

PUBLIC

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

NICARAGUA

PROGRAM TO CONSTRUCT AND IMPROVE RURAL ROADS

(NI0033)

LOAN PROPOSAL

NOVEMBER 1976

NICARAGUA

LOCAL ROAD CONSTRUCTION AND MAINTENANCE PROGRAM

Table of Contents

LOAN PROPOSAL

APPENDIX A	-	Proposed Resolution
APPENDIX B	-	Recommendations
APPENDIX C	-	Description of Program
APPENDIX D	-	Bidding Procedures

NICARAGUA

LOCAL ROAD CONSTRUCTION AND MAINTENANCE PROGRAM

Loan Proposal

A. Background

On April 30, 1976, the Government of the Republic of Nicaragua submitted an application to the Bank for a loan of US\$19.6 million equivalent for the partial financing of a program to construct and improve approximately 300 km of local roads, the total cost of which was estimated at US\$23.2 million.

A Bank mission visited Nicaragua from August 9 to 20, 1976 to make the technical, economic, financial and institutional analysis of the program. As a result of this and the subsequent analysis at headquarters a program was defined for the building and improvement of approximately 300 km of local roads at a total estimated cost of US\$22.5 million equivalent. The Bank will participate in the financing through a loan of US\$18 million equivalent, which would represent 80% of the total cost of the program.

The Nicaraguan Government submitted the application for this loan on the basis of technical and economic feasibility studies of approximately 605 km of local roads, made by Baker-Wibberley International in consortium with Octavio Salinas M. y Asociados. The studies were financed mainly through contingent recovery Technical Cooperation ATC/TF(SP)-1295-NI which the Bank granted to the Nicaraguan Ministry of Public Works in June 1974 in the equivalent of US\$750,000. The studies delivered in May 1976 represent the first stage of the operation. The second stage envisages preparation of the final designs, construction drawings, cost estimates and bidding documents for 300 km of the roads selected according to the feasibility study and which would form the program. On the second stage the consultants have delivered the documentation for six roads of a total length of 167.28 km. The firm has until May 1977 to complete the design of four of the remaining roads, which would conclude the 300 km of design contracted.

B. Previous Loans in the Transportation Sector

The Bank has granted up to now two loans to Nicaragua for road programs, together amounting to US\$15.5 million equivalent. The status of these two operations is given below:

1. Loan 63/SF-NI (Construction and Improvement of approximately 458 km). This loan of US\$12 million equivalent was approved by the Bank on September 27, 1965 and was intended for the partial financing of a program for construction and improvement of about 658 km of local roads in

various parts of the country at a total cost originally estimated at US\$18,152,125 equivalent. 1/ Executing agency was the DGC of the MOP.

The contract was signed on October 25, 1965. The deadline for the last disbursement was set at October 25, 1968. This deadline was subsequently extended three times by the Bank owing to the slow execution of the works and, finally, the problems connected with building of the Paso Real bridge. By the final deadline of May 25, 1974, construction of 386 km and improvement of 72 km had been completed, i.e. 98% of the program, and only the bridge remained to be finished. A balance of US\$19,360 of the original amount of the loan was then canceled, the borrower being required to complete the Paso Real bridge over the Río Grande de Matagalpa with its own funds. The bridge has since been completed, thus finishing execution of the program.

2. Loan 305/SF-NI (Expansion and Strengthening of the Road Maintenance System). This loan of US\$3.5 million was approved by the Bank on September 2, 1971. It was intended to cooperate in the expansion and strengthening of Nicaragua's road maintenance system by means of:

- (i) Procurement of machinery, equipment and parts for maintenance of secondary roads and construction of maintenance camps and shops for this purpose;
- (ii) Technical assistance for the strengthening and reorganization of the financial management system of the Highways Department.

The total cost of the project loan was originally estimated at US\$5,040,000 equivalent, with the MOP as executing agency through the DGC.

The contract was signed on November 23, 1971. November 23, 1974 was set as the deadline for the last disbursement. This deadline was extended three times, finally to November 23, 1976, due primarily to delays in setting up the maintenance camps and shops. It is nevertheless expected that the entire program will be completed by the date of the last disbursement.

The part of the project relating to procurement of machinery and equipment has already been completed. As of September 30, 1976, the equivalent of US\$3,376,163 had been disbursed, i.e. 96.5% of the total loan, with total project progress calculated at about 98%.

This loan included Technical Cooperation ATP/SF-1135-NI of US\$257,000 equivalent to provide technical assistance to the executing agency (DGC) for:

1/ Amendatory Contract No. 1 of April 1976 changed the physical target to 459.3 km.

- (i) road maintenance;
- (ii) maintenance and repair of machinery and equipment, and
- (iii) strengthening and reorganization of the DGC's financial management.

The studies on road maintenance and strengthening and reorganization of the DGC have been completed and are being implemented.

The work relating to machinery and equipment maintenance and repair was canceled because the consultant hired to do it later withdrew, and two subsequent attempts to find a replacement had to be declared void as no applicants were forthcoming. The DGC accordingly formally canceled the contracting of this expert, in the amount of US\$75,000 equivalent.

3. Technical Cooperation ATC/TF(SP)-1295-NI

This contingent-recovery technical cooperation was granted by the Bank to the Ministry of Public Works in June 1974, in the amount of US\$750,000 equivalent for the partial financing of technical and economic feasibility studies of about 600 km of local roads. Approximately 300 km of these roads showing the best feasibility was to be selected according to selection criteria agreed with the Bank. These studies and plans served as the basis for the Nicaraguan Government's application for the present loan.

The consultants Baker-Wibberley and Octavio M. Salinas y Asociados, working as a consortium, were hired to do the feasibility studies, which they delivered in May 1976. Based on the return of each project making up the approximately 600 km studied, twelve roads of an original total length of 327.24 km were selected for final designs. The designs for six of these have already been submitted and are presently being checked by the MOP and DGC.

The consultants have until May 1977 to complete the designs for four of the other roads, thus making up the 300 km contracted. The designs for the remaining 40 km would be made by the DGC using its own staff and would be completed before the end of the first year of the possible loan contract. The status of investment of the technical cooperation resources to date is:

Amount:	US\$750,000.00	-	100.0%
Disbursed:	571,095.09	-	76.1%
Balance:	178,904.91	-	23.9%

The borrower, in its turn, has disbursed the equivalent of US\$188,465.66 chargeable to the local contribution, i.e. 56.2% of its contribution to the program.

C. The Program

1. Purposes and Description

The main purpose of this program is to provide all-year road links between the agricultural areas of the country and the centers of consumption and marketing. These roads would make the transportation of agricultural produce easier the year round, thus reducing the cost, and would tie new farming areas into the country's economic development thereby bringing about an increase in agricultural production. Besides facilitating higher production and thus helping to raise farmers' incomes, an efficient transportation system is also important for the implementation of other projects related to integral rural development such as education, public health, drainage, electrification, irrigation and agricultural and forestry development schemes.

To achieve the above purposes the program envisages construction and/or improvement of approximately 10 local roads of a total length of some 300 km located in the central and Pacific regions of the country. 1/ The roads selected on a preliminary basis are:

<u>Road</u>	<u>Length (km)</u> <u>2/</u>
1. Somotillo-Cinco Pinos	30.0
2. Villa Salvadorita-Malpaisillo	29.5
3. Limay-Pueblo Nuevo	24.7
4. El Sauce-Villanueva	40.6
5. Juigalpa-La Libertad	32.9
6. Asturias-Pantasma	24.7
7. Abisinia-Bocaycito	26.9
8. S.J. del Río Coco-Wiwilí	55.6
9. Rivas-Veracruz	5.7
10. San Cayetano-La Trinidad	30.8

In accordance with current Bank policies, six have been selected from this preliminary list of 10, for which final designs and economic feasibility studies are available, to make up the representative sample of the program. The five roads indicated account for 59.4% of the cost and 69.5% of the length of the construction work, while the improvement road accounts for 29.8% of the cost and 33.9% of the length of improvement work.

The other 132.72 km would basically be selected from the other roads on the list, which have already been shown to have a rate of return in excess of 10%. 3/

1/ The location of the roads is shown on the map on page 12.

2/ According to the technical and economic feasibility report of May 1976.

3/ This condition would be stipulated in the possible loan contract.

The average per-km cost of both the roads in the sample and the others making up the program is approximately of the same order as in the El Salvador Rural Road Construction Program recently financed by the Bank (473/SF-ES).

2. Total Cost of Program

The total cost of the program is estimated at US\$22.5 million equivalent, which would be broken down as follows:

Financing Table
(In thousands of US\$ or equivalent)

	<u>I D B</u>				<u>Nicaraguan Government</u>		
	<u>Foreign Exchange</u>		<u>National currency</u>	<u>Total</u>	<u>Direct foreign exchange</u>	<u>National currency</u>	<u>Total</u>
	<u>Direct</u>	<u>Indirect</u>					
<u>Engineering and Administration</u>	1,430	-	560	1,990	-	710	710
1.1 Engineering designs	525	-	225	750	-	-	-
1.2 Works supervision	615	-	265	880	-	-	-
1.3 Executing unit	-	-	-	-	-	710	710
1.4 Consultants	140	-	70	210	-	-	-
1.5 Equipment	150	-	-	150	-	-	-
<u>Direct Costs</u>	4,420	7,100	3,840	15,360	-	3,440	3,440
2.1 Construction on contract	3,070	5,450	2,900	11,420	-	2,680	2,680
2.2 Improvement on force account	650	1,650	940	3,240	-	760	760
2.3 Equipment purchase	700	-	-	700	-	-	-
<u>Finance Charges</u>	650	-	-	650	180	-	180
3.1 Commitment fee	-	-	-	-	180	-	180
3.2 Interest interpolated	470	-	-	470	-	-	-
3.3 Inspection and supervision fund	180	-	-	180	-	-	-
<u>Associated costs</u>	-	-	-	-	-	170	170
4.1 Rights of way	-	-	-	-	-	170	170
Totals	6,500	7,100	4,400	18,000	180	4,320	4,500
Percentages	(28.9)	(31.2)	(19.6)	(80.0)	(0.8)	(19.2)	(20.0)

3. Financing Plan

The program would be financed as follows:

(In thousands of US\$ or equivalent)

	<u>Source of funds</u>		<u>Use of funds</u>		<u>Total</u>	<u>%</u>
	<u>Foreign exchange</u>	<u>Local currency</u>	<u>Foreign exchange</u>	<u>Local currency</u>		
IDB loan (FSO)	18,000 <u>1/</u>	-	13,600 <u>2/</u>	4,400	18,000	80.0
Nicaraguan Government	-	4,500	180 <u>3/</u>	4,320	4,500	20.0
Total	18,000	4,500	13,780	8,720	22,500	100.0
	=====	=====	=====	=====	=====	=====
Percentage	80.0	20.0	61.2	38.8	100.0	

The Bank loan chargeable to the Fund for Special Operations would amount to US\$18 million (80% of the total cost of the program), which would be disbursed entirely in foreign exchange over a period of five years from the effective date of the relevant contract. The Bank financing would cover the full amount of the external costs, except for the commitment fee, and 48.7% of the local costs. The borrower's local contribution would be equivalent to US\$4.5 million, 20% of the total program cost.

All the roads to be built under the program would be physically started within two years of the entry into effect of the loan.

4. Engineering Designs and Economic Feasibility Studies

The technical and economic feasibility study of 605 km of local roads made by the consulting firm Baker-Wibberley was submitted in May 1976, marking the completion of the first stage of the study financed by ATC/TF-(SP)-1295-NI. At this time final engineering designs and construction drawings are available for six of the roads, totaling 167.28 km, which form the representative sample for the program. The final designs on hand are being reviewed by the Ministry of Public Works for final approval.

1/ US\$4.4 million, equal to 24.4% of the foreign exchange proceeds of the loan, would be used for financing local expenditures.

2/ Includes an estimated US\$7.1 million as indirect foreign exchange costs.

3/ Represents the commitment fee.

5. The Borrower and the Executing Agency

The borrower would be the Republic of Nicaragua and the executing agency would be the Ministry of Public Works (MOP) through its General Bureau of Roads (DGC). The latter will have under it Local Road Program Executing Unit that will be set up primarily for the more efficient performance of the work involved in the program under study.

The DGC would take care of the first steps essential to execution of the program (call for prequalification, prequalification, invitation to bid on the first package of works, invitation to consulting firms to bid on supervision of the works under contract, hiring of individual consultant) while the Executing Unit is being formed. It would be a condition precedent to the first disbursement from the possible loan that this Unit must have been formed. 1/

Once the Executing Unit is operational it would facilitate the administrative work and decision-making, thus avoiding the delays which affected and still affect the other Bank-financed road projects in Nicaragua.

The MOP maintains a budget accounting system in accordance with the requirements of the Budget Law. Performance of the budget is the responsibility of two Budget Delegates, one for the rest of the Ministry apart from the DGC and the other for the DGC alone.

The DGC has an accounting system that is independent of that for the rest of the Ministry, which covers the aspects connected with performance of its budget, general accounting and cost accounting for works underway. During the execution of the program the DGC would set up a system of separate accounts for recording all investments made in the program both those chargeable to the loan funds and those funded from the local contribution.

Technical cooperation ATP/SF-1135-NI (reorganization of DGC accounting and administrative systems) enabled the DGC to remedy to a large extent the shortcomings in its administrative and accounting procedures.

D. Main Aspects

1. Availability of Construction Firms

The Nicaraguan roadbuilding industry has never had any chance to develop. Up to about twenty years ago, all roads were built by the DGC by force account. When financing was first obtained from international agencies for such works, which then had to be carried out by contract, the lack of financial support, the high guarantees required and the discontinuity of the market hindered development of the industry, to the extent that the few local companies were unable to compete with foreign contractors. There are currently only four companies or consortia that could accept contracts of the size of these proposed for this project.

1/ This condition will be included in the possible loan contract.

In recent years it has normally been foreign contractors who have carried out the major projects in Nicaragua, either by themselves or in partnership with local firms.

It is believed however, that there will be sufficient qualified firms to carry out the program even in the event that the nature or amount of the work does not attract foreign firms.

With regard to the capacity of local firms, the roads to be contracted out would be combined into bidding packages, selected on the basis of amount, proximity and interconnection, in such a way that each of the packages would be large enough to also be attractive for foreign firms, so as to allow the widest possible competition.

2. Construction Method

Various of the roads identified in principle as forming the program are already partly or wholly in existence, so that only improvement would be required for these. The extent of this improvement will depend on the nature of the present road and the final engineering design. In some cases no more than a simple resurfacing and addition of drainage may be needed, while in others virtually full construction will be called for. In the cases where only small or medium volumes of improvement works are needed, it would be more economical to do them by force account, since the equipment productivity is low and the prices quoted by contractors for this type of work are therefore high.

Based on the works scheduled, the 10 roads selected were classified in principle into construction (six) and improvement (four) works. The construction jobs would be carried out by local or foreign construction firms working under contract, while the improvement jobs would be done on force account.

The contracting of the construction firms, and the procurement of the construction equipment and vehicles, would be done by international public competitive bidding following the procedure set forth in Appendix IV hereto. Because of the precarious status of the local road construction industry, it is considered advisable to employ the pre-qualification system.

4. Rights of Way

The roads selected on a preliminary basis to form the program follow the present routes in practically all cases. It will therefore not be necessary to obtain rights of way in most cases. The cost of obtaining the rights of way is estimated at US\$170,000 equivalent.

The MOP informed the Study Mission that it would start the negotiations to purchase right of way as soon as the possible loan contract was signed. Although no difficulties are expected with the physical commencement of the works for each road, the borrower would be required to prove to the Bank that it has sufficient rights to the land involved. 1/

1/ A condition to this effect would be included in the possible loan contract.

5. Specifications of the Roads to be Built

The design standards employed for these roads would be those for low-cost roads with small widths and design speeds, a screened gravel wearing surface, and usable the year round.

This type of low-cost road with modest geometric specifications is adequate for the rural areas in question and the demands of low traffic volumes.

6. Supervision and Technical Control of the Works

The supervision, inspection and technical control would be performed by the Executing Unit. In the works to be executed by contract, it would be done by a consulting firm that would be hired for the purpose, while in those done by force account it would be handled directly by the Executing Unit's staff with advice from the individual consultant.

7. Betterment Tax

Nicaragua has an annual tax on real property that is applied and collected by the General Bureau of Revenue on the basis of assessed value. The General Bureau of Natural Resources will be required to pay the tax on real estate at the rate of 1% of the value assessed as of June 30 preceding. This tax is a charge on the property which takes precedence over all other charges, which gives it privileged status. Nevertheless, the Law on Taxes on Real Estate allows the granting to taxpayers in certain cases of a credit against the tax, which can also be 1% of mortgage balances due on the date of the tax liability.

8. Maintenance of the Program Roads

The roads built under the program would be maintained by the DGC through the Maintenance Section of its Roads Division.

Execution of this project is almost completed, with satisfactory results. Technical cooperation ATP/SF-1135-NI granted simultaneously with this loan has achieved all its purposes except for implementation, which could not be finished owing to lack of sufficient maintenance equipment. The part relating to maintenance equipment was canceled because the expert hired withdrew.

To resolve the implementation and maintenance problems, the DGC plans to purchase about US\$15 million worth of equipment, which would arrive in the country in the course of 1977. It has also awarded a contract worth US\$2.4 million to the Boswell Engineering Co. US\$320,000 of this total would be for training mechanics and operators, US\$320,000 for construction of a lecture room, procurement of audiovisual and instruction equipment and additional equipment to be installed in the existing facilities, and US\$1,760,000 for purchase of workshop equipment and tools.

This would then leave implementation of the maintenance plan prepared with Loan 305/SF-NI. It is proposed that the same consultant who would be contracted to advise the Executing Unit during execution of the present program be requested to extend his activities to include advice on maintenance to the DGC, in accordance with the terms of reference in Appendix D hereto. This would considerably improve the maintenance work done by the DGC, so that it could be assumed that the roads to be built under this program would be properly maintained.

No problems are therefore expected as regards the maintaining of the roads to be built under the program. The borrower would, in any event, undertake to perform this maintenance work to the Bank's satisfaction.

9. Economic Justification

The economic analysis of the program shows that the average internal rate of return of the roads in the representative sample varies between a minimum of 10.5% and a maximum of 18.5%.

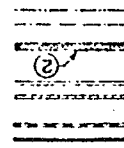
10. Justification of the Financing

It is considered that use of the Fund for Special Operations for partial financing of the program is justified because:

- 1) Nicaragua is classified as a relatively less developed country.
- 2) The roads to be built under the program would directly benefit poor and less privileged sectors of the country's population.
- 3) The program meets the purpose of integrating various agricultural and livestock regions into the economic development of the country as a whole, and that of improving living standards. In addition, it complements other rural development programs.

NICARAGUA D VIAL Y PROGRAMAS DE VERSION EN CARRETERAS

SIMBOLOS



CONEXIONES
TRANSITABLE PERMANENTEMENTE
TRANSITABLE EN PERIODOS DE SECA
CON ESCULTURAS
LIMITE DEPARTAMENTAL
LIMITE INTERNACIONAL
ESCALA 1:100,000

de la Republica
Estado de Carreteras
Octubre, 1967

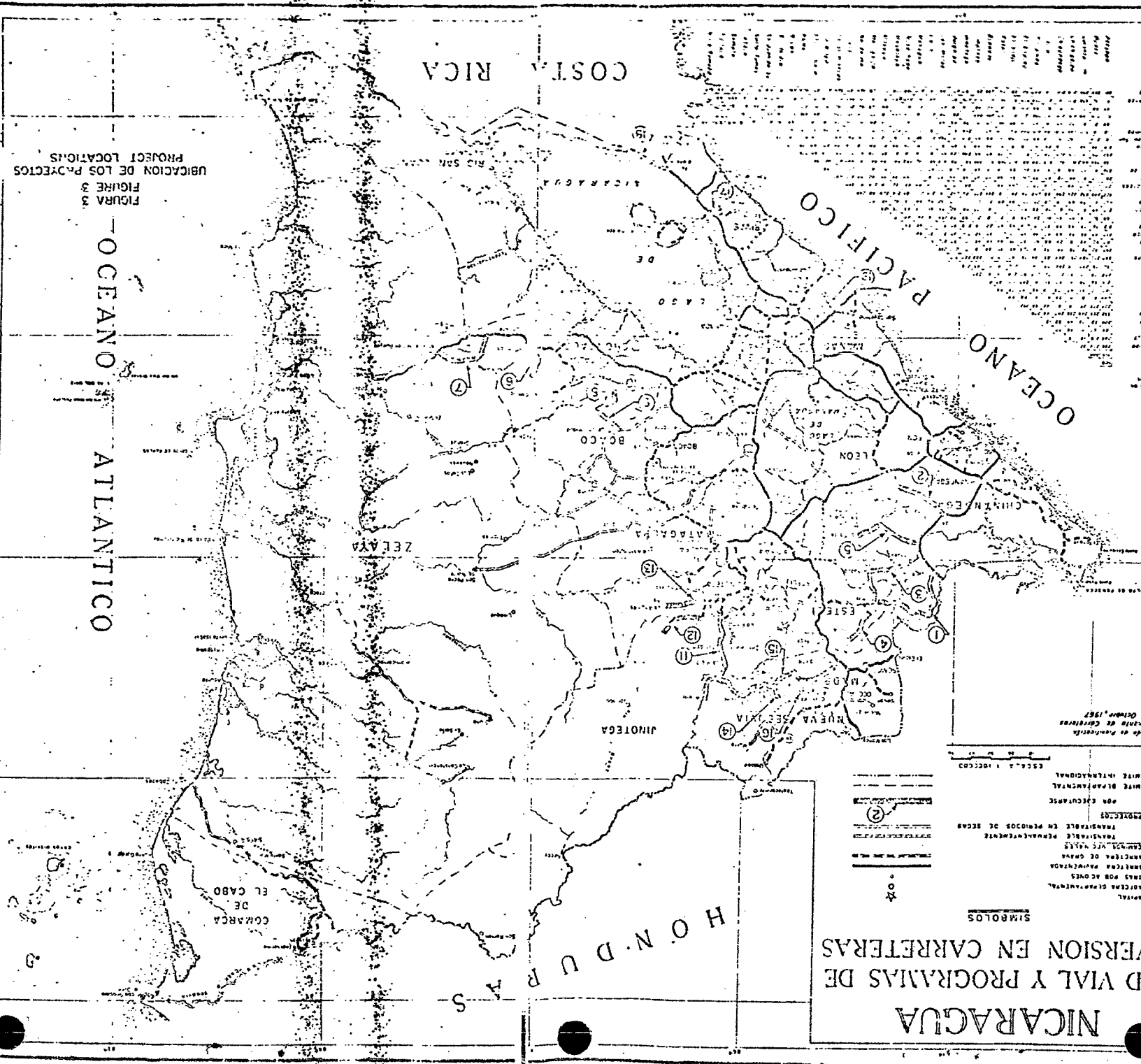


FIGURA 3
UBICACION DE LOS PROYECTOS
PROJECT LOCATIONS

PROPOSED RESOLUTION

NICARAGUA. LOAN /SF-NI TO THE REPUBLIC OF NICARAGUA
(Program for construction and improvement of local roads)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Nicaragua, as borrower, for the purpose of granting it financing to cooperate in the execution of a program for construction and improvement of local roads. This financing shall be subject substantially to the following conditions:

1. Amount and Currencies: Up to US\$18,000,000, or the equivalent in other currencies (except that of Nicaragua) which are part of the Fund for Special Operations, to pay for goods and services acquired in the regional member countries of the Bank and for such other purposes as may be specified in the loan contract. Payments of amortization and interest shall be effected proportionately in the respective currencies disbursed, in accordance with provisions to be included in the loan contract.
2. Source of Funds: The Fund for Special Operations.
3. Guarantee: The general responsibility of the borrower.
4. Credit Fee: 1/2 of 1% per annum on the undisbursed portion of the sum indicated in paragraph 1 of this resolution, commencing to accrue 12 months after the date of this resolution. The fee shall be paid in dollars of the United States of America on the same dates as the interest.
5. Amortization: The borrower shall amortize the loan in a period of 40 years from the effective date of the contract, by means of 60 equal and consecutive semiannual installments. The first installment shall be paid 10-1/2 years after the date of the contract.

6. Interest: 1% per annum during the first 10 years from the effective date of the loan contract and 2% per annum thereafter. Interest shall be payable semiannually on principal amounts outstanding, and the first payment shall be made 6 months after the effective date of the loan contract. At the request of the borrower, resources from the financing may be used for paying the interest on the loan during the disbursement period.
7. Physical Initiation and Disbursement: Physical initiation of all the works shall take place within a period of two years from the effective date of the loan contract, and total disbursement of the financing shall be made within a period of five years from the same date.
8. Special Conditions:
 - (a) The resources of the loan shall be utilized in their entirety by the Dirección General de Caminos (hereinafter called "DGC") of the Ministerio de Obras Públicas, through the Unidad Ejecutora del Programa de Caminos Vecinales to be established and attached to DGC. If modifications in the legal provisions or the basic regulations concerning DGC are approved which, in the opinion of the Bank, may substantially affect the program, the Bank may take such measures as it deems appropriate in accordance with provisions to be set forth in the loan contract.
 - (b) The loan shall be used for the execution of a program estimated at the equivalent of US\$22,500,000 and in no case shall the participation from the resources of the financing exceed 80% of the total amount of such program. Consequently, the loan contract shall contain such provisions as the Bank deems appropriate to ensure that such national resources as may be necessary, in addition to the financing, for the complete execution of the program shall be duly provided, in an amount estimated at the equivalent of US\$4,500,000, in accordance with a schedule of investments satisfactory to the Bank.
 - (c) Prior to the first disbursement from the financing, the borrower, through DGC, shall demonstrate that:
 - (i) It has created the Unidad Ejecutora del Programa de Caminos Vecinales attached to DGC previously agreed upon with the Bank and given it the necessary powers to assure satisfactory performance of its functions;

- (ii) it has contracted, consistent with the Bank's policy, for the services of (i) an individual consultant to advise the Unidad Ejecutora and DGC on all technical aspects related to execution of the program and on maintenance of roads, and (ii) a consulting firm to supervise and control those works of the program which are to be done under contract.
- (d) In the acquisition of machinery, equipment and other materials for the program and in the award of construction contracts, the system of public bids shall be followed in each case in which the value of such acquisitions or contracts exceeds the equivalent of US\$50,000. The bidding shall be subject to the procedures to be included in an annex to the loan contract.
- (e) The provisions of (d) above notwithstanding, DGC may execute by force account, works for construction and improvement of the roads included in the program, up to a total amount equivalent to US\$4,000,000, when the Bank so agrees upon request of the borrower supported by a justification based on the location, characteristics and other conditions of such works.
- (f) The Bank shall establish such inspection and supervision procedures as it deems necessary to assure the satisfactory execution of the program, and the borrower shall extend all cooperation which is required for the most effective accomplishment of this purpose. From the amount of the financing provided by the Bank the sum of US\$180,000 shall be allocated for credit to the general income accounts of the Bank to meet expenses of general inspection and supervision.

RECOMMENDATIONS

It is recommended that the following conditions be included in the loan contract in addition to conditions set forth in the proposed resolution to be performed to the Bank's satisfaction:

1. Prior to the call for bids on each work or group of works or, when a call for bids is not appropriate, prior to the initiation of the works, the borrower undertakes that the executing agency shall present:
 - (i) The plans, specifications and documents required for the construction in question and, if applicable, the documentation pertaining to the call for bids, including the pertinent forms of contracts; and
 - (ii) evidence that the borrower has sufficient legal rights over the land on which the pertinent construction is to be carried out.
2. Prior to physical initiation of any of the works, the borrower shall present evidence that the Unidad Ejecutora to which reference is made in clause 8(c)(i) of the resolution has been established and has adequate technical and administrative personnel to assure the satisfactory performance of its functions.
3. Within one year of the effective date of the loan contract, the borrower, through DGC, shall present:
 - (i) evidence that DGC has provided its internal audit units with sufficient and qualified personnel;
 - (ii) evidence that the system of accounting information and the administrative, accounting and audit procedures recommended under Technical Cooperation Agreement ATP/SF-1135-NI, or other alternative measures conducive to the same purposes, previously agreed upon with the Bank, have been implemented in DGC.
4. Within 18 months of the effective date of the loan contract, the borrower, through DGC, shall demonstrate that it has acquired the equipment and spare parts to supplement existing equipment and spare parts that DGC plans to use for work to be done by force account.
5. Within one year from the date of completion of the works included in the program, the borrower shall present annually for a period of 10 years evidence that such works are being adequately maintained in accordance with engineering standards acceptable to the Bank and with the stipulations in section 6 of Annex B to the Loan Contract.

6. Every two years until the tenth year after the date of the last disbursement of the loan, the borrower shall present to the Bank an evaluation on the results of the program using the methodology agreed upon with the Bank.
7. The financial statements of the program shall be audited by an independent firm of public accountants proposed by the Tribunal de Cuentas and acceptable to the Bank in accordance with procedures agreed upon with the Bank.
8. An annex substantially similar in content to Appendix II (Description of Program) to the loan summary shall be included in the loan contract.
9. The dollars of the United States of America to be utilized in the loan shall be drawn from the resources contributed to the Fund for Special Operations by virtue of the increases approved by Resolutions AG-2/65, AG-10/67 and/or AG-12/70.

DESCRIPTION OF PROGRAM

(Annex B to Loan Contract)

I. Description of Program

1.01 The Program calls for construction and improvement of approximately 300 kilometers of roads in different areas of the country. The selection of the roads to make up the Program shall be made in accordance with the following criteria:

- (i) The roads must be directly connected to the existing road network and its characteristics should be similar to the departmental roads types I and II of Nicaragua.
- (ii) The economic evaluation of each road must indicate an internal rate of return of more than 10%.
- (iii) The characteristics of each road and the extent of progress on its engineering designs must be such that its construction can be started and completed within two and five years respectively of the effective date of the loan contract.
- (iv) The roads must be consistent with the recommendations of the National Transport Plan of Nicaragua, preparation of which is now in the final stage.
- (v) The Program must be composed substantially of the roads included in the study financed with resources provided under Technical Cooperation Agreement ATN/TF(SF)-1295-NI and principally of those that were found technically and economically feasible in that study and are today included in the preliminary list of ten (10) roads.

2. Total Cost of Program

The total cost of the Program is estimated at the equivalent of US\$22,500,000 itemized approximately as follows:

	B A N K				LOCAL CONTRIBUTION					%
	Foreign Exchange			Sub- total	Foreign			Total		
	Direct	In- direct	Local Expenditures		exchange costs	Local Costs	Sub- total			
Engineering and Administration	1,430	-	560	1,990	-	710	710	2,700	12	
Engineering designs	525	-	225	750 ^{a/}	-	-	-	750	3	
Work supervision	615	-	265	880	-	-	-	880	3	
Unidad Ejecutora	-	-	-	-	-	710	710	710	3	
Consulting services	140	-	70	210	-	-	-	210	1	
Equipping of Unidad Ejecutora	150	-	-	150	-	-	-	150	0	
Construction Costs	4,420	7,100	3,840	15,360	-	3,440	3,440	18,800	83	
Construction and improvement	3,070	5,450	2,900	11,420	-	2,680	2,680	14,100	62	
Improvement by force account	650	1,650	940	3,240	-	760	760	4,000	17	
Machinery and equipment	700	-	-	700	-	-	-	700	3	
Special Charges	650	-	-	650	180	-	180	830	3	
Credit fee	-	-	-	-	180	-	180	180	0	
Interest during execution	470	-	-	470	-	-	-	470	2	
Bank inspection & supervision	180	-	-	180	-	-	-	180	0	
Unallocated Costs	-	-	-	-	-	170	170	170	0	
Weight of way	-	-	-	-	-	170	170	170	0	
Totals	6,500	7,100	4,400	18,000	180	4,320	4,500	22,500	100	
Percentages	(28.9)	(31.2)	(19.6)	(80.0)	(0.8)	(19.2)	(20.0)	(100.0)		

Recovery of funds provided by the Bank under Technical Cooperation Agreement ATC/TF(SP)-1295-NI.

3. Sources and Use of Funds

3.01 The sources of funds and currencies of origin and use for financing the Program will be as follows:

(In US\$ thousands or equivalent)

<u>Source</u>	<u>Currency of Origin</u>		<u>Currency of Use</u>		<u>Total</u>	<u>%</u>
	<u>Foreign Exchange</u>	<u>Local Currency</u>	<u>Foreign Exchange</u>	<u>Local Currency</u>		
Bank loan	18,000 <u>a/</u>	-	13,600 <u>b/</u>	4,000	18,000	80.0
Natnl. resources	-	4,500	180 <u>c/</u>	4,320	4,500	20.0
Total	<u>18,000</u>	<u>4,500</u>	<u>13,780</u>	<u>8,720</u>	<u>22,500</u>	<u>100.0</u>
Percentages	(80.0)	(20.0)	(61.2)	(38.8)	(100.0)	

a/ The United States dollars to be used to finance local expenses are estimated at US\$4,400,000 accounting for 24.4% of the foreign exchange portion of the financing.

b/ Includes US\$7,100,000 as indirect foreign exchange component.

c/ Credit fee.

4. Bidding

4.01 When goods to be acquired through public bidding are to be financed in whole or in part with funds from the Bank's loan, the bidding procedures and specific bidding requirement shall permit unrestricted participation of bidders from regional member countries in accordance with the eligibility rules governing the use of resources of the Fund for Special Operations. Consequently, no condition precluding or restricting the participation of such bidders shall be established in such procedures or specific requirements.

5. Selection and Contracting of Consultants

5.01 In selecting and contracting consultants for the advisory services for the execution of the Program, the Borrower shall follow procedures acceptable to the Bank, with the understanding that the Borrower shall not establish provisions or conditions precluding or restricting the selection and contracting of consultants from regional member countries of the Bank.

6. Maintenance

6.01 The basic purpose of maintenance shall be to keep the road or section of road and related facilities financed with the Loan in substantially the same condition as they were in at the time of completion of each one of them.

- 6.02 The annual maintenance plan for the rural roads shall be presented for the Bank's consideration prior to November 30 of the preceding fiscal year. The plan shall include, as a minimum, detailed information on the organization responsible for maintenance, the number, type and condition of the equipment to be used for maintenance, the location, size and condition of repair and storage facilities and maintenance equipment, and the number of kilometers, location, and category of the roads to be served by the units in charge of maintenance of the roads under this Program.
- 6.03 The maintenance plan shall state the amount of funds available in the maintenance budget in execution as of November 30 of each year (excluding funds for improvement operations) and the amount to be assigned in the budget for the year for which the plan is submitted.
- 6.04 The plan shall include also a report on maintenance conditions based on a system of adequacy evaluation. The system shall be so structured as to provide an overall rating of maintenance conditions of the roads, such rating to be based on a numerical evaluation of the various components.
- 6.05 The Bank will reserve the right to inspect the roads periodically. Should it be determined on the basis of such inspections or of reports received by the Bank that the maintenance is below the agree upon levels, the Borrower and DGC shall take the necessary steps to correct the deficiencies noted in full.

BIDDING PROCEDURE

1. INTRODUCTION

The Ministry of Public Works, through the Direccion General de Caminos (General Bureau of Roads), hereinafter called "Executing Agency", shall use the following public bidding procedures for the purchase of equipment, machinery and other goods and/or for the award of contracts for execution of works included in the global program of multiple works for construction and improvement of local roads, financed with IDB Loan /SF-MI, in each case in which the value of such purchases or contracts exceeds the equivalent of US\$50,000.

2. PUBLIC BIDDING

Purchases and/or contracts financed with foreign exchange resources from the loan shall be subject to a system of international public bidding. When such purchases or contracts are financed solely with local currency from the loan or with resources from the local contribution, the bidding may be restricted to Nicaragua.

2.1 Bidding Announcements

The executing agency will prepare and submit for prior approval by the Inter-American Development Bank (IDB) a bidding announcement containing a clear description of what is to be bid upon, an indication of the place where the bidding requirements and documents will be delivered to interested parties, the conditions for delivery of that material, and the place, date and hour for receipt and opening of proposals. The announcement should contain a reference to the IDB's participation.

In the case of bidding of international scope, the executing agency will send a copy of the announcement to the Embassies and/or Consulates in Nicaragua of the countries having IDB eligibility.

The bidding will be announced three times in two of the country's largest-circulation newspapers within a period of 15 days, counted from the date of the first publication, and at intervals of at least three days, in each newspaper.

The Executing Agency shall submit all the bidding documents for approval by the IDB together with the text of the announcement or before sending such an announcement.

2.2 Term for Receipt of Proposals

The term for receipt of proposals will be at least forty-five days in the case of international bidding and at least thirty days in the case of national bidding.

2.3 Prequalification

2.3.1 A call for prequalification, the bases for which shall be first submitted for approval by the IDB, and which must permit the participation of companies from eligible IDB member countries, shall be published.

2.3.2 The call shall be published at least three times in two of the largest-circulation newspapers of the city of Managua. Concurrently with such publication a circular shall be delivered to the Embassy and/or Consulate in Nicaragua of each of the countries having IDB eligibility.

2.3.3 The prequalification requirements shall call for the following information, inter alia:

- a) Legal information on the firm, together with its charter and other documents pertaining to its establishment; an indication of whether the firm is an affiliate or subsidiary of any other institution; an indication of the place where the firm was established or legally organized; its principal place of business; evidence that more than 50% of its shares belong to citizens of the eligible country, and that the firm, as a whole, is an integral part of the economy of an eligible country; an undertaking that at least 80% of all the persons who will render services under the construction contract will be bona fide residents of member countries of the Bank; a statement that the firm has not entered into any agreements under which a substantial part of its earnings or profits would be transferred to persons who or entities which are not nationals of an eligible country; and, if the bidder plans to enter into subcontracts, an undertaking that only such subcontractors will be used as eligible, are by reason of nationality, under the rules pertaining to this procedure.

In the case of consortia, the name of each of its components, together with a copy of the charter or instruments that served as a basis for establishment of the consortium.

Each member of the consortium must separately complete the pertinent questionnaire. Consortia including one or more members which are not eligible by reason of nationality shall not be qualified as eligible.

A commitment of the firm or consortium that its structure in accordance with the above requirements will not be modified during the execution of the program.

- b) Technical and financial information on the firm;
- c) Experience in the construction, manufacture and installation of the goods or works to be bid upon;
- d) Information on past performance;
- e) Evidence that the firm has adequate staff and equipment for satisfactorily performing the work envisaged under the contract, and an indication of the place where such equipment is located;
- f) A certified financial report containing, as a minimum, a statement of profit and loss for the last two years, a balance sheet, and bank references;
- g) Evidence of its capacity to obtain performance bonds;
- h) Any other documents to be submitted by the interested party together with the prequalification form.

2.3.4 Firms interested in participating in the bidding must present a registration request within thirty days of the date of the last publication of the prequalification announcement. In doing so they must adhere to the prequalification procedures that were established and that were sent to them for that purpose.

2.3.5. The information submitted by the firms shall be sent to the IDB, together with the list of those firms which in the opinion of the executing agency should be prequalified, for the IDB's concurrence.

2.3.6 After the Bank has made a favorable pronouncement with respect to the information presented by the firms and the list of firms prequalified referred to in 2.3.5 above, the Executing Agency shall publish such list in two of Nicaragua's largest-circulation newspapers.

2.3.7 The bidding documents shall be delivered to the firms prequalified within ninety days after the close of the registration period. In the event of failure to comply with the periods mentioned above, registration for prequalification must be re-opened in accordance with the procedure set forth in clauses 2.3.2, 2.3.3, and 2.3.4.

3. BIDDING DOCUMENTS WITH PREQUALIFICATION INCLUDED

The bidding documents will consist of the bidding requirements, which will include the prequalification bases indicated in 2.3.3, the model contract, the general conditions, the special conditions, the general specifications for the purchase of goods or construction work to be carried out, the special provisions pertaining thereto, plans, list of materials, a model proposal, the tentative execution period, a table of currencies of payments, a model of proposal and performance guarantees, and any other documents pertaining to the purchase or construction to be carried out.

The bidding requirements will call for information on matters such as:

3.1 Bonds

3.1.1 Guarantee of Maintenance of Proposal

3.1.2. Performance and Construction Maintenance Bond

3.2 Insurance

The insurance policies shall cover, as appropriate in each case, the risks inherent to the nature of the goods and works to be bid upon. They shall be established separately for each bidding operation. The term of the policy shall extend to such time as the awardee presents evidence of having complied with the conditions of the contract in the case of purchase of goods and to the date of preliminary acceptance in the case of works.

3.3 Whenever for special reasons unforeseen and not contemplated in the contract documents it becomes necessary to modify the amount of the original contract entered into by the Executing Agency and the contractor by increasing such amount by more than 15% or reducing it by more than 15%, such modification shall require the approval of the IDB.

3.4 Origin of Goods and/or Services

3.4.1 Origin of goods. Only proposals pertaining to goods originating in Nicaragua, the United States of America or other eligible IDB countries may be accepted. However, in the case of goods or services to be financed solely with bolivars from the loan they may have any of the following origins:

- i) Countries which are not members of the Bank;
- ii) Relatively developed countries which are members of the International Monetary Fund; or
- iii) Developed countries which on the date of the call for bids (or on the date of signature of the documents for procurement of goods and/or award of service contracts if no bidding is held) have been declared eligible for this purpose by the Bank.

3.4.2. Certificate of Origin of the Goods and/or Services.

For all purchases of goods and/or awards of service contracts, a "certificate of origin" of the goods and/or services in question must accompany the corresponding supporting documents. The model certificate will be supplied in due course by the Executing Agency.

3.5 Transportation of the Goods

At least fifty per cent (50%) of the gross tonnage of goods acquired with United States dollars from the loan, needed for performance of the contract and which must be moved by sea shall be transported in United States flag merchant ships belonging to private companies, provided that such ships are available at fair and reasonable rates for merchant ships flying the flag of the United States of America.

3.6 Inspections by IDB Staff

The Executing Agency and the contractor will be obligated to extend to duly accredited officials of the IDB the necessary facilities that will enable them to inspect the works, examine the documents on acquisition of goods and materials or carry out any other inspection procedure considered necessary by the IDB.

3.7 Form of Payment and Advances to Contractors

In the case of acquisition of goods, the form of payment will be governed by the legal procedures established for State organization and will be set forth in the bidding requirements. In the case of construction work, the form of payment may include an advance for progress payments to the contractor against delivery of a bond which shall be at least equal in amount to the advances to be made during the first year and equal to the maximum amount owed in subsequent years.

3.8 Currencies and Use of Funds

3.9 Analysis of Unit Prices

The Bidding Board responsible for qualifying the proposals may, when it deems advisable, request bidders to explain how they arrived at the prices on which the proposal was based.

4. PUBLIC BIDDING PROCESS

4.1 Presentation of Proposals

At the place and on the date and hour set in the bidding announcements the interested parties shall present their proposals, with at

least two additional copies or, in any case, the number of copies specified in the bidding requirements.

4.2 Receipt and Opening of Proposals

The proposals will be received and opened at _____ in the presence of _____ and of those bidders so requesting. They will be opened and read aloud and a record of the proceedings will be taken and entered in the corresponding book. The report, with a duly certified copy of the record of the proceedings, will be processed at the offices of the executing agency within three business days of the date of the said proceedings, for purposes of qualification of proposals.

4.3 Qualification of Proposals

_____ will be responsible for qualifying the proposals. The Bidding Board will tentatively select the most convenient and favorable proposal according to the criteria set forth in the bidding requirements. In order to determine the most convenient and favorable proposal, consideration will be given also to its being the one offering a reasonable cost, which will generally be the lowest price in the market, with account taken of quality, efficiency, delivery times and other appropriate factors.

Once the report of the Bidding Board is known, and prior to continuing the process in accordance with the laws of Nicaragua, the Executing Agency will send the IDB for its approval a copy of such report of the Bidding Board, as well as copies of the proposals, the comparative tables and other materials taken into account in qualifying the proposals. The IDB will process this material as quickly as possible so that the procedure may continue.

4.4 Award

Once the IDB has approved the tentative selection, the Executing Agency, through its competent unit and within a term of fifteen business days counted from the date of receipt of the material, will finally approve or disapprove the tentative selection and proceed to make the formal award.

4.5 Signature of Contract

The Executing Agency will sign the contract with the awardee, using the model included in the bidding requirements, after submitting the draft contract for approval by the Bank.

4.6 Bidding Declared Void

Whenever it is considered that there are good reasons for declaring the bidding void, a complete file including all the

analyses and reasons for believing that the bidding should be declared void shall be furnished to the LDB. When a bid is declared void, a new call for bids shall be issued following the rules set forth in this procedure.

Should the second bid also be declared void, the Executing Agency and the Bank shall agree upon the procedure to be followed.

4.7 Rescission of Construction Contracts

When a contract has been rescinded because of nonperformance, whether by reason of the quality of the work or the time of execution, or of the quality or time of delivery of machinery, equipment or materials, the executing agency shall propose to the Bank a course of action to be taken in such event.

4.8 This procedure is intended to supplement the provisions of the pertinent clauses of the loan contract. Accordingly, the provisions of the contract shall prevail in the event of conflict between the provisions of this procedure and those of the contract.