initiatives while maintaining a degree of control on the informal development.

In the search for lower cost solutions to the housing problem, which can also meet the needs of the people in terms of numbers, squatter upgrading has not yet been identified for general application. This is due to a natural caution that upgrading might result in a decline in housing standards ("slums") and further encourage continued migration to and settlement of such areas. However, a successful upgrading project could demonstrate that government support for the informal sector can provide an effective and affordable means of providing adequate shelter and, therefore, open the way for upgrading as part of national housing policy. It is understood that there are settlements other major towns of Zimbabwe which might lend themselves to upgrading in the future.

In spite of a reluctance to adopt upgrading on a wide scale at this time, the Government of Zimbabwe has decided that Epworth should be upgraded, and the residents have been informed of the fact. Several activities have already taken place within Epworth, and discussions have been held with the Harare City Council with a view to having Epworth incorporated within the City boundaries.

## 2. Hbst Country Priorities and Programs

The government of Zimbabwe (GOZ) has embarked on an ambitious program to provide shelter to lower income families in Zimbabwe. The basic policy of the government calls for provision of housing that is affordable to lower income people and that achieves full cost recovery of capital and recurrent costs. The government policy emphasizes self-reliance. However, the primary vehicle for implementation of this policy has thus far been new construction on new land. Urban upgrading has not been incorporated as a government policy. However, due to the limited resources of the government and increasing demand for shelter, GOZ has decided to upgrade Epworth. The GOZ has given the highest priority and commitment to this project. The first urban upgrading project at Epworth will be utilized by Zimbabwe officials to learn more about squatter problems and the urban upgrading process. The government is likely to use the experience of this project as a basis for determining future policy towards upgrading.

The government has already made a substantial commitment to the project, through assignment of staff and creation of coordinating mechanisms to carry out the project. This project will support the government's commitment to upgrade Epworth.

3. Relationship to the CDSS and ABS

USAID/Zimbabwe, in its Country Development Strategy Statement (CDSS) for FY 1984, explicitly spelled out eight elements of its assistance strategy, which are consistent with AID's Africa Bureau and the Government of Zimbabwe's policies. One of eight elements of the CDSS states "to provide capital resources to open up access to home ownership for low income families, to involve the private sector as a major source of lending for low income housing." The same CDSS and ABS for FY 85 planned for a Housing Guaranty Loan Program for Zimbabwe, and the proposed project is specifically incorporated in the ABS for FY85. The ABS states the project purpose is "to demonstrate the viability and feasibility of upgrading existing neighborhoods in Harare and in small towns and to build institutional capacity at the national and local levels."

In terms of the relationship of the proposed project to major policy concerns, the ABS states, "the proposed project will utilize funds from the U.S. private sector that will provide long term HG financing under the full faith and credit guaranty to the U.S. government. The Zimbabwe private sector will be involved in the project, by carrying out all construction works for infrastructure and community facilities." Thus, the proposed project and CDSS are closely interrelated and form a part of the overall development assistance strategy of USAID/Zimbabwe.

4. Coordination with other Donors

USAID is the only donor agency involved in the urban upgrading program in Zimbabwe. However, in related areas of housing, the United Nations Centre for Human Settlements (UN HABITAT) and the World Bank are involved. In fact AID has co-funded and co-sponsored a pilot project to involve a private sector building society (savings and loan) in low cost housing in the secondary city of Kwe Kwe and rural growth center of Gutu. Under this project UN HABITAT has provided US\$960,000 for technical assistance and training, AID has provided US\$2.5 million in CIP funds and Beverly Building Society has made a commitment to provide US\$2.5 million from its own funds. This joint project is in advanced stages of implementation.

The World Bank started discussions with GOZ in June, 1981 to provide assistance in the housing sector. The loan signing is planned for June, 1984. In discussions with GOZ, it was agreed that World Bank and USAID should work in different cities to ensure participation by a larger number of cities in the program. USAID and the World Bank both agreed to pursue the adoption of affordable standards and progressive development for shelter solutions. As a result AID supported

projects are in Harare, Kadoma, Marondera and Chinhoyi. The World Bank is supporting planned projects in Bulawayo, Harare, Umtali and Msvingo, and USAID/HABITAT joint projects are in Kwe Kwe and Gutu. The Commonwealth Development Corporation (CDC) is considering a project in Gweru.

USAID developed a methodology to conduct an Effective Housing Demand Study in 1982. This methodology was used by the World Bank to carry out a similar study in its assigned towns. The basic goal of all donor activity is to assist GOZ in providing affordable shelter to lower income people in the country.

USAID will continue to monitor the development of the World Bank and HABITAT projects and will coordinate with their officials on policy matters.

B. Objectives

1. Program Goal and Purpose

The goal of the program is to improve the quality of life for lower income people living in urban areas.

The purpose of the project is to upgrade Epworth and to provide a learning experience for the Ministry and the City to enable them to develop a more appropriate policy response to the squatter problems.

2. Outputs

It is expected that this project will directly benefit all the residents of Epworth, where 90 percent of the families have incomes below the median and a large number of the families are in the lowest 30th percentile. The following are anticipated outputs:

1. Improvement in the living conditions of approximately 25,000 residents of Epworth.
2. Individual water connection for each household.
3. "Blair" modified septic sanitation system for all households in Epworth.
4. Tarred major and minor distribution roads for bus and other vehicle traffic plus access streets to some plots.
5. Community facilities including one police station, one health clinic, community hall, administrative office, one secondary school, bus shelters and markets and a post office.

6. Electrical power supply to community facilities and security lighting to all residents.
7. Resettlement loans for 500 families.
8. Home Improvement Loans on approximately 1,500 plots.
9. Loans to build Blair toilets on 3,500 plots.
10. Studies to better understand squatter upgrading phenomenon in Zimbabwe.
11. Ministry and City experience with implementation of an urban upgrading project.
12. Small enterprise plots for employment generation.
13. Institutional Capacity and Policy Framework to develop an appropriate response to the squatter issue in Zimbabwe.

The Logical Framework is attached as Annex B.

C. Description

1. Overview

The US\$14.0 million in HG loan and US\$400,000 in Grant funds will be used to plan, develop and implement the first urban upgrading project in Zimbabwe. The government has already made a substantial commitment to the Epworth project, through assignment of staff and creation of coordinating mechanisms to carry out the project. The MLGTP has completed the preliminary planning work and USAID has assisted the Ministry in carrying out a detailed feasibility study.<sup>1/</sup> While the project will be implemented by the Ministry of Local Government and Town Planning, the Epworth community will be an active participant in all phases of planning and implementation. The Epworth residents have developed an internal system of self-government over the past several years. In May 1983 the MLGTP assigned Local Government Promotion Officers (LGPOs) to assist the community in identifying its needs and priorities. The community, working with LGPOs, identified the following priorities for Epworth:

1/ Epworth Feasibility Study, USAID, October 1983 (On file)

- (i) Piped Water
- (ii) Improved Roads
- (iii) Trees to limit erosion, beautify the area and provide for fuel wood in the future
- (iv) Sanitation System
- (v) Police Station
- (vi) Health Clinic
- (vii) Telephone Booths
- (viii) Markets
- (ix) Electric Security Lighting

The community is already actively involved in the planning and decision-making process. The proposed project will support the community's priorities and support community participation, the foundations for which have already been established.

Under this project, all the facilities and services will be planned, designed and implemented to support the concepts of progressive development based on the principles of affordability and cost recovery. This project is designed to respond to the priorities of the residents of the area and the planning standards of the city; further, it will support the government's policy decision to upgrade Epworth, and to accomplish this on the principles of affordability and cost recovery.

## 2. Program Implementation and Operation

The HG loan funds will flow from the U.S. lender to the Ministry of Finance, Economic Planning and Development (MFEED). MFEED will pass on the funds to MLGTP. MLGTP will have the primary responsibility for project planning, design and implementation.

MLGTP has already established a Coordinating Committee for the Epworth Project under the chairmanship of MLGTP. Its membership includes Ministry of Construction and National Housing and Harare City Council. The Ministry of Health, Ministry of Education and other ministries and organizations are consulted as the need arises. Under the policy guidance of this committee, a "Project Management Unit" with full time staff will be set up. This will consist of a full time Project Manager and a staff of professionals with background in planning, engineering and community organization. The full time staff will be supported by Local Government Promotion Officers (LGPOs), Department of Community Services of the City of Harare, Department of Physical Planning of MLGTP and others. In addition USAID will provide the services of one long term advisor for a period of two years and series of short term consultants and advisors experienced in various aspects of urban upgrading. Thus the professional staff, working closely with the community, will be responsible for planning, designing and implementing the project. The Project

Manager will report to the Director of Physical Planning, who reports to the Permanent Secretary, MLGTP.

It is expected that MLGTP will utilize the services of consulting firms to do the detailed design and engineering works for the project. The actual construction work for the infrastructure and community facilities will be carried out by the private contracting firms selected through the competitive bidding process and selected by GOZ Tender Board. The construction works on house construction and Blair modified septic system will be carried out by the people themselves on self-help basis or by small Zimbabwean contractors selected by the individual beneficiaries. The beneficiaries will be provided technical assistance in selecting small contractor or self-help depending on the preference of the beneficiaries.

In the initial stages of the implementation MLGTP will take the lead in project implementation in close coordination and consultation with the City of Harare. Therefore, it will be responsible for overseeing the award of tenders for the major infrastructure works and community facilities. However, as the project progresses, increasingly greater responsibilities will be shifted to the City of Harare, especially the City's Department of Community Services, the Department of Works and the City Treasurer. The individual housing loan program will be administered by the Department of Community Services (DCS) with the assistance and support of the Department of Works and City Treasurer. DCS already has experience in handling such programs and is currently implementing a program on the AID-supported Parkridge Fontainebleau project in Harare. By the time people are ready to begin repayment for the loan and infrastructure services, Epworth will have been incorporated in the City of Harare and all collections will be the responsibility of the City of Harare. The project will have the following components:

(a) Infrastructure

Water

Individual water connections will be provided. It is anticipated that a large percentage of householders will want to have their own tap and will be prepared to pay for it. This will increase demand for water which cannot be met without increasing the capacity of the existing water supply system. Funds are included in the project to increase the capacity of the water supply on the side of the city affected. The water distribution system will allow for a future waterborne sanitation system with a septic tank.

Sanitation

Because of the site's physical conditions and the income of the residents, a waterborne sanitation system is not

economically feasible. It is therefore proposed to rely on the "Blair" system,<sup>1/</sup> a simple and improved latrine type system developed in Zimbabwe which has found a wide measure of acceptance. Large plots will enable individual ploholders to upgrade their bathroom facilities and make them into a waterborne system with septic tanks.

### Roads

Vehicle ownership at Epworth is low and road access to every plot is not considered essential at the present time by the residents. Nor is it economically feasible. To keep costs at an affordable level, it is therefore proposed to construct only a skeleton system of tarred major and minor distributor roads, but to a standard suitable for bus and other vehicle traffic. Soils are very suitable for roads, and the existing network of informal roads is suitable for light traffic. Some access streets will be provided. This system can be upgraded at a later date.

### Security Lighting and Electricity

It is proposed to install security lighting in Epworth. A basic network of electricity supply will also be installed, primarily to serve community facilities and the business center but with potential for a limited supply to domestic users. This system can be expanded at a later date to provide individual electricity connections, as the people's incomes increase.

### (b) Community Facilities

The following is a list of community facilities/services which are considered appropriate for the community based on two criteria: (1) the expressed needs of the residents and (2) the consideration that Epworth should receive the same level of community facilities as Harare. This will include the building or provision of the following:

- Clinic
- Community Hall/Project Office
- 4 Small Community Centers
- Bus Shelters
- Markets
- Landscaping and tree planting
- Schools
- Police Station

<sup>1/</sup> See Annex F for more detail on Blair System.  
non-governmental organization.

(c) Income and Employment Generation

It is proposed to support and expand Epworth's small businesses. This is to be carried out by the provision of loans for purchase of materials and equipment, the building of facilities, and provision of technical assistance. It is proposed that a fund be established for loans to small businesses. Examples of the types of businesses likely to benefit from the fund are a concrete block factory, transportation businesses, joinery and metal workshops, sewing cooperatives, market gardening and tree planting. It is planned that administration of the loan funds will be undertaken by the Small Enterprise Development Corporation (SEDCO), which is under the jurisdiction of the Ministry of Trade, who will be part of the Coordinating Committee. Technical assistance and training will be conducted by a non-governmental organization.

(d) Home Improvement Loans

A survey was carried out by the MLGTP to determine the housing units that will need to be relocated. This survey was carried out in close coordination with the community. The survey showed that approximately 500 housing units, which are located in wet areas, subject to flooding, and/or rocky areas difficult to service, will have to be relocated. These families will be given a comparable plot, assistance in moving and a home construction and improvement loan. The new area has already been identified by the MLGTP and is within the boundaries of Epworth. This area will be administered as a site and service scheme. Beneficiaries will get the serviced plots and house construction and improvement loan, based on their income and ability to pay. They will also receive technical assistance in designing and building the house. Individuals will be given help in moving their belongings and salvaged building materials from their previous house to the resettlement area. Regulations regarding the standards of house construction will be flexible. This will ensure that people can build their shelters based on their ability to pay.

The survey carried out by MLGTP showed that while many of the houses were in satisfactory condition, residents expressed an interest and desire to improve their dwellings. It is estimated that an additional 1500 families will be eligible for the home improvement loan. Thus a provision is made for 2000 housing loans in this project.

3. Project Beneficiaries

(a) Owners

Direct beneficiaries under this program will be 25,000 residents of Epworth area. People have been living in this area for decades without proper water, sanitation, schools, or community facilities required for safe and decent living

environment. Ninety percent of these people are below the median income of Z\$193 (US\$ 168) (April 1984), for the City of Harare. A large number of them earn less than Z\$100 (US\$87.5) per month. This program is designed to provide minimum acceptable services and facilities that all residents can afford now, while at the same time making provision for improvement as the people's incomes increase.

(b) Workers

About 30 percent of the construction cost is labor. Of that a little more than 50 percent is at low skill levels, say Z\$5 (US\$4.38) per day wage level, and the remainder is at high level averaging Z\$10 (US\$8.75) per day. Technical and supervisory staff are paid more money, but their aggregate wage bill is small, perhaps less than 5 percent of the total input. Based on these assumptions, the following estimates can be derived:

For each US\$1,000,000 of total investment there will be US\$250,000 for non construction cost, and US\$750,000 for construction cost. Thirty per cent of this, or US\$225,000 for labor cost at an average of say US\$6.60 (Z\$7.50) per day, will provide 34,090 work days. For US\$14.0 million almost 494,305 person days or 1765 person years (280 days/year) of employment will be generated. Thus the project will have a significant employment generation impact on the economy.

(c) Small Zimbabwe Contractors

A considerable amount of construction activity will be generated at Epworth during the project. It is appropriate that the community should benefit from the construction process, as well as from the capital improvements. To that end an effort will be made to keep the scope of the work at the level of the abilities of smaller contractors and artisans. Except for the major infrastructure works, that will call for special skills and equipment only available through the more sophisticated contractors, the small Zimbabwean contractors and entrepreneurs, will benefit from this project.

4. Sustainability and Replicability

The upgrading of Epworth will be utilized by Zimbabwe officials to learn more about squatter problems and urban upgrading processes. A study would be carried out to understand the nature of the problem at the national level. The government, especially MLGTP, which has jurisdiction over squatter problems in the urban areas, is likely to use the experience of this project as a basis for determining future policy towards urban upgrading. However, it is difficult to state categorically whether the government will replicate this project in an exact manner elsewhere in the country. It can

be said that the learning experience from this project will be fully utilized so that the government can develop an appropriate response to the growing urban and shelter problem in the country. The government may realize that the best option is to take pre-emptive actions by provision of affordable shelter for all. In cases where that is not possible, upgrading of an existing neighbourhood is a viable and acceptable way of improving the quality of life of its people. The government will also see that while upgrading of an existing neighbourhood may not meet high standards of housing units per se, it does preserve the community neighbourhood spirit and encourages self-reliance while progressively improving the quality of life. It is expected that the community participation process and self-reliance encouraged in this project will be replicated elsewhere in the country.

V. COST ESTIMATES AND FINANCIAL PLAN

A. Housing Guaranty Loan

US\$14.0 million in Housing Guaranty loan funds will be required over a period of three years. The feasibility study carried out MLGTP, with the assistance of USAID (RHUDO/E&SA) in October 1983, and subsequent analysis and discussions resulted in the following cost estimates:

Total Project Costs (US\$)

Infrastructure

Roads and Drainage	1,247,879
Water Supply (on-site)	2,438,203
Electricity (security lighting and power supply for community facilities)	962,500

Loans

Loans for Blair Toilets (3500 toilets at \$262.50 each)	918,750
Loans for resettlement, (500 loans at \$1,500 each)	750,000
Home Improvement Loans (1500 loans at \$800 each)	1,200,000

Community Facilities 1,202,300

Water Supply (off-site) 875,000

Roads (off-site)	194,627
Employment Generation	<u>500,000</u>
Sub-Total (at April '84 prices)	10,289,259
Inflation at 20% a year through October 1985	<u>3,086,778</u>
	13,376,037
Contingencies	<u>623,963</u>
<b>TOTAL PROJECT COST</b>	<u><b>14,000,000</b></u>

Cost Recovery

All costs will be recovered by the City of Harare. The cost of on-site infrastructure will be recovered from the residents of Epworth, cost of off-site infrastructure and community facilities will be recovered through the city wide rate/tax system (supplementary charge). The cost of home improvement loans will be recovered from the individuals who draw down the loan.

The GOZ Treasury calculates the average cost of its borrowings from all sources and determines an on-lending rate every April, which is effective the new fiscal year beginning July 1. The City of Harare calculates its cost of on-lending the monies from the Treasury and determines a Loan Administration Charge that the city puts on all loans. Thus, the interest rates to the individuals as well as Loan Administration Charge can go up or down based on yearly calculations of the cost of funds to the GOZ Treasury and City of Harare. The current rate from the GOZ Treasury is 9.75% and the loan term is 25 years, and the City of Harare charges Z\$3.00 (US\$2.63) per month for loan administration.

B. Technical Assistance and Training

In addition to the HG loan funds, US\$400,000 will be required from the Africa Bureau for training and technical assistance to implement the project effectively and provide necessary support for policy development and institutional development. A budget for the technical assistance is outlined as follows:

	<u>Amount</u>
(a) One long term advisor - (for 2 years)	US\$160,000
(b) Short-term consultants (seven person months)	US\$ 85,000
(c) Overseas and Local Training	US\$ 30,000
(d) Commodities	
Two vehicles	US\$25,000
Training Material	US\$ 5,000
Miscellaneous	US\$ 5,000
	<u>US\$35,000</u>
(e) Project Unit Staff (2 persons for 2 years - both Zimbabweans)	US\$ <u>90,000</u>
TOTAL	US\$ <u>400,000</u>

One long term advisor will be needed to provide continuing support and technical assistance to the Project Management Unit. The advisor will be an Architect/Planner with appropriate experience and training. The short term consultants will be needed to provide assistance in community organization, project planning, and carrying out a study to understand the squatter issues in Zimbabwe.

It is proposed that funds be made available to pay for two Zimbabweans for a period of two years. The two proposed positions to be funded would be those of a Deputy Project Manager and an Engineer. MLGTP does not have the staff with required expertise and training for these two positions. These funds are needed primarily because GOZ is making a concerted effort to keep the public sector employment at a low level. It does not want to start making exception on a project by project basis for the fear that every ministry may start asking for exceptions. After the initial two years the MLGTP will absorb these two positions in the regular ministry's staffing.

It is anticipated that key Zimbabwe officials will visit upgrading projects in other countries to share their experiences. A limited amount of funds will be made available for participation in workshops and conferences. Local training will be provided in community organization and project implementation. A limited amount of commodities will be provided to implement the project in an effective and efficient manner.

C. Local Contribution

The local contribution will be for land (US\$2.5 million), land surveying and registration (US\$250,000), and building of two primary schools (US\$200,000). Thus the total local contribution will be US\$ 2.95 million, i.e. almost 20 percent of the total project cost. In addition, the MLGTP will provide a Project Manager, four Local Government Promotion Officers (LGPOs), four Building Liaison Officers, two Revenue Officers and associated support staff.

VI. IMPLEMENTATION PLAN

A. Implementation Arrangements

It has already been discussed in this paper that MLGTP has taken over Epworth from the Methodist Mission, which is the original owner of the site, and has decided to upgrade it. The MLGTP, has already agreed with Harare City Council (HCC) that since Epworth is currently not within the City boundaries, MLGTP will take the lead responsibility in initiating the upgrading process and in the planning, design and implementation of the project, in close coordination and consultations with the City of Harare. As the project implementation progresses, the City of Harare will get increasingly more involved in the direct implementation of the project. In the meantime the City of Harare's boundaries will be extended by the Minister of Local Government to include Epworth. The Minister has the legislative power to take the action and has already informed the Harare City Council of his intention to do so. Furthermore, HCC has already agreed in principle to take over Epworth in due course.

In order to implement this project in an efficient and effective manner, the Minister of Local Government has established a "Coordinating Committee" under the chairmanship of the MLGTP. This Committee consists of representatives from the City of Harare and Ministry of Housing. Ministry of Health, Ministry of Education and others are consulted and invited to participate, as the need arises. The purpose of this Committee is to coordinate activities of various government agencies to ensure effective coordination and commitment".

The project will be implemented by a Project Management Unit consisting of a staff of technical people, headed by a Project Manager. The Project Manager will be a member of the "Coordination Committee". He will report to the Director of Physical Planning, who in turn reports to the Permanent Secretary, MLGTP. The Project Management Unit will have following major responsibilities:

- co-ordinating all agencies involved, for example the Harare City Council, the Ministries of Construction and National Housing, Education, Health, and Agriculture, and private voluntary organizations
- planning and implementing the project in collaboration with the community
- co-ordinating and assisting in land survey and issue of leases
- commissioning consultants for design and supervision work as required
- acting as a channel to the GOZ Tender Board for the approval of all tenders, etc.
- supervising work on-site and its inspection
- supervising all resettlement activities and on-plot improvements
- co-ordinating disbursement of housing loans, which will be handled by COH, Department of Community Services
- co-ordinating supervision and assisting income and employment generation activities and loan disbursement

The Project Manager will be assisted by a Deputy Project Manager. The grant-funded technical advisor will work with the Project Manager. Below him will be the three divisions of the unit: technical, financial and administrative, and social. The technical division will be headed by an experienced engineer, and will include a planner, a planning assistant and building advisors. The financial and administrative division will be headed by an experienced accountant, and will include secretarial staff, an accounts clerk, and cashiers. The social division will be headed by an experienced community development/social worker, and will include the Local Government Promotion Officers and Community Development Workers.

Most of the skills required by the staff are already available within the MLGTP and City of Harare. The existing staff will be utilized to fill most of the positions. However, it will be necessary to recruit two Zimbabweans to fill the position of the Deputy Project Manager and Head of the Technical Division (an Engineer). Due to the limited resources of the MLGTP and a government-wide freeze on new recruitments, funds are requested from a technical assistance grant to pay for these two people for a two year period. At the end of the initial two year period, the government will absorb them in its regular staff.

B. Implementation Schedule

It is anticipated that AID will authorize the HG program in June 1984 and the technical assistance grant funds in early FY 85. Immediately upon authorization of the HG program, USAID and the government of Zimbabwe will proceed to negotiate the Implementation Agreement. It is anticipated that the Implementation Agreement will be signed by the end of September 1984.

The MLGTP will, in the meantime, continue to do detailed planning of work in consultation with the community. MLGTP will carry out the detailed design for engineering and infrastructure services with assistance from private consulting firms during this time. It is expected that the construction works on infrastructure can begin by February 1985. Thus, it is anticipated that the government of Zimbabwe will sign the Loan Agreement in February 1985. Due to strong commitment to the project at the highest levels in the government, it is expected that project implementation will move at a rapid speed. A detailed implementation schedule is included as Annex E.

C. USAID Management

Management and administration of this program will be the responsibility of the Office of Housing and Urban Programs (PRE/H) acting through the Regional Housing and Urban Development Office (RHUDO/E&SA) which is located in Nairobi. RHUDO/E&SA will designate a Project Officer, who will visit Zimbabwe periodically or as often as necessary. USAID/Zimbabwe will nominate a person as a point of contact for RHUDO/USAID and GOZ liaison.

All program management, implementation and administrative actions, consistent with the approved Project Paper and Implementation Agreement, will rest with RHUDO/E&SA. However, USAID/Zimbabwe will provide overall policy guidance to RHUDO/E&SA.

VII. MONITORING PLAN

This project will be a major part of USAID's bilateral assistance program to Zimbabwe. USAID/Zimbabwe will be responsible for the policy framework within which this project is implemented. Within this policy framework, the USAID Office of Housing and Urban Programs (PRE/H) will be responsible for implementation, including all negotiations with the GOZ. The Office of Housing and Urban Programs' responsibilities will be carried out by its Regional Housing and Urban Development Office for East and Southern Africa (RHUDO/E&SA).

The long-term technical advisor will submit quarterly reports to USAID/Zimbabwe and RHUDO/E&SA. These reports will include quantitative and qualitative measures of the progress of physical elements of the project, progress in meeting policy and institutional objectives, identification of problem areas, and the recommended strategy for reaching the objectives for the subsequent quarter.

The designated Project Officer from RHUDO/E&SA in Nairobi will make frequent site visits (usually every month) to assess the progress in the implementation of the project and to identify key issues and resolve them with GOZ, USAID/Zimbabwe or others concerned with the issue.

#### VIII. PROJECT ANALYSIS SUMMARIES

##### A. Economic Analysis

##### 1. Overview<sup>1/</sup>

Zimbabwe is a middle-income country with the largest and most developed economy in majority-ruled Southern Africa. Its formal economy is characterized by sophistication and diversity, and in 1981 the overall GDP per capita was US\$775, although the average for the majority - 97% - black population was probably less than half this figure. Exports are evenly divided between agricultural produce, manufactured goods and minerals. Manufacturing constitutes the largest sectoral component of GDP (23%), followed by agriculture (18%), public administration, education and health (16%), and trade, hotels and restaurants (14%).<sup>2/</sup>

The range of products produced in Zimbabwe includes twelve major agricultural crops, 10 minerals and 6,200 other distinct manufactured goods. Major agricultural crops include maize, wheat, tobacco, cotton, sugar, beef and dairy products, groundnuts, tea and coffee. Mineral production includes gold (30%), asbestos (23%), nickel (13%), coal (8%), copper (7%), silver (6%), and chrome (5%); manufacturing industries include iron, steel and metals (26%), textiles (19%), chemicals and petro-chemicals (14%), food processing (14%), and beverages and tobacco (11%).

Zimbabwe's land-locked position constitutes a continuing financial and political burden. Although ample infrastructure includes rail links connecting all major economic centers with four ports in Mozambique and South Africa, 10,000 kilometers of quality roads and a widespread telecommunications system, Zimbabwe nonetheless suffers from international transport problems. The oil pipeline from Beira has been interrupted twice in the last two years by acts of sabotage in Mozambique. Even though the ports at Beira and Maputo are about one-third to one-half the

distance, owing to Mozambique port inefficiencies, about three-quarters of imports and exports are shipped through South Africa. Thus, domestic and foreign exchange resources expended for transport are greater than necessary.

Excepting petroleum, Zimbabwe is also endowed with a significant energy production capacity. The hydro-electric complex at Lake Kariba provides a significant proportion of energy consumption. With the completion of the Hwange coal-fired electric complex in 1984, Zimbabwe will be self-sufficient in electricity generation. Petroleum is entirely imported, consuming about 25 percent of the imports in 1982. However, the ethanol content of gasoline was raised to 20 percent in 1980 and is produced from local sources.

Although per capita income is high by African standards, the economy is sharply dualistic. The modern sector is dominated by whites and foreign investors with about 70 percent of all industrial, financial and commercial assets being foreign owned. This accounts for perhaps as much as 96 percent of GDP. As a result, per capita income in the modern economy far exceeds that of the traditional economy. Of the approximate one million African wage-earners in 1981, about 40 percent were employed in low-paying agriculture and domestic service jobs. About 40 percent were employed in mining, manufacturing and services, with another 16 percent in public services.

The private sector dominates the modern economy in manufacturing, mining, commerce and finance. The government, conscious of its social objectives and wanting to improve income distribution, has continued price controls inherited from the UDI government. Minimum and maximum wage rates have also been established, with higher incomes frozen since 1980 at current levels. Minimum wages have increased by 63 percent between 1980 and 1982 and lay-offs have been regulated by the government. These regulations, in addition to strict controls on imports and repatriation of profits, are causing increasing hardship within the economy. Compounded by the World recession, a southern African drought and an austerity program announced in December 1982 to complement the 20 percent devaluation, the next few years will certainly be difficult for the economy.

1/ For more details on the macro-economic setting, refer to the FY 1984 Zimbabwe ODSS and the FY 1983 CIP.

2/ Source of all data used in this section is IMF staff reports, Quarterly Economic and Statistical Review and Ministry of Finance, Economic Planning and Development.

The challenge which continues at the core of the GOZ's concern is to achieve growth with equity, and to redress the inequities of the existing economic structure without eroding the potential of the modern, largely private sector.

During the first two years of independence, Zimbabwe's economy grew at an impressive rate. Real GDP growth during 1980 was about 11%, while real growth during 1981 was 7% (IMF). Per capita income increased by 12% to 15% in real terms during 1980 and 1981.

The recovery was strengthened by a substantial improvement in terms of trade (34%) and a bumper agricultural crop in 1981. These two factors, along with donor aid, eased existing foreign exchange shortages. The inflationary impact of the recovery was moderated somewhat by a substantial excess capacity within the economy.

Economic events during 1982/83 and prospects for 1984 are far less promising. The domestic and external financial positions of the GOZ have come under increasing pressure. Real growth during 1982 was about equal to the population growth (3.5 percent), but there was a decline in 1983 of perhaps 3 percent. Inflation should remain high, rising from 17 percent to possibly 20 percent in 1983. This deteriorating growth performance reflects in part the impact of temporary factors, notably the drought of the last three years, and the continuing effects of the world recession which limits demand for both manufacturing and mining exports. It also reflects the effects of underlying problems in the economy, including: (i) a fall in the rate of domestic capital formation; (ii) limited capacity utilization in the manufacturing sector due to inadequate levels of imports and reduced profitability in the productive sectors; and (iii) weakened competitiveness of manufactured exports owing to substantial increases in wages and other costs. While some fundamental inflationary pressures remain strong, medium term prospects are that inflation will decline, assuming of course continuation by government of the current policy stance on wage and budgetary controls, according to IMF.

Budgetary developments in recent years reflected rapid growth in both revenues and expenditures, as the economy shifted from war-time to recovery and rehabilitation, and social and economic services were expanded to majority of the population. Increase in revenue reflected significant growth of the post independence economy, as well as the introduction of a wide range of new tax measures. Total revenue as a proportion of GDP increased from 23 percent in 1979/80 to 30 percent in 1981/82 and was projected to increase to 34 percent of GDP during 1982/83. However, the increase in absolute terms is likely to be significantly lower than previous years owing to the levelling off of the revenue base.

Government expenditures increased as the new government introduced programs for recovery, rehabilitation, reconstruction, and expansion of public services in education and health. At the same time, defense decreased only slightly from war-time expenditures due to the high cost of demobilization and integration of the three armies, and the increase in anti-government activities in the Southwest. However, since independence, the percent of government expenditures allocated to defense decreased sharply as expenditures on education and health increased. Aside from the cost of expanding social programs, agricultural production, consumer and railway subsidies rose after independence, reaching Z\$150 million or about 3.5 percent of GDP in 1981/82, as well as accounting for almost half of the overall budget deficit. Recently GOZ has announced significant reductions in subsidies. These subsidies have now become a matter of review between the GOZ and IMF.

Government debt, significant during the 1970s, has increased since April, 1980. The new government inherited a gross public debt of Z\$1.48 billion from 1979. By June 1982, this debt had increased to Z\$2.3 billion of which about 30 percent was external. However, the budgetary deficit as a proportion of GDP has declined from 12.7 percent in 1979/80 to 7.7 percent in 1980/81, and 7.6 percent in 1981/82. While the budgeted deficit for the 1982/83 fiscal year was originally projected to be 11.2 percent of GDP, the austerity measures undertaken by GOZ reduced recurrent expenditures below planned levels for an overall deficit of 8.5 percent. It is expected to go down to 6.6 percent during 1983/84. There is evidence that the GOZ intends further to reduce budget deficits, including expenditure cuts for all ministries.

## 2. Balance of Payments and External Debt

During the two-year period 1980 and 1981, export receipts increased at an average annual rate of 22 percent, and import payments at a rate of 39 percent. The deficits on invisibles and private transfers widened significantly owing to the liberalization measures taken in 1980 and 1981, and to the discharge of financial obligations undertaken during the Lancaster House constitutional talks which led to the country's independence. Despite increased net capital inflows and official transfers, the overall balance of payments deficit increased from SDR 140 million in 1980 to SDR 160 million <sup>1/</sup> in 1981.

<sup>1/</sup> The Special Drawing Rights (SDR) is an average of world trading currencies and is, therefore, a better measure than local currency of international transactions in a period of wide currency fluctuations. In December 1983, the SDR, the Zimbabwe dollar and the U.S. dollar are all within a few percentage points of one another.

In 1982 and 1983, the external debt situation remained under pressure. Reflecting mainly a decline in prices of most products, export receipts are estimated to have declined by 5 percent below the 1981 level. The authorities, reacting to the poor export performance, reduced foreign exchange allocations for imports in 1982 by 17 percent, compared to the amount allocated in the preceding year. Despite the reduction in import allocations, nominal imports in 1982 remained at about the same level as in 1981, as public sector imports financed by aid funds and short and medium-term commercial credits increased. With no improvement in the services account, the current account deficit is estimated to have been SDR 719 million, equivalent to 12.3 percent of GDP, compared to 12.5 percent in 1981. Despite an increase in net capital inflows, the overall deficit is estimated to have widened by about 19 percent to SDR 190 million.

The stock of government and government-guaranteed external debt with maturities exceeding one year, increased from SDR 1,376 million (28 percent of GDP) at the end of December 1981, to SDR 1,705 million (29 percent of GDP) at the end of September, 1982. About three quarters of the external loans which were contracted or guaranteed by the government during the first three quarters of 1982 were nonconcessional. Of this amount, the government accounted for about 10 percent. In 1982, service payments on debt of more than one year's maturity (including IMF repurchases and charges) was SDR 148 million, equivalent to 10.4 percent of exports of goods and services. Taking into account estimated service payments on new external debt projected to be disbursed up to 1989, this ratio is expected to rise to 16.9 percent in 1983, 23.3 percent in 1984, and decline to 22.4 percent to 1985 and down to 19.0 percent by 1988, assuming an annual growth in exports of between 10 and 20 percent. Short-term loans of less than one year's maturity amounting in total to SDR 208 million were contracted in 1981 and SDR 96 million in 1982. Zimbabwe is likely to rollover these debts until 1985 under the recent IMF agreement.

On December 8, 1982, the Zimbabwe dollar was devalued by 20 percent in local currency terms, and the currency basket was modified. In January 1983, the Zimbabwe dollar was allowed to depreciate by a further 5 percent in local currency terms. Subsequently, the Zimbabwe dollar has been allowed to fluctuate with respect to SDR. The net effect has been depreciation of the Zimbabwe dollar by almost 50 percent in relation to the US dollar. Because of the current economic situation, the external accounts of Zimbabwe were expected to deteriorate in 1983. Because of the drought and the world recession there probably will be little if any increase in exports (in SDR terms) in 1983. The demand for minerals should start to pick up in 1984, but the Southern African drought means there will be a smaller agricultural surplus if any, to export and adjacent countries will be constrained in

imports of Zimbabwean manufactures. On the other hand, drought relief and the need to provide imported components for the manufacturing sector will make it difficult to reduce import allocation. Just to maintain imports at current real levels would mean an additional current account deficit of SDR 100-200 million on top of the already projected overall deficit of over SDR 200 million. The recent devaluation will help the situation in the medium-term by discouraging imports and making exports more attractive. In the short-term, however, a devaluation is likely to worsen the country's external balance, and 1983/84 will be a year of adjustment on many levels.

The one bright spot has been a series of announced agreements that will provide balance of payments assistance. The IMF has agreed to lend SDR 300 million during 1983/84 which should provide considerable debt service restructuring and relief. The World Bank has agreed to loan US\$70 million during FY 83 and FY 84 (in disbursements of US\$25 million and US\$45 million) for current production of imports targeted for the manufacturing sector. The United States Government aid program has consisted of US\$234 million in grants and development loans, which includes US\$25 million in HG loans. An additional US\$25 million HG loan authorized in 1982 will be signed shortly.

The authorities recognize the need to pursue a cautious external debt management policy so that service payments on debt to be contracted in the future will not unduly increase the debt service burden. In 1983, the contracting of new government or government-guaranteed nonconcessional debts with an original maturity of 1-10 years will be limited to SDR 220 million, of which not more than SDR 10 million will have an original maturity of 1-5 years. In addition, there is to be no commercial borrowing with a maturity of less than one year for balance of payments support.

TABLE 1

Zimbabwe: Balance of Payments, 1982-87

(In millions of SDRs)

	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u> Projections	<u>1986</u>	<u>1987</u>
Trade balance	-144	-134	-71	-3	70	164
Exports, f.o.b.	1,164	1,280	1,456	1,633	1,825	2,044
Imports, f.o.b.	-1,308	-1,414	-1,527	-1,633	-1,755	-1,800
Services (net)	-444	-494	-522	-623	-688	-753
Private transfers (net)	-131	-115	-110	-100	-100	-100
Current balance	<u>-719</u>	<u>-743</u>	<u>-713</u>	<u>726</u>	<u>-718</u>	<u>-689</u>
Official transfers (net)	43	60	72	80	90	100
Capital (net)	486	456	441	500	500	550
Overall balance	-190	-227	-200	-146	-128	-39
<u>Memorandum item:</u>						
Current account deficit as percent of GDP	12.2	13	10	9	7	6

Sources: Data provided by the Zimbabwean authorities; and IMF staff estimates.

TABLE 2

Zimbabwe: Service Payments on Government and  
Government-Guaranteed External Debt, 1982-88<sup>1/</sup>

	Projected						
	1982	1983	1984	1985	1986	1987	1988
	(In millions of SDRs)						
I. Government							
Amortization	50.5	72.1	103.9	122.1	120.8	111.4	91.9
Interest	48.2	55.1	60.2	59.3	52.3	45.0	39.6
Subtotal	98.7	127.2	164.1	181.4	173.1	156.5	131.5
II. Government-guaranteed							
Amortization	5.9	19.8	53.3	55.2	50.9	60.1	59.5
Interest	41.4	52.2	49.5	51.3	52.1	47.1	42.5
Subtotal	47.3	72.0	103.8	106.5	103.0	107.2	102.0
III. Fund <sup>2/</sup>							
Repurchases	-	-	9.4	18.8	53.3	132.2	127.2
Charges	2.4	12.7	29.2	32.2	30.6	24.7	15.1
Subtotal	2.4	12.7	38.6	51.0	83.9	156.9	142.3
(A) Total I + II	146.0	199.2	267.9	287.9	276.1	263.8	233.6
(B) Total I + II + III	148.4	211.9	306.6	338.9	360.0	420.8	375.9
<u>Memorandum items:</u>							
Exports of goods and services <sup>3/</sup>	1,416	1,251	1,317	1,516	1,657	1,811	1,980
Debt service ratios							
Excluding Fund (A)	10.3	15.9	20.3	19.0	16.7	14.6	11.8
Including Fund (b)	10.4	16.9	23.3	22.4	21.7	21.2	19.0

Sources: Data provided by the Zimbabwe authorities; and staff estimates.

<sup>1/</sup> Service payments on existing external debt outstanding, government and government-guaranteed, which, at the end of April 1983 stood at SDR 2,254 million (including undisbursed).

<sup>2/</sup> Includes repurchases and charges in respect of purchases to be made under the present stand-by arrangement.

<sup>3/</sup> Exports of goods are projected to grow at 12 percent in 1984 and at 10 percent thereafter.

3. Impact of HG Program on Zimbabwe External Debt

It is difficult to predict the exact interest rate that government will have to pay for the proposed HG loan, since the rate will be determined by the U.S. capital market at the time the Loan Agreement is signed. Applying current U.S. market conditions, however, the HG loan will be for a period of up to 30 years maturity with 10 years grace on repayment of principal and an interest rate of approximately 10 percent. Under these terms, the HG loan will be available to the government at terms and interest more favourable than marginal rates of interest and terms available to the government. As such it is outside the IMF ceilings of nonconcessional debt - like the IBRD loans. IMF usually considers any borrowing with long maturities like an IBRD loan with 20 years term or an HG loan with 30 years term as a borrowing having significantly beneficial impact on the economy. Under these terms the proposed US\$14.0 million HG loan will add approximately US\$1.47 million per year to the total debt service. The debt service ratio to exports will increase by 0.4% 1986, 0.3% in 1987 and 0.41% in 1988, as a result of the proposed HG loan.

TABLE 3

Zimbabwe: Service Payments on Government and Government-Guaranteed External Debt 1982-88

(In millions of SDRs)

Year	Total Debt Service	Total Debt Including HG Loan	Debt Service Ratio Excluding HG Loan
1982	148.4	-	10.4
1983	211.9	-	16.9
1984	306.6	-	23.3
1985	338.9	-	22.4
1986	360.0	361.47	21.7
1987	420.8	422.27	21.2
1988	375.9	377.37	19.0

If the Government were to borrow the same amount on the Eurodollar market, the interest rate would probably be 13.0% (or approximately two percentage points over the LIBOR). This higher interest rate coupled with a shorter loan maturity, usually no longer than than 5-6 years, would substantially increase Zimbabwe's short-term total debt and the debt service ratio.

It is useful to remember that should the interest rates drop or the government obtain access to a cheaper source of foreign exchange, the government of Zimbabwe would have the option to prepay the loan contracted under the HG program.

The other side of the impact of the HG loan is the government of Zimbabwe's ability to service debt and the potential negative impact on the HG reserve fund. Table 2 presents the debt service during 1982-88 and Table 1 presents Zimbabwe's balance of payment prospects for 1982-87. While the debt service ratio as a percentage of exports will reach the peak of 23.3 percent in 1984, it is expected to decline to 19 percent in 1988. If one excludes the IMF loan repayment the debt service ratio in 1988 is expected to reach down to 11.8 percent, well below the average of approximately 30 percent for all developing countries. The current account deficit as a percent of GDP will decline from 12.2% in 1982 to 6% in 1987 and to 4% in 1988 and 3% in 1989. In terms of overall balance, a deficit of SDR 227 million in 1983 is expected to decline to 39 million in 1987 and reach a surplus of SDR 161 million by 1989. While a cause for prudent economic policies, Zimbabwe's debt service ratio is moderate compared with other developing countries. There are no prospects for debt rescheduling in the foreseeable future. The government has already embarked on the economic recovery plan with the assistance of the IMF. The December 1983 review by the IMF indicates that the government of Zimbabwe continues to follow the economic recovery plan agreed to with the IMF. USAID/Zimbabwe believes that the AID will not be taking any extraordinary risk by issuing its guaranty under the proposed program.

#### 4. Interest Rates and HG Loan

The HG program will not affect Zimbabwe's existing interest rate structure, since the interest rates are controlled by the Ministry of Finance through the Central Bank. These rates are established within the context of the country's macro-economic policies.

Recent government policy directs using interest rates with greater flexibility to encourage domestic savings and capital formation as well as contain credit expansion. Thus Zimbabwean authorities raised the minimum deposit interest rates and the required liquidity and statutory

reserve ratios from 20 to 24 percent in 1981. Interest rates were adjusted twice in that year raising the bank rate from 4.5 percent to 9 percent and the commercial bank prime lending rate from 7.5 percent to 13 percent. Adjustments were also made in other rates. Several loan rates are now positive in real terms. The adequacy of interest rates is an issue of periodic reviews between the government and IMF.

The Ministry of Finance calculates an on-lending rate to local authorities for municipal development and housing programs, based on its own cost of money from all sources. The rates are calculated every April and are effective July 1 of that year. The municipal authorities add an administrative charge which covers the city's operational expenses to handle the loan funds and its cost of servicing the loan. The municipal authorities also calculate their administrative charge on an annual basis. Thus, there is no subsidy either in the Ministry of Finance lending rate to the municipal authorities, or municipal authorities on-lending to the individuals. The current on-lending rate is 9.75 percent and the City of Harare's Loan Administration charge is Z\$3.00 per month (US\$2.63). The HG interest rate by itself will not affect the on-lending rate. In future years, the beneficiaries of the proposed project will pay the prevailing rates at that time. These rates can obviously go up or down depending on the cost of money to the Treasury. In a sense all loans in Zimbabwe are at variable rates adjustable every year and there are no fixed rates, for the terms of the mortgage.

5. Macro-economic Justification for the Proposed Program

Almost 98 percent of the cost of building and infrastructure for the proposed US\$14.0 million project will be in local currency; therefore US\$13.72 million will have an impact of balance of payment support to the government. Given prudent economic policies of the government, these funds can be used to procure priority items needed for the economic development of the country. While the macro-economic benefits will be derived during current difficult economic situations, the loan repayment will be over a 30 year period, with 10 years grace on repayment of principal amount.

Untied dollars and very long repayment periods will be especially helpful in servicing Zimbabwe's

short-term external debt. The HG loan's interest rates and terms of repayment are well below the marginal rates and terms of repayment presently available to Zimbabwe.

The total debt service will increase by approximately US\$1.47 million per year, i.e., 0.4% in 1986, 0.37% in 1987 and 0.41% in 1988 and perhaps lower in future years. With improving the balance of payment situations and increasing exports, the increased debt service burden will be minimal and will not significantly alter debt service ratio to exports.

Assuming highly concessional funding similar to IDA credits or AID Development Grants or ESF funds are not forthcoming for the proposed project, HG provides an attractive source of financing and significant macro-economic benefits. This loan fits the IMF and GOZ criteria of concessional loans, because of its very long maturity.

It is important to note, that by participating in the HG program, the government of Zimbabwe obtains a favorable interest rate on long-term loans tied to the long-term obligations of the U.S. government. Such long maturities at favorable interest rates will not otherwise be available to Zimbabwe.

It has been estimated that if the foreign exchange element of the project were directed towards manufacturing, the HG loan could result in a GDP increase of over 0.5 percent within a year. With the GDP at Z\$4.14 billion (US\$3.64 billion) in 1982, this would result in an increase of almost Z\$20 million (US\$17.6 million), a number greater than the amount of the HG loan. While estimating the longer term impact is much more difficult, depending on the specific uses of the foreign exchange, it, in any event, will be positive.

B. Social Analysis

1. Urban Shelter Problem

Like most African nations, Zimbabwe has had rapid urban growth in the last two decades. In addition to the effects of an overall population growth rate of 3.2 percent per year, the percentage of the population living in the urban areas increased from 17.6 to 23.0 between 1969 and 1982. Of a total population of 7.5 million in 1982, 1.73 million lived in urban areas.

The greatest growth has occurred in Harare. From 1969 to 1982 that city's population more than doubled to 829,000. Much of this growth during the 1970's was a result of the civil war. Since the end of the war the personal aspirations generated by independence have contributed to further urbanization.

The number of families living in the low-cost housing areas of Harare is estimated at 100,000. The current low-cost housing backlog in Harare is estimated at 52,000 units. Future demand for housing in Harare is estimated at 6,300 additional units per year (based on an annual growth rate of 6.3 percent). In the last few years the production rate has been far less than the demand. 1/

The growth of squatter settlements in Zimbabwe has not yet reached the alarming proportions found in other East African countries. The government tries to prevent urban squatter areas from developing into a major problem by emphasizing rural development and increasing the provision of low-cost urban housing on an ownership basis. Within the city boundaries, squatter settlements of a transitory nature are small; those built on government or city-owned land are regularly demolished. Alternative dwellings are then offered to those squatters who are employed in the city. However, in Epworth a squatter settlement of more permanent character has developed. While this is not currently part of the City of Harare, the housing provided here and at other smaller outlying squatter areas is a crucial contribution to the overall low-cost housing stock.

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1/ For a detailed discussion of the housing issues see "Housing Preferences and Potential Housing Demands of Low Income Urban Households in Zimbabwe," Volume I, Harare. Prepared for Ministry of Housing and USAID, October 1982 (on file)

The great excess of demand over supply for low-cost housing suggests that Epworth be upgraded. Bulldozing the area would mean the sudden addition of 5,800 families needing low cost housing. This increased housing demand could not be accommodated even under the most optimistic projections of housing production. Bulldozing would also be the demise of strong community ties that themselves are a force for development. To do nothing is not feasible due to public health problems and the fact that further informal housing investment at Epworth would continue to be piecemeal and inefficient due to the lack of planning and proper development controls.

It is against this backdrop of existing and growing demand for low-cost housing that the government of Zimbabwe has decided to embark on its first upgrading project. Upgrading the area is a strategy to deal with a poorly laid out settlement that poses serious public health problems, in such a way to neither disrupt the established community nor further exacerbate demand for low-cost housing in the Harare area.

2. Income Distribution and HG Target Population

A comprehensive study was undertaken in July 1982 to establish the income distribution of all households living in Harare area. This study established the income distribution shown in Table 4.

TABLE 4

HARARE: HOUSEHOLD INCOME DISTRIBUTION

(Estimates, July, 1982)

Z\$ Per Month	f	F	%	Cum %	L	A
0- 30	15	15	02	02	30	8,25
31- 50	15	30	02	04	50	13,75
51- 70	181	211	25	29	70	19,25
71- 90	10	221	01	30	90	24,75
91- 110	45	266	06	36	110	30,25
111- 200	140	406	20	56	200	55,00
201- 300	45	451	06	62	300	82,50
301- 400	15	466	02	64	400	110,00
401- 500	.18	484	03	67	500	137,50
501- 600	18	502	03	70	600	165,00
601- 700	.21	523	03	73	700	192,50
701- 800	25	548	04	77	800	220,00
801- 900	27	575	04	81	900	247,50
901-1000	30	605	04	85	1000	275,00
1001-1100	17	622	02	87	1100	392,50
1101-1200	21	643	03	90	1200	330,00
1201-1600	39	682	06	96	1600	440,00
over 1600	15	697	02	98	--	--

(704) (100) (100)

Median Household Income = Z\$ 175 Per month

Key:

- f = Frequency
- F = Cumulative Frequency
- % = Percentage Cases in Income Group
- Cum % = Cumulative Percentage
- L = Number of Cases Less Than
- A = Housing Affordability in Z\$

The average salary increase among the 12 employment sectors used by the government was 5.1 percent from 1982 to June 1983. If the 1982 median income is adjusted to June 1984 at this rate, an estimated median income for mid 1984 is Z\$193 (US \$168). The same survey estimated that over 90 percent of the Epworth households had incomes less than the median for the city as a whole.

3. Affordability Analysis

In assessing the capacity of Epworth residents to pay for improved shelter conditions, three principles are considered. First, the minimum monthly payment required should not exceed the residents' expectations concerning the amount of money appropriate to spend on shelter. Second, payment should be related to the size of the plot. Third, the total monthly payment should not exceed 27.5 percent of monthly income.

The costs of on-site water, roads and drainage are the elements of this project that will be directly recovered from the residents of Epworth. Other development costs, such as community facilities, security/street lighting, and improvements to the major through street in Epworth are recovered by the city through the rates/tax structure. Water, roads and drainage costs are noted below:<sup>1/</sup>

Water	US\$ 2,438,000
Roads & Drainage	<u>1,248,000</u>
	3,686,000

These costs will be recovered over 25 years, although each resident will be able to pay off the total cost to him at any time without penalty. The interest rate, which will reflect the composite cost of all borrowing to the government of Zimbabwe Treasury, is currently 9.75 percent.

The actual development cost attributed to each stand will be related to frontage.

In addition to amortizing the capital cost of infrastructure, each plotholder will pay recurrent costs each month. These are a water charge (US\$1.97), Loan Administration fee (US\$2.63) and a supplementary charge/tax (US\$3.94). The loan administration fee covers the salaries and associated costs,

<sup>1/</sup> Construction costs and incomes in the affordability section are for April 1984 prices and incomes. Design and supervision costs are included in these figures.

including any site administration and revenue collection and also contains a fee for the city to pass on the funds for the project to the plottolders. This is done instead of marking up the interest rate. The supplementary charge is a fixed payment made by all households of Harare low-income areas in lieu of rates or taxes. This payment goes into the general revenue fund of the city. The composite payment for the smallest plot with no home improvement loan is estimated as follows:-

Capital Improvement <sup>1/</sup> (On-Site Water, Roads, Drainage)		US\$3.12
Recurrent Costs		US\$8.54
Supplementary (tax)	3.94	
Loan Administration	2.63	
Water charge	1.97	
		<u>US\$11.66</u>

Optional building material loans of up to US \$3,000 per stand will be available. The maximum available for each stand will be based on affordability. The total monthly payment for shelter, including infrastructure development, recurrent costs, and building material loan, will not exceed 27.5 percent of household income. Examples of composite monthly payments for various size plots and building material loans are shown below:

Typical Per Stand Payments (US\$)

	<u>Stand Size (Sq. meters)</u>				
	<u>300</u>	<u>1500</u>	<u>2700</u>	<u>4500</u>	<u>6000</u>
No home improvement loan	11.66	15.56	17.91	20.63	21.50
US\$ 500 loan	16.16	20.02	22.39	25.09	26.96
1000 loan	20.58	24.48	26.83	29.55	31.42
1500 loan	25.04	28.94	31.29	34.01	35.88
2000 loan	29.50	33.40	35.75	38.47	40.34
2500 loan	33.96	37.86	40.21	42.93	44.80
3000 loan	38.42	45.32	44.79	47.39	49.26

<sup>1/</sup> Capital cost per plot is based on frontage. For illustration this is calculated based on the formula  $F = .8661 / .67A$ . (F = Frontage, A = Area)

To afford the payment on the smallest stand of 300 square metres with no home improvement loan, a monthly income of US\$42 is needed. The available data indicate that this minimum mandatory payment is affordable at about the 15th income percentile for Harare.

4. Profile of Program Beneficiaries

Of all Epworth residents, about 12 percent arrived before 1965. During and after the war, this older settlement was significantly added to by the influx of newcomers from rural areas. Now this latter group outnumbers the original settlers.

At Epworth today there is a wide range of residents. At one extreme are the long-existing residents on larger stands closer to Harare. At the other extreme are the migrants of the last few years on smaller stands. Some of these people are renting a portion of a larger stand or renting part of a house.

Recent data <sup>1/</sup> indicate 1.7 households per stand and a total of 7.2 people per stand. More than one-half (55%) of the households "own" their plots (i.e. they are not paying rent to someone else). Many of these households rely on income from renting out a room or a portion of the stand. Of the remainder, most (39% of all households) are lodgers, where the owner lives on the stand. Fewer than five percent of the stands are completely rented out.

Unemployment is moderate at Epworth (approximately nine percent), and about one-half of the households depend on wages from low-paying domestic and mining employment. At least one-quarter are working in the informal sector.

Attitudinal data have also been collected. Of special note are the reasons given for moving to Epworth. The primary reason has been that it is cheap. Another important reason is its proximity to town. Many also noted the existence of relatives already living at Epworth. These factors point to the need to keep shelter expenses to the practical minimum and enhance community cohesion, while strengthening the ties to the Harare economy.

<sup>1/</sup> Data provided by Department of Physical Planning, MLGTP, December 1983.

5. Community Organization

Over the past several years the residents of Epworth have developed an internal system of self-government under the protection of the Methodist Mission authorities. The residents formed a cohesive group responsible for managing the agricultural and developmental aspects of the Epworth farms. They put their own money into buying some of the land, as well as the building of the primary schools. This has given the original settlers a strong sense of de facto ownership.

During and after the liberation war, the cohesion in the settlement was significantly reduced by the influx of newcomers who out-numbered and lacked the social organization of the original settlers. However, when the government of Zimbabwe made a commitment to upgrade Epworth, the Ministry of Local Government and Town Planning formed an Interim Committee to represent the community in further discussions about their future. The committee consists of 50 residents, 29 men and 21 women.

In May 1983, the Ministry of Local Government and Town Planning assigned 10 Local Government Promotion Officers (LGPOs) to assist in further training of the residents in community development and resource mobilization. It was decided that they would remain in Epworth for a period of about four months, after which four would remain until the upgrading of Epworth area has been completed.

One of their first tasks was to identify all the achievements of the community and formal groups in existence. It was found that a number of social and community organization projects had been developed. At their own expense, and with their own skills, the residents have achieved the following:

- organized two pre-school programmes.
- organized the construction of two primary schools and one secondary school.
- organized churches, political parties and burial societies.
- gardened and raised animals for sale.
- established a brick and block-making business.
- organized women's groups to produce and sell school uniforms.
- established a cattle ranching business.

Epworth Community is organized in four "Area Development Committees" (ADCs), each of which has five original settlers and five newcomers. From the ADC, the Overall Development Committee (ODC) is elected. This is the main body which represents the residents in any discussion concerning the future development of Epworth. The formation of these ADCs and ODC has diffused the latent polarization between the original settlers and the newcomers and is leading to a consensus mode of decision-making.

This activity, in effect, initiated the upgrading process. It established a system for representation of the residents and a system for the residents to communicate with the Authorities (through the LGPOs). The existence of the ADC/ODC network has already been used to start certain activities which will be of material assistance when proper upgrading starts. For example:

- each plotholder has been asked to identify the corners of his/her plot to avoid disputes at a later stage.
- each plotholder has been required to register the plot by producing specific documentation proving right of ownership.
- a plot-by-plot registration exercise has been undertaken to ascertain the number of occupants of each plot.

6. Priorities for Upgrading

The LGPOs have held discussions with the Committees to ascertain the residents' priorities for upgrading. The priorities of the residents are as follows:

- a) Piped Water: Individual standpipes for every plot.
- b) Improved Roads: It is estimated that at least one person per family makes a round trip to Harare on a daily basis while other members commute several times a week. All the schools are overcrowded and families have to send their children to schools outside Epworth. For these reasons a more convenient bus service is needed. This will require building roads suitable for buses to run through Epworth, not just along Widdecombe Road - a major road that borders Epworth.
- c) Trees: There are two reasons for planting trees, the most important of which is to assure a future supply of firewood. The second, more immediate reason, is to beautify the area and limit erosion.
- d) Sanitation System: The residents do not expect waterborne sanitation nor can they afford it, but they are aware of the contamination of the water by existing latrines. They would prefer improved types of toilet facilities.

In addition to the infrastructure needs listed above, the residents have expressed a desire for improved or additional community facilities, e.g.,

- a police station
- more schools
- a better clinic with maternity services
- telephone booths

They also have ideas for commercial developments. One idea is to develop a hotel or restaurant services for tourists who visit the "Balancing Rocks", as well as brick and block-making factories, whose products would be in great demand under an upgrading project. They would like to see a cinema and improved shopping facilities and markets.

It is clear from the above discussion that the community is already actively involved in the decision-making process. The proposed project will support and enhance the community participation, foundations of which have already been established.

C. Technical Analysis

1. Infrastructure

Roads

Existing situation: The settlement is reached by Widdecombe Road from central Harare. This is a narrow tar road, in fair condition. Delport Road which is gravel paved, also runs northeast-southwest through the southeastern part of Epworth.

The internal road system is a series of tracks, which appear generally adequate for the light traffic they carry, although some of these tracks become difficult to use during the rainy season. However, the majority of the site appears to be suitable for low cost roadworks.

A bus service to Harare runs along Widdecombe Road, with a terminus slightly over half way through Epworth. At off-peak times it is infrequent, and at peak hours it is overloaded. Residents also make use of "emergency taxis", an informal shared taxi service.

Proposals: It is proposed to construct a skeleton system of roads in order to permit a bus route through Epworth, and to ensure limited all-weather vehicular access throughout the settlement. With the exception of the resettlement area the system as designed is not intended to give individual plot access (for standards in the settlement area see below under "Housing").

Road standards proposed are: Bus Route (from Harare through the settlement to Harare along Widdecombe Road): 20 meters road reserve, with double spray and chip tarred surface, 8.5 metres wide; Minor Roads: 12 meters road reserve with single spray and chip tarred surface, 6.7 metres wide.

The City of Harare requires that special provision being made for bus stops (widening the road, concrete blocks instead of tarred surface), and provision has been made for this.

Widdecombe Road, being very narrow at present, will require widening, and funds are set aside for this. Stormwater drainage is included alongside all roads. In addition, certain additional drainage works will be undertaken to minimize the need for resettlement due to wet soil conditions.

Road Costs

<u>On-site</u>	Z\$	US\$
Local Collectors	890,500	779,187
Access Streets	249,900	218,662
Drainage, Bus Stops	156,100	136,587
Sub Total	<u>1,296,500</u>	<u>1,134,436</u>
Professional Fees and Supervision	<u>129,650</u>	<u>113,443</u>
	1,426,150	1,247,879
 <u>Off-Site</u>	 Z\$	 US\$
Widening Widdecombe Road	212,600	186,025
Professional Fees and Supervision	<u>21,260</u>	<u>18,602</u>
	233,860	194,627

Water Supply

Existing Conditions: There is no piped water supply within Epworth. Most plots have their own well, the water from which is pulled up in buckets. A few have fitted a windlass system, and Blair Research Laboratory has conducted tests of prototype hand pumps on a few wells. In the course of its research it has tested the water in many wells and found the majority contaminated. This occurs most seriously in the rainy season, and is caused by surface water or side wall intrusion, or by contamination from pit latrines at a lower level.

Proposals: In view of this, a piped water supply is to be made available to every plot. Fortunately, Epworth is directly adjacent to Harare City Council's Ventersburg Reservoir from which supplies can be taken. Presently, this

reservoir has only limited spare capacity , but Harare City Council plans to increase the supply to the reservoir by doubling the existing main between Highfield Gate and Hatfield PSCA. Funds to meet a proportion of the cost appropriate to Epworth are included in the project.

It is unlikely that these capacity increases to the trunk main can be completed by the time the on-site infrastructure is complete. Therefore water supply will initially be by public standpipe until the work has been completed. Pipe design is to be based on 90 litres per person per day. This is sufficient to allow for future waterborne sewerage.

#### Water Costs

<u>On-site</u>	Z\$	US\$
Distribution lines	1,787,300	1,563,887
House Connections and Meters	195,300	170,887
Valves and Fittings	430,000	376,250
Resettlement Area	120,600	105,525
Sub Total	<u>2,533,200</u>	<u>2,216,549</u>
Professional Fees and Supervision	253,320	221,654
TOTAL	<u>2,786,520</u>	<u>2,438,203</u>

#### Off-Site

City Supply Main (contribution to total cost)	Z\$1,000,000	US\$875,000
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#### Sanitation and Refuse Removal

Existing Conditions: All stands have some form of pit latrine, mostly of the "unimproved" type.

Sullage water is usually used as an irrigation medium on the family garden.

Garbage is disposed of in pits, the majority of which are borrow pits for brick making. Garbage consists largely of vegetable matter, or ashes. Once filled, such pits are usually used for tree planting with excellent results.

In spite of these unsophisticated sanitation methods, there is a great interest in cleanliness within the community and there are no unsanitary smells.

Proposals: Proposed sewage disposal will be by modified Blair Tank system which is a toilet on top of a tank, which leads into a soakaway. The Blair System has been researched for some 9 years. The soakaway is in sand or sandy loam, and the

tank is ventilated. The number of tanks per plot will be based on one tank per 10 persons. Blair Research Laboratory will produce standard designs and train builders.

#### Sanitation Costs

(In the form of loans to ploholders, not contractor costs).

	Z\$	US\$
3500 Loans @ Z\$300 for Blair Tank Systems	1,050,000	918,750

No charge is proposed concerning existing solid waste disposal since the garbage is small in volume and non-pathogenic in nature. Residents will be able to dispose of household garbage in clay-lined pits on their plots.

#### Electrical Power

Existing Conditions: The main electrical power lines are on Widdecombe Road and generally do not supply the community.

Proposals: It is proposed to have security lighting for the whole community and power supply to special use buildings, schools, community facilities, and small industries, all of which are grouped along the local collector roads. This will also provide the possibility of house connection along those roads.

Due to the high cost of supply lines and house connections, as well as the size of the minimum monthly charge, it is not considered realistic to install a comprehensive electrical system at this time.

#### Electricity and Security Lighting Costs

	Z\$	US\$
Security Lighting and Community facilities	1,000,000	875,000
Professional Fees and Supervision	100,000	87,500
	<u>1,100,000</u>	<u>962,500</u>

## 2. Community Facilities

Existing Conditions: The residents have raised the funds to build two primary schools and a secondary school. The latter, although fully functioning, is not yet completed, and is being expanded on an annual basis.

While the mission has contributed part of the funds for these school buildings, and the Ministry of Education provides the staff, the residents are very proud of the part they played in fund-raising and consider them their own property. The schools are, however, used to full capacity, with 45 children per class and double sessions, but are still insufficient for the needs of the community.

There is also a very inadequate clinic run by the Red Cross. There is a need for more staff and space to meet the demand for this facility.

Other community facilities and services such as police station, post office, bus shelters, community hall, markets, etc. do not exist.

Proposals: In order to bring Epworth up to a level broadly comparable with Harare as a whole, the following facilities will be constructed under the project.

#### Police Station

One Police Station at an estimated cost of Z\$50,000 (US\$43,750).

#### Clinic

A poly-clinic that provides 24 hour maternity services as well as 2 satellite clinics are required for a population the size of Epworth. An estimate of cost is Z\$200,000 (US\$175,000).

#### Secondary School

A government secondary school with facilities for sports such as football, tennis and swimming, which would also be available for use by members of the community, is to be built. The estimated cost is Z\$350,000 (US\$306,250).

#### Community Hall

This will be designed as the main community hall in which large meetings, seminars, dances, film shows and the like can be held. In addition to the main space there will one or two offices which will be used for small meetings and/or be let to co-operatives, or small businesses. The cost for this has been put at Z\$250,000 (US\$218,000).

#### Administrative Office

This will house the staff who will be working in the field during project execution, and afterwards. It will include a cash office for receipt of loan repayments and service charges. Cost is estimated at Z\$200,000 (US\$175,000)

#### Post Office

A small post office and public telephone booths are required. They are estimated to cost Z\$50,000 (US\$43,750).

### Bus Shelters

These are required along the proposed bus routes within Epworth and along Widdecombe Road. It is estimated that 24 is an appropriate level of provision, though it will obviously depend on the frequency of the bus stops proposed by the bus company. The total cost would be about Z\$20,000 (US\$17,500).

### Markets

Markets to permit the hygienic sale of vegetables and other perishable foodstuffs are required. Small serviced stands, possibly designed for small service and manufacturing sector industries, will be sited nearby. Public toilets will be provided adjacent to markets. It is envisaged that the public sector would provide the external wall and some covered area, while the marketeers would erect their own stalls. Four such markets are proposed at a total cost of Z\$80,000 (US\$70,000).

### Small Enterprise Plots

These will be larger than the stands associated with the markets, and will consist of land, water supply and road access only. Electricity and any other necessary services will be supplied under normal arrangements with the SEDCO but capital and servicing costs will be eligible expenditures under the employment generation loan programme described above. The servicing cost of these stands will be Z\$20,000 (US\$17,500) in total.

### Tree Planting

Provision is to be made for two trees to be planted in each plot by the residents themselves. The seedlings will be provided by the government (with a small charge, to make sure that people look after them when they have been planted) and planted under supervision. This will make a tremendous difference to the ecology and the micro-climate of the area. It will also reduce soil erosion. In addition to the on-plot tree planting exercise, a firewood plantation is also to be developed. The funds for this are to be allocated under the employment generation loans. The total cost of the provision of trees, technical assistance and protection against animals, is Z\$30,000 (US\$26,250).

Total Cost of Community Facilities is Summarized as follows:

	Z\$	US\$
Police Station	50,000	43,750
Clinic	200,000	175,000
Secondary School	350,000	306,250
Community Hall Office	250,000	218,000
Administrative Office	200,000	175,000
Post Office/Telephone	50,000	43,750
Bus Shelters	20,000	17,500
Markets	80,000	70,000
Small Enterprise Plots	20,000	17,500
Tree planting/Landscaping	30,000	26,250
Sub Total	<u>1,250,000</u>	<u>1,093,000</u>
Professional Fees and Supervision	125,000	109,300
TOTAL	<u>1,375,000</u>	<u>1,202,300</u>

3. Housing

Existing Conditions: Epworth is a relatively low density settlement. Based on an analysis of aerial photography taken in May 1983 the average plot size is about 2700 square metres placing it well into the medium to low density category. Within the settlement there are wide variations in plot size, from about 300 square metres, up to 6000 square metres. While the plot sizes are very large, 78 percent of the households have less than 30 square metres in built up area for the house and only 22 percent have built up area of between 30 and 60 square meters. There are 2.2 persons per room indicating severe overcrowding in Epworth. As a generalization it can be said that the larger the plot, the longer it has been settled; in other words, newcomers have had to accept smaller plots.

On the majority of the plots there are several structures. Besides the main house there is often a house used by another family, either a lodger or relatives. In addition, most plots have separate kitchens.

Information concerning the number of people per plot has been obtained from a survey conducted in August 1983, the results of which are as follows:

- Most houses are in relatively good condition for their type. Most are built of sun dried brick, which is often plastered and painted. Others are built of concrete block or burnt brick (made on the site). Roofs are either thatched, corrugated iron or asbestos cement, and are in relatively good condition.

- In spite of the uncontrolled nature of the development, the layout is orderly and lends itself to upgrading with very little modification. This shows that firm control over settlement has been exercised by the residents, which argues well for future development.

One of the major characteristics of Epworth is the rocky outcrops, including a famous tourist attraction the "Balancing Rocks". Many of the newcomers have settled in the rocky areas, which while offering an acceptable environment at present will make servicing very difficult and expensive. If they are to benefit from urban upgrading they will have to be resettled to more suitable land.

The same problem exists in the case of houses that have been built on marshy areas. In this case, there is a risk of flooding, and suitable foundations would be expensive. On the basis of existing information the MLGTP has identified about 346 ha of the development as being on unsuitable ground, affecting approximately 500 plots.

Proposals: Under the project those houses which cannot be serviced economically, especially due to surface or slightly sub-surface rock, or which are on flood-prone areas will be resettled.

A resettlement area has been identified and the residents have already accepted the concept of relocation and the specific site. This area will be laid out to the standards prevailing in the rest of the settlement with the exception of the fact that every plot will have road access.

For those who will resettle out of the wet or rocky areas, the following procedure will apply:

All plottolders who have to resettle would be eligible for a loan amount of a maximum of US\$3,000, subject to affordability, to re-build their house and provide an appropriate sanitary unit.

The size of the loan would be subject to the ability of the plottolder to repay it, so in the case of a poor person who was unable to repay a loan, but who could afford the monthly charges within the existing areas, efforts would be made to arrange an exchange of plots with someone who wished to move. It has been found in other schemes that the incentive of a bigger loan and slightly better plot can be an inducement for people to resettle.

All loans would be repayable at current interest rates, over a period of 25 years, but accelerated payments would be possible without any penalty.

Loans would be used for labour and materials and would be disbursed by means of a cash advance system, already in operation in the other projects in Harare. This works as follows:

- The proposed house plan, which can be supplied by the participant, or will be one of the standard plans supplied by the Project Management Unit, is checked to ensure that it can be built with the resources of the applicant.
- A first instalment is given, for example, to pay for the foundations and flooring.
- When the work is complete it is checked by a project-employed building liaison officer; if it is satisfactory the participant receives his second instalment.
- This process is repeated until the loan is fully disbursed.

The cash advance system may also be used for payments for labour when the participant wishes it.

Aid in Moving: Each participant would be given full briefing before the move concerning the procedures for obtaining loans, the technical assistance available, the cost of building, how to engage builders, the building regulations and kindred matters.

Resettling families will receive assistance from the Ministry in transporting building materials and household effects to their new sites. Loading and unloading would be done by members of the community assisting the householder - children typically enjoy this and can simply be organized for the purpose.

Regulations: Building standards at the resettlement site will be looked upon as if the houses being constructed are essentially replacements for a house that has been demolished, and not a basically new building site. Although the standards will be kept very simple - so as not to impose financial hardship on the participants, and so as to maximize the number of rooms that can be built (which is considered to be the most important aspect of housing conditions) - it is expected that even if they start with a somewhat lower standard house there will be a rapid transformation of the buildings over time into modern and fully permanent structures.

By way of illustration the following examples of permitted standards that would be considered acceptable for housing built on the resettlement site:

- Sun-dried brick walls are permitted provided that permanent foundations, a damp-proof course and roof with a good overhang are provided.
- Earth floors are permitted.
- Wooden shutters are permitted.
- The occupant is permitted to build a temporary shelter on his plot until he moves in, which he can do as soon as one room is completed.

Improvements to Houses Not Being Moved: Those who do not resettle would be eligible for a loan for house improvements, and would be subject to the same rules as the resettlers. The amount of the loan will depend upon the person's income and ability to pay back the loan.

<u>Loans for House Construction and Improvement</u>	<u>Z\$</u>	<u>US\$</u>
House Construction 500 @ US\$1,500	857,143	750,000
House Improvement 1,500 @ US\$ 800	1,371,420	1,200,000
Total	<u>2,228,563</u>	<u>1,950,000</u>

4. Land Matters

Land Use Planning

As an integral part of the upgrading exercise a collaborative land use planning exercise will be mounted jointly by the Project Management Unit and the Epworth Community. They will discuss the issues of location of the resettlement areas, the proposed community facilities, and the location of roads to be upgraded. As soon as the strategic issues have been agreed, a detailed plan will be prepared which assigns uses to all parts of the settlement.

An agricultural plan, which will be prepared in conjunction with the Ministry of Agriculture's extension officers, will be an important component of the land use plan. With such a plan the incentive to prevent squatting will be increased, provided that the widest possible participation is encouraged in its formulation.

In Annex G preliminary land use plans are reproduced, including the re-organization of the settlement based on the need to relocate residents from the rocky and wet ground, and the preferred area for resettlement, to the northeast of

the existing settlement. It also includes a road plan for the whole settlement. The plans illustrate the scheme prepared for which cost calculations are provided.

#### Development Control

The subject of development control is an important one. On the one hand it is unrealistic and counter-productive to expect the very low income groups to be able to conform with the procedures of the Regional Town and Country Planning Act and the Model Building By-Laws. These instruments presuppose professional advice in the applications, and require drawings and other information that are beyond the ability of the ordinary person to prepare. On the other hand some measure of development control is an essential mechanism for society to protect itself against acts of unscrupulous individuals, and to protect the environment against exploitation.

Experience with site and service and core housing schemes in many countries including Zimbabwe shows that approvals and inspections can be done by site staff. Applications would be made in the form of simple sketches, and setting out of the foundations and supervision of the construction would be done by resident building advisors/supervisors. In the case of Epworth these advisors will be acting as agents of the lessor. The Minister for Local Government and Town Planning is responsible for the administration of all development control activities and is therefore ideally placed to modify the regulations and enactments for which he is responsible. In respect of the Epworth project, the Minister, under Section 26 of the Regional Town and Country Planning Act, would be able to effect residential development on State Land.

With regard to the Building By-Laws he has powers to introduce different By-Laws under the Acts relating to Urban and Rural Councils (Caps 214 and 211 respectively). In the case of Epworth he will use Section 183 of the Urban Councils Act, (83A of the Rural Council Act) subsection (4), which states that different sets of model building by-laws may be made for different areas.

Appropriate matters for regulation in the circumstances are:

- the location of all buildings
- the foundations
- the strength of the structure
- the size of the rooms
- lighting and ventilation of the rooms
- sanitation

The regulations covering these subjects will be kept brief and simple, on the understanding that exceptional circumstances will be dealt with by the building advisors on the site.

#### Land Tenure

As soon as resettlement has been completed steps will be taken to survey all plots to the standards required for the issue of freehold title, in accordance with Cap. 147, the Land Survey Act.

Once survey has been completed all plots will be registered, and ploholders will be given a lease with option to get freehold title. This lease would be in the standard format issued by the Urban State Lands Office in the Ministry of Local Government and Town Planning, adapted to the circumstances prevailing in Epworth.

Among items to be included in the terms of the lease are:

- Freehold title of ownership will be conditional on the repayment of plot development costs, which will be cited in the lease document.
- Freehold title of ownership will be conditional on the repayment of resettlement and home improvement loans.
- Freehold title of ownership will be conditional on the plot having an individual water supply and residential accommodation and sanitation to the satisfaction of the lessor.
- The lease will be subject to termination by the lessor if the lessee does not maintain regular repayment for plot development costs and any loans.
- No development will be permitted on the plot without the authority of the lessor.

The option to receive freehold title would be available for twenty five years, and would be transferred with the consent of the lessor. This period is chosen to permit monthly instalments to be affordable by low income residents, but any person wishing to make accelerated payments will be able to do so, and receive freehold title at a much earlier date.

The Urban State Land Office and the present system of offering leases with option to purchase are ideal for the purpose. And the system is cheap and quick to implement. Survey can be undertaken for about Z\$60 (US\$51) per stand for the small stands, up to Z\$200 (US\$175) for the large ones, and legal costs are virtually eliminated.

5. Cost Summary

	US\$
<u>On-Site Infrastructure</u>	
Roads and Drainage	1,247,879
Water Supply	2,438,203
Electricity and Security Lighting	962,500
<u>Off-Site Infrastructure</u>	
Roads	194,627
Water	875,000
<u>Community Facilities</u>	1,202,300
<u>Loans</u>	
Blair Toilets	918,750
House Construction and Improvement	1,950,000
Employment Generation	500,000
Sub Total (April 84 Prices)	<u>10,289,259</u>
Inflation at 20% through Oct.1985	<u>3,086,778</u>
Sub-Total	<u>14,147,731</u>
Contingencies	623,963
TOTAL COST	<u>14,000,000</u>

D. Institutional Analysis

1. Overview

The Epworth site falls under the jurisdiction of the Bromley Rura Rural Council. This Council has neither the expertise nor the manpower to administer the area. The MLGTP, recognizing this fact, has taken responsibility for the Epworth area. This is in accordance with the Local Government Circular No. 10 of December 10, 1981 on squatter policy, which gives responsibility for "urban squatters" to MLGTP and responsibility for "rural squatters" to the Ministry of Lands, Resettlement and Rural Development.

An agreement in principle has been reached between Harare City Council and MLGTP to incorporate Epworth in the City of Harare jurisdiction. The respective staffs are in continuing discussions to pave the way for a smooth transition of Epworth from MLGTP to the City of Harare.

The MLGTP has established a Coordinating Committee for the Epworth Project. Included in its membership are the Department of Community Services and the Department of Works of the Harare City Council and the Ministry of Local Government and Town Planning and the Ministry of Construction and National Housing of the central government. MLGTP will establish a Project Management Unit to implement this project.

2. Central Government

The MLGTP will be the lead Ministry responsible for implementing this project on the national government level. The actual detailed design will be done by the consulting firms in Zimbabwe. Tendering and inspection of civil works will be handled by the Project Management Unit of MLGTP. The Ministries of Health and of Education will be involved as the need arises. Following construction, they will be responsible for staffing these facilities and putting them into operation. The Ministry of Agriculture will provide technical assistance to the Epworth residents to improve their small-scale farming practices.

Within the MLGTP, it is the Department of Physical Planning, through its Provincial Planning Office for Mashonaland East, that will continue to refine the master plan for Epworth. This Office is coordinating with the Epworth Area Development Committees and the Overall Development Committee (see Social Analysis Section) to ensure community input into the master plan.

Three other departments of MLGTP have certain functions within the government that will be relevant to the Epworth Project. The Department of Local Government Promotion and

Training sponsors Local Government Promotion Officers (LGPOs). The LGPOs are community organizers and facilitate communication and coordination between the citizens and the government. The LGPO program has been in effect for three years, and during that time has proved to be an effective mechanism for fostering involvement in local development planning, and support for local government institutions. The four LGPOs have been assigned to the Epworth area. Thus far, they have been successful at organizing the residents and fostering community participation.

The issuance of provisional leases and lease-purchase agreements on state land is the responsibility of the Urban State Land Department of the MLGTP. At Epworth, because transfer of the land to the City's jurisdiction is envisaged, the Harare city government is expected to review these leases before issuance. The Region I Department of MLGTP is responsible for land transfers from national to local jurisdiction. Working with the City, this department will effectuate the eventual transfer of the Epworth area to the City's jurisdiction.

The Small Enterprise Development Corporation (SEDCO) was recently chartered as a subsidiary of the Zimbabwe Industrial Development Corporation, a parastatal under the Ministry of Trade. Its purpose is to appraise proposals to develop small industry and provide technical assistance and financing. SEDCO was created as a result of a recent government reorganization. SEDCO will play an active and direct role in the employment generation aspect of this project and will handle all loans to small enterprises and all loan repayments from them.

### 3. Local Authority

The Harare City Council will take a progressively larger role in the Epworth project. Within the City government, the Community Services Department will have the primary responsibilities. This department has broad expertise in progressive housing development. For example, all of the field operations of the Parkridge Fountainbleau Project, an enormous sites and services development, are carried out by the Community Services Department. Among the functions are screening of applicants, allocation of plots, issuance of building material loans, self-help construction technical assistance, inspections, revenue collection, and general community development. Many of these skills are similar to those that will be required for the Epworth upgrading.

## IX. CONDITIONS AND COVENANTS

### Major Conditions Precedent and Covenants

Prior to AID's authorization of the First Disbursement under the

loan, the government shall, except as AID may otherwise agree in writing, deliver to AID in form and substance satisfactory to AID:

- A legal opinion of the principal legal authority of the government of Zimbabwe attesting to the validity and enforceability of the Zimbabwe Guaranty Agreement and stating that such Agreement has been duly authorized, executed and delivered and constitutes a legal, valid and binding obligation of Zimbabwe.
- Legal opinion of counsel satisfactory to AID attesting to the validity of the Loan Agreement, the Paying and Transfer Agency Agreement, Program Implementation Agreement, and stating that such Agreements have been duly authorized, executed and delivered by the government of Zimbabwe and constitute legal, valid and binding obligations of the Host Country Parties.
- A Master Project Delivery Plan which shall include current cost estimates, cash flow schedules for the program, updated affordability analysis, schedule of contracts, project management and other information as AID may reasonably request.
- An evidence that MLGTP and Harare City Council have taken appropriate steps to ensure that Epworth will be incorporated in the City of Harare and Harare City Council will provide the necessary services to Epworth.

The Project Grant Agreement shall be subject to the following terms, conditions and covenants:

- An evidence that the government has developed a staffing plan to implement this project.
- An evidence that the government has agreed to provide adequate office space, local transportation, secretarial support services and related equipment and supplies for the proposed long term advisor.

X. EVALUATION ARRANGEMENTS

A central objective of this project is to determine the parameters for successful squatter upgrading in Zimbabwe. The evaluations are therefore crucial to this project. There will be an interim evaluation and a final evaluation, both of which will be conducted jointly by USAID and the MLGTP and the City of Harare.

An interim evaluation will be conducted approximately a year after the signing of the Loan Agreement. This evaluation will be designed to examine the operational aspects of the project. Among the issues to be considered in this evaluation are the following:

1. The performance of the project management unit of MLGTP in implementing the project.
2. The effectiveness of the Epworth community groups in representing the residents and guiding development.
3. Progress in the provision of infrastructure services, community facilities and home improvement loans.
4. Progress in the incorporation of Epworth in the City of Harare.
5. Lessons learned from the upgrading process and its possible impact on the government's policy.

The results of this evaluation will be presented to the GOZ. This evaluation will form the basis for mid-project consultation and discussions involving USAID, GOZ officials, and Epworth Community representatives, in order to improve implementation during the balance of the project.

Within one year after the final disbursement, a final evaluation will be conducted. This evaluation will be designed to determine the impact that the project has had on the Epworth residents individually and as a community as well as on the government's understanding of the issues and problems of upgrading. The following issues are among those that will be considered.

1. The progress in the house consolidation that has occurred, including those financed through building materials loans and those privately financed through individuals' savings.
2. Maintenance of the public improvements made at Epworth through this project.
3. Impact of the upgrading exercise on the stability of the Epworth community as evidenced by land tenure, length of residence, community organization, and perceptions of and identity with the Epworth area.
4. The environmental improvements that have resulted from the project.
5. Impact of the project on the government's policy on urban upgrading and possible future policy directions of the government.

While these evaluations will be carried out jointly by USAID, MLGTP and City of Harare, USAID will have the primary responsibility for taking the lead and organizing for the evaluation exercise. USAID's responsibility will be carried out by RHUDO/E&SA Project Officer. It is expected that one outside consultant will be needed

for one month for each of the two evaluations. The cost of consultant services estimated at US\$ 30,000 will be out of the proposed grant funds. Any additional funds required for evaluation will come from PRE/H and RHUDO/E&SA funds.

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STATE 113720

AID-3 ECON CBRON-5

ANNEX A

OFFICIAL FILE  
RHUDDO FILE

VZCZCNA0259  
PP RUEHNR  
DE RUEHC #3720 1092151  
ZNR UUUUU ZZH  
P R 181916Z APR 84  
FM SECSTATE WASHDC  
TO RUEHSE/AMEMBASSY HARARE PRIORITY 3415  
INFO RUEHNR/AMEMBASSY NAIROBI 7193  
BT  
UNCLAS STATE 113720

LOC: 164 556  
18 APR 84 2204  
CN: 31688  
CHRG: AID  
DIST: AID

AIDAC, NAIROBI FOR RHUDDO

E.O. 12356: N/A

TAGS:

SUBJECT: ZIMBABWE EPWORTH URBAN UPGRADING PID  
(613-HG-002)

REFERENCE: STATE 095922

ACTION COPY

Action taken: \_\_\_\_\_

No action necessary: \_\_\_\_\_

1. AS REPORTED REFTEL, ECPR APPROVED PID APRIL 2. A DISCUSSION OF ISSUES PRODUCED THE FOLLOWING GUIDANCE ON PREPARATION OF PP.

2. PPC ECONOMIST EXPRESSED SOME CONCERN OVER IMPACT OF PROPOSED HG LOAN ON ZIMBABWE'S GROWING EXTERNAL DEBT BURDEN. COMMITTEE AGREED TO REQUEST THAT PP PROVIDE DETAILED UPDATE OF ZIMBABWE PUBLIC AND PRIVATE EXTERNAL DEBT POSITION POTENTIAL IMPACT OF HG ON SAME.

3. AFR/DP NOTED THAT NO FUNDS ARE AVAILABLE FOR DOLS. 375,000 TA COMPONENT OF PROJECT IN FY 84 AND QUESTIONS WERE RAISED AS TO BASIS FOR TA FOR THIS SPECIFIC HG. PP SHOULD BE MUCH MORE EXPLICIT AS TO REASONS WHY TA IS NEEDED. COMMITTEE RAISED POSSIBILITY OF FUNDS BEING MADE AVAILABLE FROM ONE PERCENT HG SERVICE FEE, OR TA

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4. ANOTHER IMPORTANT CONCERN IS IEE RECOMMENDATION FOR NEGATIVE DETERMINATION DESPITE REFERENCE ON PAGE 8 OF IEE TO FAIRLY SERIOUS POTENTIAL PROJECT IMPACT RESULTING FROM WATER POLLUTION, FLOODING AND WASTE DISPOSAL. BUREAU ENVIRONMENTAL OFFICER BELIEVES FURTHER ATTENTION SHOULD BE DEVOTED TO THESE PROBLEMS AS PART OF PP ANALYSIS. THIS SHOULD INCLUDE ASSESSMENT OF POSITIVE OR MITIGATING EFFECTS PROJECT WILL HAVE ON THE ENVIRONMENT, AS COMPARED TO ALTERNATIVE OF NO ACTION AND ALLOWING SQUATTERS TO REMAIN UNDER INCREASINGLY UNSANITARY

(Initials) (Date)

DATE RECD:	
4-19	
REPLY DUE:	
ACTION TO:	
RHUDDO	
INFO	
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RIG/A	
RIG/II	
RFMC	1
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EXO	
GSO	
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RF	1
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CER	
EMB	
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STATE 113720

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5. PP SHOULD INCLUDE DESCRIPTION OF GOZ'S EVOLVING POLICIES REGARDING TREATMENT OF SQUATTERS COMMUNITIES AND INDICATION OF GOZ PLANS TO REPLICATE EPWORTH EXPERIENCE AS PILOT PROJECT IN OTHER URBAN AREAS. WHAT ARE FINANCIAL AND BALANCE OF PAYMENTS IMPLICATIONS OF THIS POLICY IF URBAN UPGRADING CONTINUES TO BE FINANCED BY FOREIGN BORROWING?

6. ECPR NOTED THAT LONGSTANDING INTERNAL INTEREST RATE OF 9.75 PERCENT WHICH RESIDENTS PAY FOR HOME IMPROVEMENT LOANS REPRESENTS NEGATIVE RATE IN REAL TERMS, IN LIGHT OF 20 PERCENT INFLATION RATE IN ZIMBABWE OVER PAST SEVERAL YEARS. IF INFLATION INCREASES FURTHER, A WIDENING OF THE INTEREST RATE SPREAD WILL PRODUCE AN EVEN GREATER SUBSIDY AND WILL DECAPITALIZE REVOLVING FUND AT FASTER RATE. PP SHOULD ADDRESS HOW GOZ WILL DEAL WITH THIS PROBLEM, INCLUDING INDICATION OF WHETHER GOZ IS LIKELY TO BRING INTERNAL INTEREST RATE MORE IN LINE WITH INFLATION AND TRUE COST OF BORROWING.

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8. BECAUSE OF THE UNCERTAINTIES EXPRESSED ABOVE. AID/W WOULD LIKE TO REVIEW THE PP AND AUTHORIZE THE HG IN WASHINGTON. SHULTZ

BT  
#3720

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STATE 113720

OFFICIAL FILE  
RHUDO FILE

AID-3 ECON CERON-5

ANNEX A

VZCZCNAO259  
PP RUEHNR  
DE RUEHC #3720 1092151  
ZNR UUUUU ZZH  
P R 181916Z APR 84  
FM SECSTATE WASHDC  
TO RUEHSB/AMEMBASSY HARARE PRIORITY 3415  
INFO RUEHNR/AMEMBASSY NAIROBI 7193  
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UNCLAS STATE 113720

LOC: 164 556  
18 APR 84 2204  
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E.O. 12356: N/A

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PROG	
AGR	
HNP	
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EXO	
GSO	
PER	
RF	1
CHRON	
C&R	
EMB	5

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UNCLASSIFIED

STATE 113720

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#3720

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B-1

ANNEX B  
PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project  
From FY 84 to FY 87  
Total U. S. Funding  
Date Prepared May 1, 1984

410 1020-2011-721

Project Title & Number: URBAN UPGRADING AND COMMUNITY FACILITIES 613-IG-002

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <ol style="list-style-type: none"><li>To improve the quality of life for low income people living in urban areas.</li></ol>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"><li>Improved living conditions of people living in squatter settlements.</li></ol>	<ol style="list-style-type: none"><li>Survey data on living conditions.</li></ol>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"><li>Continued commitment of the government to improve the conditions of people living in squatter settlements.</li></ol>

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B-2

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project:  
From FY 84 to FY87  
Total U. S. Funding \_\_\_\_\_  
Date Prepared: May 1, 1984

FORM 17-511  
REV. 1-78

Title & Number: URBAN UPGRADING AND COMMUNITY FACILITIES 613-HG-002

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Purpose:</p> <ol style="list-style-type: none"><li>1. Upgrade Epworth and provide a learning experience for the Ministry and the City to enable them to develop a more appropriate policy response to the squatter problems.</li></ol>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"><li>1. Provision of water, roads, security lighting, sanitation, and community facilities to approximately 25,000 people living in a squatter settlement.</li><li>2. Better understanding of the squatter problems in the country and appropriate policy response of the government.</li></ol>	<ol style="list-style-type: none"><li>3. Joint evaluation by MLGTP, COH and USAID.</li></ol>	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"><li>1. Willingness of MLGTP and local authority to accept upgrading of squatter areas progressively.</li></ol>

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10-10-79  
ELEMENT 1

B-3

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project:  
From FY 84 to FY 87  
Total U.S. Funding  
Date Prepared: May 1, 1984

Title & Number: URBAN UPGRADING AND COMMUNITY FACILITIES 613-HG-002

PAGE

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>1. Upgrading of Epworth area where 90 percent of families are below median income.</p> <p>2. Home improvement loans.</p> <p>3. Employment generation loans.</p>	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> <li>1. Improvement in the living conditions of approximately 25,000 residents of Epworth.</li> <li>2. Individual water connection for each house.</li> <li>3. "Blair" system toilets for all households in Epworth.</li> <li>4. Distributor roads tarred for bus and other vehicle traffic and access streets to some plots.</li> <li>5. One police station, one clinic, one community hall, administrative office, bus shelters, markets, one secondary school, and post office.</li> <li>6. Electrical security lighting to housing and power connection to community facility buildings.</li> <li>7. Resettlement loans for 500 families.</li> <li>8. Home improvement loans for 2,000 families.</li> <li>9. Loans to build Blair toilets for 3,500 families.</li> <li>10. Studies to better understand squatter upgrading phenomenon in Zimbabwe.</li> </ol> <p>(cont.)</p>	<ol style="list-style-type: none"> <li>1. Records of MLGTP and COH.</li> <li>2. MLGTP, Coh and USAID evaluations.</li> </ol>	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> <li>1. GOZ draws down HG loan.</li> </ol>

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10-1

B-4

PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Life of Project:  
From FY 84 to FY 87  
Total U.S. Funding \_\_\_\_\_  
Date Prepared: May 1, 1984

URBAN UPGRADING AND COMMUNITY FACILITIES 613-HG-002

Title & Number:

PAGE

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	<p>Magnitude of Outputs: Continued.</p> <ol style="list-style-type: none"> <li>11. Ministry and City experience with implementation of an urban upgrading project.</li> <li>12. Small enterprise plots for employment generation.</li> <li>13. Institutional capacity and policy framework to develop an appropriate response to the squatter issue in Zimbabwe.</li> </ol>		<p>Assumptions for achieving outputs:</p>

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AID 1010-20 (1-79)  
SUPPLEMENT 1PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK

Project Title &amp; Number: URBAN UPGRADING AND COMMUNITY FACILITIES 613-HG-002

Life of Project:  
From FY 84 to FY 87  
Total U.S. Funding  
Date Prepared: May 1, 1984

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Input (D-1)	Implementation Target (Type and Quantity) (D-2)	(D-3)	Assumptions for providing inputs (D-4)
1. HG Loan	. \$14.0 million loan	1. Lender and borrower reports	1. HG loan authorized by AID
2. One long term resident advisor	2. \$160,000 Grant funds	2. USAID evaluations	2. Grant funds authorized by AID
3. Short term TA	3. \$85,000 Grant funds		
4. Overseas and local training	4. \$30,000 Grant funds		
5. Commodities	5. \$35,000 Grant funds		
6. Project staff (2 people for two years on local terms)	6. \$90,000 Grant funds		

ANNEX C

THE HOUSING GUARANTY PROGRAM

STATUTORY CHECKLIST

ZIMBABWE

PROJECT NO. 613-HG-002

ANSWER YES OR NO PUT  
PP PAGE REFERENCE  
AND/OR EXPLANATIONS  
WHERE APPROPRIATE

A. General Criteria Under HG Statutory Authority.

Section 221(a)

Will the proposed project further one or more of the following policy goals?

- (1) is intended to increase the availability of domestic financing by demonstrating to local entrepreneurs and institutions that providing low-cost housing is financially viable; YES (P. 9)
- (2) is intending to assist in marshalling resources for low-cost housing; YES (P. 14)
- (3) supports a pilot project for low-cost shelter, or is intended to have a maximum demonstration impact on local institutions and national; and/or; YES (P. 14, 16, 24)
- (4) is intended to have a long run goal to develop domestic construction capabilities and stimulate local credit institutions to make available domestic capital and other management and technological resources required for low-cost shelter programs and policies? YES (P.20, 21 24)

Section 222(a)

Will the issuance of this guaranty cause the total face amount of guaranties issued and outstanding at this time to be in excess of US\$1,893,100,000?

NO

Will the guaranty be issued prior to September 30, 1984?

YES

Section 222(b)

Will the proposed guaranty result in activity which emphasizes:

- (1) project providing improved home site to poor families on which to build shelter related services; or YES (P. 9 ,23)
- (2) projects consisting of expandable core shelter units on serviced sites; or YES (P. 23)
- (3) slum upgrading projects designed to conserve and improve existing shelter; or YES (P.9,19,20,21)
- (4) shelter projects for low-income people designed for demonstration or institution building; or YES (P. 9 ,28)
- (5) community facilities and services in support of projects authorized under this section to improve the shelter occupied by the poor? YES (P. 9, 19, 22)

Section 222(c)

If the project requires the use or conservation of energy was considered given to the use of solar energy technologies, where economically or technically feasible?

NA

Section 223(a)

Will the USAID guaranty fee be in an amount authorized by USAID in accordance with its delegated powers?

YES

Section 223(f)

Is the maximum rate of interest allowable to the eligible USAID Investor as prescribed by the Administrator not more than one percent (1%) above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development?

YES

Section 223(h)

Will the Guaranty Agreement provide that no payment may be made under any guaranty issued for any loss arising out of fraud or misrepresentation for which the party seeking payment is responsible?

YES

Section 223(j)

- (1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country. YES (P. 17)
- (2) Will the proposed HG demonstrate the feasibility of particular kinds of housing and other institutional arrangements? YES (P. 9)
- (3) Is the project designed and planned by USAID so that at least 90 percent of the face value of the proposed guaranty will be for housing suitable for families below the median income, or below the median urban income for housing in urban areas, in the host country? YES (P. 23)
- (4) Will the issuance of this guaranty cause the face value of guaranties issued with respect to the host country to exceed US\$25 million in any fiscal year? NO
- (5) Will the issuance of this guaranty cause the average face value of all housing guaranties issued in this fiscal year to exceed US\$15 million? NO

Section 238(c)

Will the guaranty agreement provide that it will cover only lenders who are "eligible investors" within the meaning of this section of the statute at the time the guaranty is issued? YES

B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

1. Does the host country meet the general criteria for country eligibility under the Foreign Assistance Act as set forth in the country eligibility checklist prepared at the beginning of each year? YES
2. Is there any reason to believe that circumstances have changed in the host country so that it would now be ineligible under the country statutory checklist? NO

IMPLEMENTATION SCHEDULE FOR EPWORTH UPGRADING PROJECT

ACTIVITY	RESPONSIBLE PARTY <sup>1/</sup>
<u>3rd Quarter FY 1984</u>	
Socio Economic Survey completed	MLGTP
House to house registration for provisional lease of plots	ODC, MLGTP
Plan prepared of resettlement area	ODC, MLGTP
Infrastructure standards for water, sanitation, electricity and roads agreed in principle	COH, MLGTP, ODC, USAID
Locations for water lines agreed in principle	COH, MLGTP, USAID
Locations for electricity distribution lines agreed in principle	COH, MLGTP, USAID
Type and location of community facilities agreed in principle	COH, MLGTP, ODC, USAID
Preliminary Land Use Plan prepared	MLGTP, ODC
Estimates of costs for infrastructure prepared	MLGTP, COH, USAID
Resettlement areas and layout approved legally	MLGTP
Agreement on composition of Project Management Unit	MLGTP
Survey of Soils (percolation, ground water, rock, type, etc.) completed	MLGTP
Project Paper approved	AID

<sup>1/</sup> AID - U.S. Agency for International Development (USAID)  
 ODC - Overall Development Committee  
 COH - City of Harare  
 GOZ - Government of Zimbabwe  
 MLGTP - Ministry of Local Government and Town Planning  
 SEDCO - Small Enterprise Development Corporation

ACTIVITY	RESPONSIBLE PARTY
4th Quarter FY 1984	
Houses to be moved from unsuitable ground identified	MLGTP, ODC
Residents affected by community facilities consulted	MLGTP, ODC
Residents affected by roads consulted	MLGTP, ODC
Vacant plots identified	MLGTP, ODC
Land Use Plan agreed	MLGTP, COH
Final plans of resettlement area completed	MLGTP, ODC
Preliminary and final plans prepared for site offices	MLGTP, COH
Infrastructure location plan updated	MLGTP, COH
Standards for By-laws and Building Code agreed in principle	MLGTP, COH, ODC
Engineering studies, preliminary and final plans, tender documents for roads and water on total layout made	MLGTP
Draft Implementation Agreement submitted to MLGTP	USAID
Draft Grant Agreement submitted to GOZ	USAID
Training programme finalized	MLGTP, COH, USAID
Cadastral Survey of resettlement area undertaken	MLGTP
System of Management for employment generation finalized	MLGTP, SEDCO

ACTIVITY	RESPONSIBLE PARTY
1st Quarter FY 1985	
Implementation Agreement signed	GOZ, AID
Grant Agreement Signed	GOZ, AID
Technical advisor recruited	USAID, MLGTP
Final plans prepared for community facilities	MLGTP
Field Team Training undertaken	MLGTP, ODC, USAID
Tenders requested for water and road construction including resettlement area	MLGTP
Project Delivery Plan completed	MLGTP
2nd Quarter FY 1985	
Loan and associated agreements signed	GOZ, AID, U.S. Lender
Final drawings for electrical distribution made	GOZ
Tenders awarded for water and and road construction	MLGTP, GOZ Tender Board
Processing of house construction and house improvement loans started	MLGTP, COH
Road and water system construction begun	Selected Contractor
First loan disbursement	U.S. Lender, GOZ, AID

ACTIVITY	RESPONSIBLE PARTY
3rd Quarter FY 1985	
Purchase of materials for relief water trunk main contract begun	MLGTP, COH
Road access from Widdecombe Road to resettlement area completed	Selected Contractor, MLGTP
Tenders awarded for electrical construction work	GOZ Tender Board, MLGTP
Tenders requested for community facilities	GOZ Tender Board, MLGTP
4th Quarter FY 1985	
Leases with option to purchase issued	MLGTP
Resettlement of families affected by road construction	MLGTP, ODC
Tenders awarded for community facilities	GOZ Tender Board, MLGTP
1st Quarter FY 1986	
Construction of community facilities begun	Selected Contractor, MLGTP
Resettlement area roads and water completed	MLGTP
Resettlement of other relocated families started	MLGTP
Completion of electrical contract	GOZ
Interim Evaluation	MLGTP, COH, ODC, USAID
2nd Quarter FY 1986	
All resettlement completed	MLGTP

ACTIVITY	RESPONSIBLE PARTY
3rd Quarter FY 1986	
All house construction and improvement loans disbursed	MLGTP, COH
Transfer of Epworth to Harare completed	MLGTP, COH
4th Quarter FY 1986	
Completion of roads and water contract	MLGTP
1st Quarter FY 1987	
Completion of community facilities	MLGTP
Final Evaluation	MLGTP, COH, ODC, USAID
Trunk water main contract completed	MLGTP, COH
Individual house connections completed	COH
Final loan disbursement from Escrow account	U.S. Lender, GOZ, AID
4th Quarter FY 1987	
Final Evaluation	MLGTP, COH, USAID

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INITIAL ENVIRONMENTAL EXAMINATIONURBAN UPGRADING AND COMMUNITY FACILITIES PROJECT613-HG-0021. History

Epworth Farm consisting of 1096 hectares was donated to the Methodist Missionary Trust Association (MMTA) in late 1800 by Cecil Rhodes. Its initial economic activities centered around farming and cattle ranching plus literacy classes for adults and elementary schooling for the youth. In 1904 Glenwood Farm with 1111 hectares was purchased by the MMTA. This was followed in 1908 by the purchase of Adelaide Farm with 1610 hectares. Farming and cattle ranching continued to provide income and the Mission expanded with a church and seminary. Education and health care began to be more formally organized.

"Epworth" is the recognized name for the entire 3670 hectares with 4 main villages established since 1900: Maguta with 56 hectares, Makono with 36 hectares, Chinamo with 24 hectares, and Zinyengere with 28 hectares.

The Epworth area has a history of more than 60 years of insecure land and tenure development. The 1928 Land Apportionment Act classified Epworth as a European area. In 1939, the government recognized the Africans as tenants of the Mission. Under the 1941 Land Apportionment Act, 240 rentals for agricultural use were approved by the Native Land Board. In 1950, 200 agricultural and 300 residential tenancies were additionally approved. At that time Epworth had some 3000 inhabitants in its four villages all tied to the Mission which was administered by Africans. In 1952 the government recognized the Mission as trustees of the African settlers land. During the Civil War the Methodist Mission received war refugees from rural areas. Estimates of refugees were 2500 to 3000 families. The Farm Council and Mission allowed refugees to construct shelters in extension areas to the four villages. Care was taken to protect cattle grazing and gardening areas. In 1979 at the end of the war, the new government offered incentives to refugees to return to their rural homes. Many refugees went home but sold their houses to those who did not want to relocate. By the end of 1979 refugees were selling houses, settlers were allowing newcomers in, as were Mission employees. In 1982 the Mission agreed to transfer the bulk of Epworth land to the Ministry of Local Government and Town Planning retaining only control of sites containing the pastors house, church, seminary, etc. In December 1982, the Minister for Local Government transferred administration responsibilities to the Urban State Land Office within the Ministry. The Ministry has promised to upgrade the settlement.

## 2. Existing Physical Conditions

### A. Housing

Based on aerial photography taken in May 1983, the average plot size is about 2700 square meters giving it a medium to low density. Variations of plots are from 300 square meters to 7000 square meters. However, plots can be taken as generally 600 square meters or 6000 square meters. Presently there are 25,000 people on 5,800 plots. Generally, the larger the plot, the longer it has been settled. While the plot sizes are relatively large, the built up areas are small, with 78 percent of the houses being less than 30 square metres.

On the majority of plots are several structures, the main house, a second house for relatives or lodgers, and a separate kitchen (usually rondavel).

People per plot vary from 30 down to 2, the smaller (newcomer) plots showing 2, 3 and 4 room units with 2.2 persons per room. The larger plots have lower occupancy rates.

The housing is in relatively good condition, being built of sun dried brick, plastered and painted. Others are built of on site concrete block or burnt brick.

Cooking is done on wood burning stoves, usually outside the house. Clothes washing is done outdoors on rocks or near wells. With large plots, there is no shortage of play space or gardening area. Few plots are fully utilized.

Layout is generally orderly and lends itself to upgrading with little modification. Exceptions are in the newer development since 1979.

### B. Community Facilities

Two primary schools have been funded and built by residents. A secondary school, although fully functioning, is not yet complete and is being expanded on an annual basis. MMTA has contributed part of the funds for the secondary school, and the Ministry of Education provides the staff. The schools run double sessions, 45 children per class, but are still insufficient for community needs. The community is actively wanting to construct a third primary school.

Two pre-schools offer half day activities without midday meals.

### C. Road Access and Transportation

The settlement is reached by Widdecombe Road from central Harare. This is a narrow tarred road in fair condition.

Delpport Road, a gravel road, runs in a northeasterly-southwesterly direction through the southeast part of Epworth.

The internal road system is a series of sandy tracks which are generally adequate for the light traffic it carries. However, some roads are difficult in the rainy season.

A good bus service to Harare runs along Widdecombe Road with a terminus near to Delpport Road. At off peak times it is infrequent and at peak hours it is overloaded. Residents make use of shared taxi services.

#### D. Water Supply

There is no piped water supply within Epworth. Most plots have their own shallow hand dug well and draw the water up in buckets. A few have fitted windlass system. Blair Research Laboratory (Harare) has conducted tests of prototype hand pumps. In the course of its research it has tested water in many house wells and found the majority to be contaminated. Contamination is more serious during the rainy seasons from surface water, side wall intrusion or by contamination from pit latrines at lower elevations.

#### E. Sanitation and Solid Waste

All plots have some form of pit latrine, mostly of the unimproved type. Presently the Blair Research Laboratory is assisting some residents to build improved ventilated septic tank type models with soakaways.

Sullage water is usually used as an irrigation medium on the family garden.

Solid waste refuse is disposed of in pits, the majority of which are disused borrow pits formerly used for brick making.

Generally, there is great interest by the inhabitants in community cleanliness and there are no unsanitary smells.

#### F. Surface Conditions and Soils

A major portion of Epworth was once good farmland, but due to grazing mismanagement over a long period of time has become very degraded especially up to Delpport Road. Vegetation is of the woodland savannah type but few trees remain.

The soils are almost all granite derived: a sand topsoil on sandy loams with some loamy sand topsoil appearing toward the northern boundary. Soil depth in the toplands is good with adequate drainage. Toward the northeast and southwest corners depth is restricted by laterite. One of the major

characteristics of Epworth is the rocky outcrop including a famous tourist attraction "the balancing rocks".

Land slopes vary from 1% to 4% generally being 2% to 2 1/2%.

#### G. Surface Pollution

Many newcomers to Epworth have settled in the rocky areas causing surface water and sanitation pollution.

Houses have also been built on vleis (marshy areas) subject to flooding and requiring more expensive foundations.

Concerns have also been expressed that since Epworth is on the water shed of the Ruwa river, which flows into one of Harare's reservoirs, Prince Edward Dam about 10 km away, there is a risk of pollution to the water supply. Tests of the water contained by the dam indicate that during wet weather contamination occurs from fecal matter together with a high level of phosphates and nitrates. It is believed that some of the contamination originates from Epworth. It is, however, not known whether the chemical pollutants are caused by detergents or fertilizers and the organic pollutants are of human or animal origin. The chemicals are of concern because they are creating algae bloom at the reservoir and temporarily overload the treatment process.

### 3. Proposed Community Upgrading with Infrastructure

#### A. Land Use Planning

As stated earlier, the housing is in relatively good condition and contained, and earth roads are in place. What needs to be done is to upgrade some housing, resettle through infilling and overspill housing presently located on rocky or flood land, upgrade roads as necessary, have all plots set with improved ventilated tank type latrines with soakaways, and supply piped water throughout the site from the city supply at the north boundary. Maps in Annex G show the land use plan and resettlement areas.

The land use plan also shows the areas to be set aside for the police station, clinic, community hall, small community centers, post office, markets, small enterprise plots, and schools. Planning would also include bus shelters and tree planting throughout the community.

#### B. Development Planning

Development Planning would be to evolve a staged construction of upgrading, (1) develop resettlement plots with improved Blair Septic Tank type toilets, water, roads, drainage, (2) resettle people, and (3) upgrade existing plots

by improved Blair toilets, piped water, improved roads, tree planting, limited electrical supply to community facilities and commercial as well as security lighting.

### C. Roads, Drainage, Transportation

Road improvements are to be a means of providing all weather transport corridors for commercial vehicles including buses as well as providing access for emergency vehicles.

New roads including bus routes would link the community with existing Widdecombe and Delport roads and to central Harare. Road elevations would be above the level of adjoining ground.

Standards would be as follows:

Local Distributors	20m reserve, storm drainage 8.7m gravel base on subbase 6.7m double course bitumenized surface for buses.
Widdecombe Road Widening	As above
Minor Local Distributors	13m reserve, storm drainage 6.5m gravel base on subbase and 5.5m single surface treatment.

Drainage and ditches would be outletted as quickly as possible. No connected drainage system would be set up.

Bus service would be on local distributors.

### D. Water Supply

All existing polluted shallow hand dug wells are to be abandoned in favor of a new community supply line with connection to the northern boundary transmission line from the Ventersburg Dam and with distribution pipes throughout the whole site. Flow to be based on the land use plan and limited consumption basis of 90 liters per capita per day which allows for eventual waterborne sewerage system. The individual piped water system from the City Supply would eliminate the present health hazard as well as giving inhabitants clean water. The project would also contribute to a new 6 kilometer water supply main, which is presently a constriction to the supply system, to assure Epworth residents get adequate supply of water.

### E. Sanitation and Solid Waste

An on plot sanitation system will be used. The Blair single tank toilet with soakaway as developed by Blair Research Laboratory in Harare has a proven track record, with maintenance free life of 10 to 15 years, and is socially acceptable. The unit is integrated with a bath house and can be upgraded to a septic tank and soakaway system

or a final waterborne sewer system. See Fig 4. The on site non water borne system will minimize water usage and soakaway outflow. The Blair system controls the sewage, flies and odor while the tank and soakaway controls the bacteria in the sandy soil.

Sullage and bath water would be to a separate soakaway.

Solid waste will be disposed of in non drainable pits, community controlled, and with surface water diverted around them.

The control of sewage systems, waste water and solid waste would prevent any pollution going into the City Water Supply System at Prince Edward Reservoir. The relocation of houses presently on rocky and marshy areas would prevent potential health hazards on site as well as reducing pollution to the City Water Supply System.

#### F. Surface water

Surface water would be outletted as sheet flow, not as point sources. Ditches would be grassed and erodability of soils controlled through sediment basins and tree planting. Sediment basins or small dams would be placed at all river and stream inlets. This prevents sediment and soil being washed into rivers and streams.

#### G. Building Improvement

Building improvements will generally be made from materials constructed locally by self-help methods or small Zimbabwean enterprises and be of permanent materials.

#### H. Construction

Construction will generally be carried out by small local contractors who have an interest in the community or on an aided self-help basis.

#### I. Electrical Supply

Electrical supply will be from Widdecombe Road along the bus route and connect to community facilities and commercial areas only. High pole security lighting would also be placed in those locations as well as to the whole site.

### 4. Project Potential Impacts

#### A. General

Concentration of housing areas at medium to low densities should result in more cultivable or improved cultivable lands. Agricultural planning should result in more manageable market gardening, cattle ranching and conservation. This should help to prevent soil loss or erosion. Surface water resources exist in the project area and will be more controlled. Resettlement of housing built in flood prone areas or on rocky outcrops would increase

surface water quality while decreasing drainage run off flows and pollution. Man made discharges into surface water will be by sheet flow and not concentrated point flows in order to prevent erosion.

Ground water quality will increase due to replacement of pit latrines by Blair Septic Tank type toilets and soakaways and by the replacement of dug wells by community piped water supply.

Air quality and noise should be unaffected except during construction. Aquatic ecosystems are not significant but will be improved through conservation. Wetlands ecosystems (marshes and flood plains) will be improved through removal of houses presently built on flood plains and conservation measures. Terrestrial system was savanna and is decreasing. Tree planting will assist in decreasing the stress on the remaining system.

Disease vectors occur through the present interrelated use of hand dug shallow wells for water supply and unimproved pit latrines on individual plots. These interrelated vectors will be eliminated through the use of Blair Septic Tank toilets and community piped water supply. Mosquitoes and flies will be reduced through the ventilated tank toilet and soakaway in generally sandy soil.

Individual health hazards will be eliminated and surface water pollution minimized. The relocation of houses presently located on rocky and marshy soils will further minimize ground and surface pollution. Resources will be conserved through proper land planning zoning and management and pollution prevented.

The project would not increase the demand for conventional or non conventional energy sources due to control over plots and people. The planting of fast growing trees for fuel wood is a possibility.

Population is generally stable and will be controlled. Only the resettlement of people presently in flood plains or rocky areas should be considered as temporarily mobile. Cultural and religious values would be relatively unaffected.

Major positive effects of the project are through controlled sewage disposal and community piped water supply which will eliminate individual health hazards and minimize surface water pollution.

#### B. Roads

Except for overspill areas, road improvement will be by designation and improvement of existing roads with drainage together with placing of a base, subbase and riding surface. The designation will fix the base, pavement and right of way widths. Surfaced roads will be used only on bus, major routes and minor routes. Only designated roads will cross wetlands and rivers. On overspill areas (new) only local distributors and minor local distributors will be constructed.

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In overspill areas which are adjacent to existing housing, slopes are relatively small and natural areas for preservation are not significant. The land use plan, zoning, densities and open area are significant.

For the improved or new roads, embankment slopes would be stabilized, spill areas reclaimed and borrow areas restored. Construction will be by local contractors requiring few construction camps and limited equipment.

Cross drainage will be by culverts, side drainage by ditches with grass controlled velocities so as to minimize erosion. Slopes are relatively small. Ditches will be outletted as quickly as possible and in the form of side sheet flow in preference to concentrated flow. Sedimentation basins will be used as needed, probably at river inlets.

#### C. Sanitation

Sanitation will be on site using ventilated tank toilets with soakaways, designed and tested by Blair Research Laboratory. Bath houses, where constructed in connection with Blair latrines, will be according to their design. Otherwise bath houses shall be on the upstream side of the latrine and sullage connected to a separate soakaway or surface trenches. Soakaways will be designed according to soil conditions.

#### D. Solid Waste Disposal

Solid waste where collected by the community shall be placed in non wet pits, clay lined and clay covered, with surface water diverted around it. Disused water wells shall not be considered for on site disposal areas.

#### E. Water Supply

Health and social conditions dictate the piped water supply with the source as the City Ventersburg Dam. The City Water Engineer has agreed that Epworth participation in a 6 km parallel water line will ensure a reliable water supply to Epworth. The water source is treated to give Zimbabwean water quality standards.

Confirmation made on the reliability of the water purification plan; the safe quantity of water withdrawn by the city annually, monthly, daily; the existing and future city demand; and the supply and demand flow in the Hatfield transmission main adjacent to Epworth together with average and peak demand; appear to show no problem except the 6km 750mm line which is low on capacity. With Epworth demand based on 90 litres per person per day, and peaked, it should be calculated and agreed to with the City that water can be taken from the Hatfield transmission main for Epworth area.

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Environmental considerations by the City in relation to the dam are protection of water source, watershed management, pollution control, and allocations to other users. Investigation of the City water supplies show a tightly controlled system.

Water flows would take into account future flows, schools, clinics, and community facilities.

Water line construction would allow for sound bedding and jointing of pipes, non leaking valves, and spring actuated faucets for any community standpipes.

#### F. Electrical Supply

Electrical supply will be from the Widdecombe distribution system and be on poles along the distributor roads giving connection and high pole lighting to community facilities, commercial and housing areas.

#### G. Small Scale Industries

Small scale enterprises in Epworth will be confined to services or small scale manufacturing related to construction. As such and because of their size it will not have a significant environmental impact. Its location will be on Widdecombe Road and local distributor roads for purposes of transportation, labor, water and materials. Labor is readily available and any waste should be disposed of on site by a suitable septic tank.

#### H. House Construction

Houses are presently constructed of sun-baked bricks, fired bricks or concrete blocks, with metal, asbestos, tile, thatch roofs, and wooden or steel windows. Major defects are lack of damp proof and weather proofing and insect protection. New buildings will incorporate higher quality materials through control and modified building codes. Present houses with few exceptions are of sufficient quality to be allowed to be habitable.

#### 5. Conclusion

The conclusion is that the upgrading of the Epworth site will not have a significant negative impact on the environment.

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TECHNICAL ANALYSIS

1. DEVELOPMENT PLANNING

The Ministry of Local Government and Town Planning has ministerial control over the whole settlement area of Epworth including land tenure. Development Planning has been carried out by this Ministry and the Department of Physical planning Mashonaland and has resulted in the following maps: (not attached)

Map No. 2 Slope Analysis	1:10000
Map No. 3 Surface Soils	1:10000
Map No. 4 Agricultural Potential	1:10000
Map No. 5 Land Unsuitable for Development	1:10000
Map No. 6 Existing Land Uses (with differentiation of houses as of November 79 and as of May 1983).	1:10000
Map No. 7 Existing Infrastructure (Major Collector roads, local collector roads, local streets, telephone, main power lines).	1:10000
Map No. 8 Preliminary Planning Proposals: Relocation (showing residential areas to be relocated, buildable undeveloped land).	1:10000
Other drawings, including Land Use Concept Plan	1:25000
Preliminary Road Hierarchy and Community Facilities (Aerials)	1: 5000
Preliminary Water Plans (Aerials)	1: 5000
Preliminary Electric Power Plan (Aerials)	1: 5000
Resettlement Area Blair Toilets	1: 2500

Map 1 through 7 relate to existing criteria while Map 8 onwards relate to proposals based on the existing data. Map 8, Preliminary Planning Proposals, relates to the existing Land Use Plan and, because of housing in relatively good condition, suitable soils, slopes and low densities, relocates only those houses (post Nov. 79) which are situated on rocky or wet soils. The land use plan shows areas to be set aside for the police station, clinic, community hall, small community centers, post office, markets, small enterprises plots, schools, as well as defining areas for housing, open space, agricultural uses. It also indicates the major roads to be constructed within the site.

Alongside the land planning would be revised regulations in relation to special development and modification of Harare City building codes and by-laws suitable for present Epworth. Development financing would be a separate part of development.

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Development planning is leading to staged construction of upgrading; the new resettlement areas for relocated families together with community facilities; the evolution of plans for the community water system, bus transportation routes, minor and major roads, electrical power and security lighting, telephones and individual sanitation system; and will lead into design and construction.

A major point of Development planning is planning be done in Epworth in such a manner that it is acceptable to the City of Harare without undue financial strain, yet be acceptable in terms of infrastructure and economics for low cost housing. The major effect of the above is the inability to provide individual plots with roads (albeit access), electricity and waterborne sewerage (modified septic tank provided).

The Department of Works will, upon inclusion of Epworth into Harare, be responsible for maintenance of the infrastructure. The Department of Works will inspect the civil works before the inauguration of the City's maintenance of the area. As a result, extensive dialogue with the Department, a set of standards has been agreed to that the Department believes are adequate to protect the basic health and safety of the residents, and are maintainable. The City Electrical Engineer has responsibility for maintenance of electricity works. The Department of Works is being consulted by the Department of Physical Planning of MLGTP on the master plan and standards for Epworth.

## 2. SEWAGE DISPOSAL (BLAIR SYSTEM)

Presently sewage disposal at Epworth is by pit latrine on plots which also have shallow water wells. The close relationship between the pit latrine and the shallow water well is a health hazard and pollution of the water wells from the pit latrines has occurred in varying concentrations. Following is a preliminary report for Epworth taken from material prepared by Dr. Peter Morgan Blair Research Laboratory, Harare.

The Ventilated Improved Pit Latrine, known in Zimbabwe as the Blair Latrine was perfected by Blair Research Staff in 1975. The latrine was designed to operate in areas where water is scarce and very specifically for rural areas.

This report speculates on its use for peri-urban development. Nine years of trials have clearly shown, that when built correctly, the Blair Latrine is effective and can operate with the minimum of maintenance for long periods of time. Its popularity in rural areas can be attributed to this ease of maintenance coupled with an almost total absence of flies and odours within the latrine. It is often used as a washroom as well as a latrine - a trend which has been encouraged.

Most Blair latrines are built over a pit - a system which is ideal for rural development where space permits the construction of a

second or third latrine on one stand or for a new pit to be dug, when the old one fills up. Family units are being promoted in rural development programmes and the basic pit design, which has a pit diameter of 1.2m (4ft) and a depth of at least 3m (10ft) and preferably 4m, should last a family of 8 persons for 15 years or more if the facility is regularly washed down and paper is used for anal cleansing. After this period it is necessary for the latrine to be sited on a new pit - and very often components from the old latrine can be used (slab, roof, pipe, etc.). A sounder policy is to build two latrines from the start - (male and female) - each will last longer, that is double the life of a single pit.

This situation may not apply in peri-urban settings, however, where space is limited on each plot. In 1976 Blair staff began to look at longer life and desludgeable ventilated Blair Tank Latrines. This work has shown that it is possible to build a tank with effluent discharge pipe and soakaway beneath a standard Blair Latrine which has the combined advantage that the life expectancy of the facility is extended and desludging the contents of the tank with a manually operated Bumi Pump or similar, becomes possible. The system also handles a greater water loading and for this reason it is possible to upgrade the facility so that it contains a conventional waterborne/flush system. Currently Blair Staff are testing small bore sewer systems attached to several tanks fitted beneath Blair Latrines. At the present time the common sewer leads to a single soakaway.

Tanks fitted beneath Blair latrines are the same size as the pit version, but are completely lined with a much more substantial layer of cement mortar, reinforced if necessary with wire. Smaller tanks, 2.5 and 2.0m deep, are also on trial. Larger tanks are preferable, however, partly because desludging periods will be less frequent but also because sand and items other than excreta can find their way into Blair latrines, since there is no restricting water seal which has the effect of reducing the range and number of extraneous items that might find their way into the tank.

In high density areas it is also possible that figures quoted for family size may well be above the actual number of persons using the facility. Thus larger tanks, which cost very little more to build, offer a number of advantages.

If the intention is to make sanitation permanent and also upgradeable right from the beginning, then it is desirable to make desludgeable tanks. In the first instance these could be connected to small soakaways but positioned so that when an upgrading exercise is undertaken and waterborne units are fitted within the same superstructure, the separate effluent discharge pipes can be fitted whether to larger individual soakaways or to a common small bore sewer. This sewer could be led either to a large soakaway or sewage ponds or whatever technology is more appropriate. Naturally it is assumed that latrines can be upgraded from non-waterborne to waterborne after water is

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delivered to each stand, and in fact is piped directly to the toilet facility itself.

Where the latrine is used as a washroom, and water is handcarried to the facility, the soakaway component should be designed to cope with that volume of water as a precaution. In the Epworth situation it is possible that most Blair Tank Latrine facilities would be used as washrooms. For this reason also, most families would prefer the square superstructure version, since this offers more room for bathing. A double square version with twin tanks and effluent discharge pipe has been designed and is the most appropriate design for use at Epworth.

Although ventilation pipes fitted to Blair Tank Latrines do emit an odour, experience at Epworth, and in many other areas where they have been installed on a family basis, indicates that there is no undue concern raised about pipe odours. Plot size would certainly play a part in determining whether ventilated latrine technology was suitable, from this point of view. However, plots at Epworth are large and certainly large enough for Blair Tank Latrines.

The question of underground water pollution is also a serious consideration especially in view of the relatively high density of settlement in the area, the relatively high water table and the proximity to rivers serving storage dams which supply water to the City of Harare.

At the existing time, most households have built a simple pit latrine on their plot which coexists with a shallow well dug on the same plot. Thus even at the present time, the situation is theoretically very serious. Bacteriological evidence derived from the sampling of wells in the area suggests, however, that generally the pollution of wells from a movement of contaminants in the ground water caused by latrines is minimal compared to pollutants derived from the surface. Wells fitted with pumps provide water of much better quality than those fitted without pumps. This is a strong indication that pollutants are derived from the surface and not from underground movement of bacilli. Epworth is an area of sand veld in general, and this may account for what appears to be a rapid dieout of organisms derived from latrines.

What is undoubtedly more serious is the contamination and pollution of the riverine courses by human contact. The following figures provide evidence of the situation.

Bacteriological samples (Epworth).

Condensed data for E. coli per 100ml sample.

Mean of 10 samples of water from protected well fitted with handpump and mean of 9 samples of water from unprotected well with open top. Well within the demarcated family plot.

Date	Protected	Unprotected
12/10/81	5.4 <u>E. coli</u> /100ml	44.3 <u>E. coli</u> /100ml
26/10/81	11.4	103.3
9/11/81	10.8	204.3
23/11/81	3.5	702.3
7/12/81	4.5	728.3
5/12/81	38.6	590.6
19/1/82	9.0	457.0

These figures, taken over a critical period of the year (early rains) show the great difference between protected and unprotected wells all dug on family plots. The most recent figures taken by Blair Research staff on 17/10/83 indicate the same trend. The mean E. coli/100ml for wells fitted with pumps was 3.7 E. coli/100ml (sample no. = 5) for unprotected wells. A sample taken from the quarry dam on the same day, where a great deal of human contact and washing takes place, indicated a figure of 1800<sup>+</sup> E. coli per 100ml. This figure reveals the most serious threat to contamination in the Epworth area - human contact with surface waters which run through the area. Improved domestic water supplies and sanitary facilities will undoubtedly lessen this problem by reducing contact with the river, etc. The current evidence suggests that threats to river pollution as a result of underground movement of waterborne contaminants may be minimal.

It seems very likely that the contamination of the ground water around a latrine may be very localised, and not a serious threat. In fact very little water is added to Blair Latrines in normal cases. The quantity added would amount to the volume of urine, plus water used for body washing and for washing down the latrine slab floor. Approximately 10 litres of water is used for bodily washing per person per day and approximately the same for washing down the slab. For a normal family this volume is not great, and could not lead to an undue change in the movement of ground water. However, once a waterborne facility is fitted the volume of water passing through the system will multiply enormously.

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Here 8-10 litres may be used per visit - thus many hundreds of litres would pass through the system daily. Under such conditions soakaways would need to be enlarged and the possibility of connection effluent discharge pipes to a common small bore sewer considered.

As far as providing water is concerned, metred family taps are preferable since water is conserved, and the possibility of swamps appearing around the waterpoint is reduced.

Blair Research team has agreed to advise local builders on the techniques of latrine construction, an operation which has in fact been active for some time already. They would also advise on siting, digging and on the preparation of the site. It is possible that builders may work on a contract basis. It is possible that under these conditions, some builders would prefer to use the technique of plastering a reusable mould to make a ferrocement structure. This technique has been used by Blair staff for many years, and may actually be cheaper than using bricks in areas such as Epworth. A series of demonstration structures could be built by Blair Research Staff - although in fact such structures are already built in Epworth, and more are being demonstrated at the present time.

### 3. TRANSPORTATION, ROADS AND DRAINAGE

Transportation to the center of the city from Epworth is an average distance of 10 kilometers, and for most inhabitants is by bus. The existing bus route is along Widdecombe Road up to Delpport Road and then returns along the same road. As no other road exist in Epworth other than Widdecombe Road, Delpport Road and sandy tracks, access to the bus points is by foot for up to 3 kilometers, as only a few vehicles venture into the site. Major commercial and community areas are close to Widdecombe Road, including one primary school, while another primary school and secondary school are internal to the site with access by sandy track. The Preliminary Road Hierarchy changes the bus route at the western entrance to Epworth by having the bus go through the site prior to making connection to Widdecombe Road at Delpport Road. This provides better access to the community and to the existing routes. The return bus route to Harare would be via Widdecombe Road, close to the southern perimeter of this site and bus connection south of Widdecombe Road would not be necessary except for Zinyenire extension. The bus route together with other major roads would give access for commercial traffic and schools. It is, however, intended to widen and improve Widdecombe Road at the site.

Minor distributor roads would connect to the housing areas and access streets would be constructed on housing through fares. Access street construction will be limited economically and at no time will there be access to all of the plots. This is a compromise between desirability and affordability.

The maps showing the residential area served by major distributors (existing bus routes), local distributors (bus and vehicles), minor local distributors and access streets have been prepared. The aeriels flown in May 1983, which are at scale 1:5000, show the existing houses and rights of way in detail.

Road standards are as follows:

<u>TYPE</u>	<u>RESERVE</u>	<u>SURFACE</u>	<u>BASE</u>	<u>SUBBASE</u>	<u>DRAINAGE</u>
Major Distributor	Existing	6.7 DBST	8.7 150 mm	8.85 150 mm	Yes Yes
Local Distributor	20m	6.7 DBST	8.7 150 mm	8.85 150mm	
Minor Local Distributor	12 - 15	5.5 SBST	6.5m 150 mm	6.65m 100mm	Yes

Thickness of the Local Distributor base will depend on vehicle or bus usage and loading. Due to sandy soils, drainage culverts will only be placed at stream crossings.

Local Distributor Roads link Epworth to Widdecombe and Delport Roads.

#### 4. WATER SUPPLY AND DISTRIBUTION

All existing shallow wells, which are to some degree contaminated, will be abandoned in favor of a community piped water system tying into the city of Harare water supply system.

The city system is supplied from the Prince Edward Dam and from Lake McIlwaine and through a series of tank reservoirs, and trunk mains supply the Greater Harare Water Region. An extension of that system together with water storage tanks runs along the Epworth northwest boundary.

Discussion with the City Water and Sanitation Engineer reveals that the water is balanced at that point and that additional water demand would involve a duplicate 24" or 30" water main from Highfield Gate to Hatfield PSCA. A contribution to the construction of that duplicate main would be based on Epworth water demand versus the design capacity of the main which is scheduled to be constructed in 1985/86.

Design for Epworth's population of 25,000 to 40,000 would be based on 40,000 population, 60 liters per day for house connections, 90 liters per day for inclusion of waterborne sewerage, peak hourly factor of 2.5. Waterborne sewage disposal at 90 liters is allowed

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for in design. Water distribution mains on site would be based on population demand per sector  $\times 40,000 \times 90 \times 2.5 = 9000 \text{ cbm}$ . The plan provides for individual water connections.

5. ELECTRICAL

Electrical supply to all plots in Epworth is not possible because of the low and medium density of the plots and the way the site is spread out. Combined with the high cost of power transmission lines, the uneconomic cost of house connections and minimum usage by occupants, it is easy to see the limitations that need to be placed on site electrical power.

It is proposed, therefore, to have only electrical power lines to feed schools and community facilities, and commercial activity plus small industry. These have generally been placed on the Land Use Map in areas convenient to transport, infrastructure and labor. Security lighting would be to the whole site. Costly minimum monthly usage could limit the number of house connections. Connection to the existing supply system is from Widdecombe Road.

6. SOLID WASTE

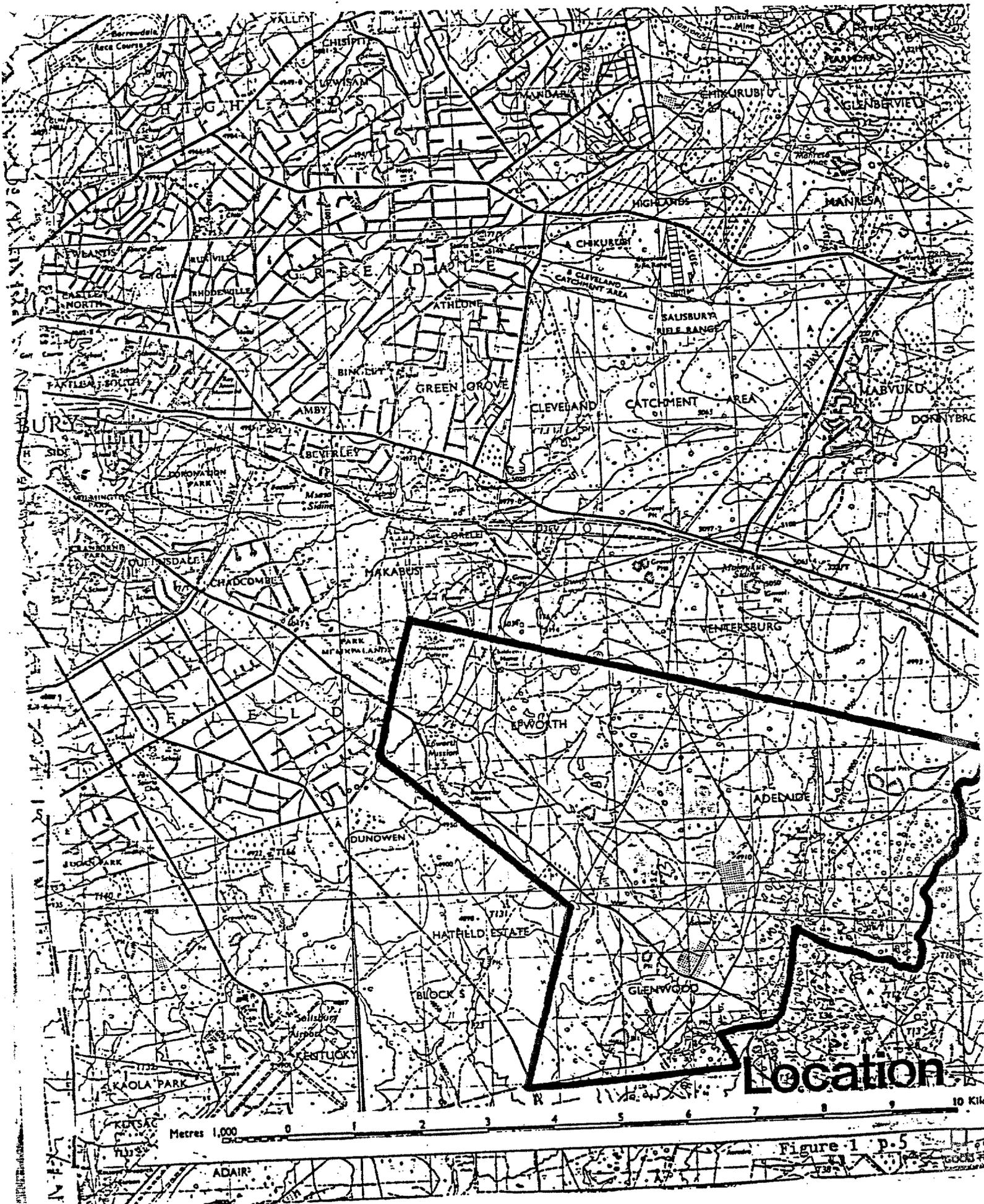
Solid waste will be collected by the community, and placed in non wet pits, clay lined and clay covered. Surface water would be diverted around them.

7. CONSERVATION

Conservation will be along streams and rivers and include sedimentation basins and minor conservation dams.

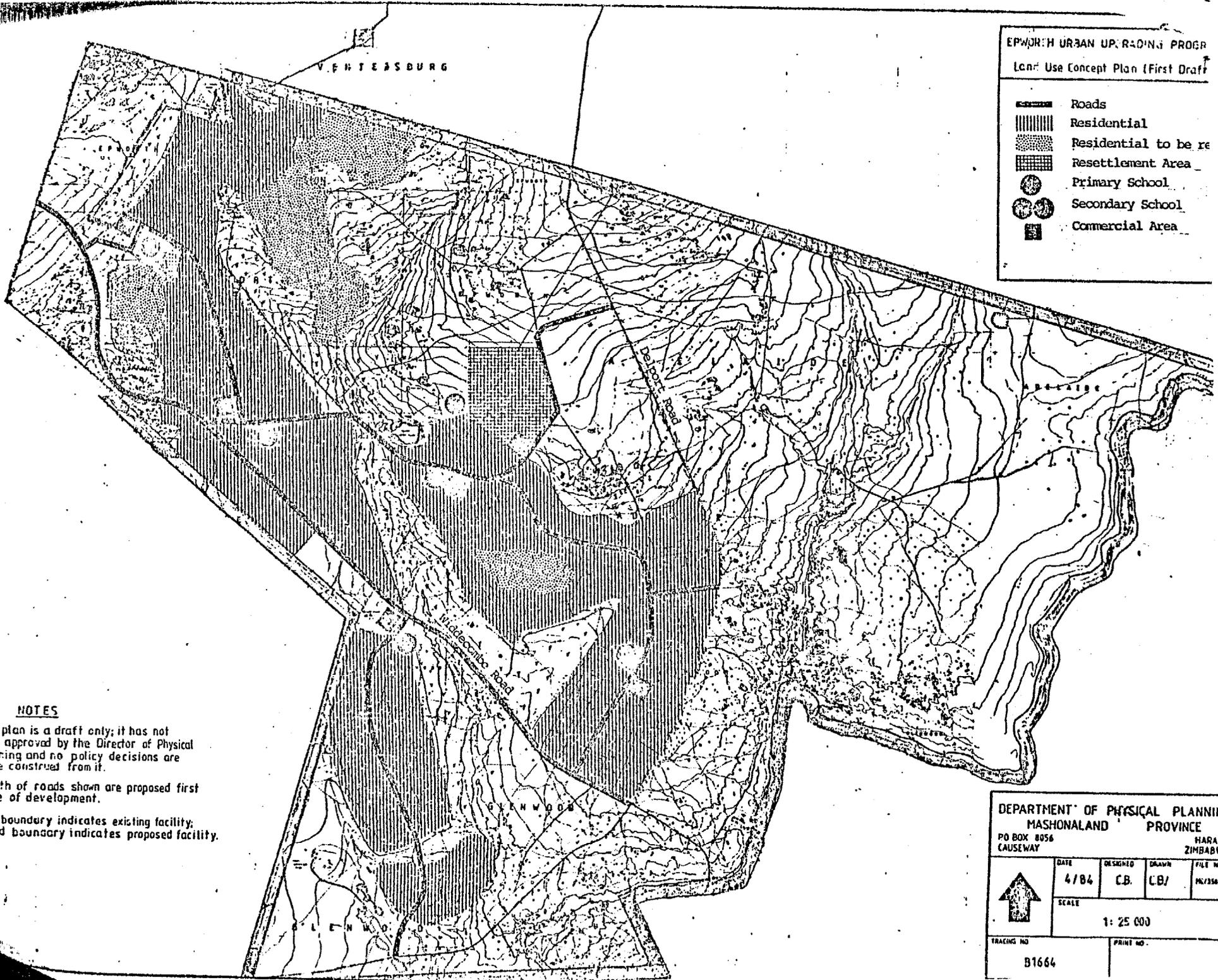
8. HOUSE CONSTRUCTION

House walls are presently constructed of sun baked bricks, fired bricks or concrete blocks, with roofs of metal, asbestos, tile or thatch. Windows are wooden and metal. The materials are durable but some are not acceptable according to the City Building Code. Defects are basically lack of damp proof courses. Use of a modified building code to give higher quality materials and workmanship for new and modified buildings would take effect.



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EPWORTH URBAN UPGRADING PROGRAM  
Land Use Concept Plan (First Draft)

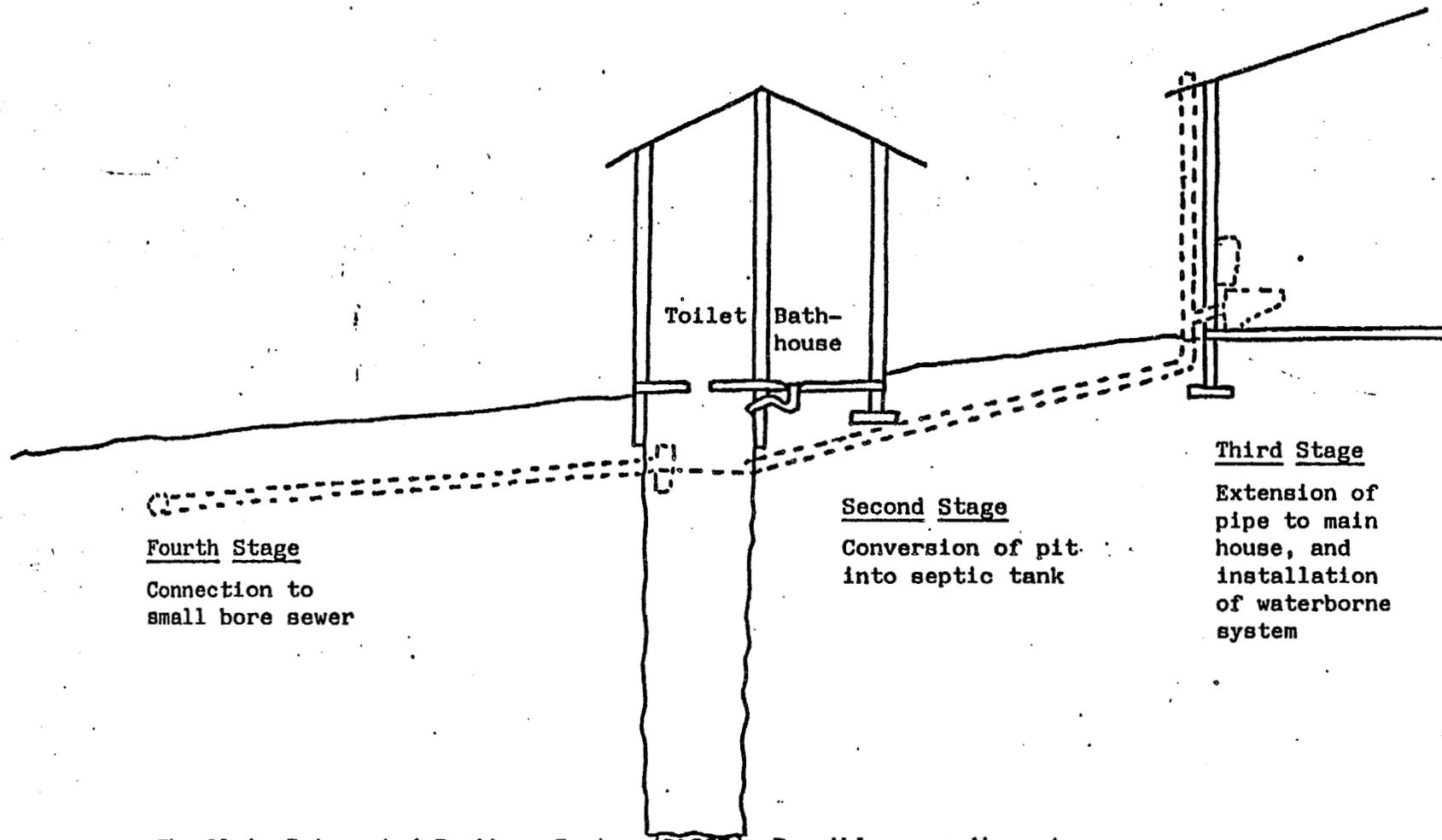
-  Roads
-  Residential
-  Residential to be re-settled Area
-  Primary School
-  Secondary School
-  Commercial Area

**NOTES**

1. This plan is a draft only; it has not been approved by the Director of Physical Planning and no policy decisions are to be construed from it.
2. Length of roads shown are proposed first phase of development.
3. Solid boundary indicates existing facility; dotted boundary indicates proposed facility.

DEPARTMENT OF PHYSICAL PLANNING  
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The Blair Integrated Sanitary System (BLISS) Possible upgrading stages  
 Drawing not to scale

FIG. 4

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