

The Municipal Engineer's Office through the Municipal Engineer will be the one to execute and manage the construction duly supported by the Local Government Unit of Baliguian.

5.2 Plan for management during construction, key roles and responsibilities and implementation arrangements

Since MPMIU is organized, it will have to monitor the implementation to determine if it is in accordance to the expected timelines and construction specifications of the project. There is also the RPCO who will constantly monitor its implementation and status from time to time.

5.3 Collection of Road user fees and other operational policies

The road when completed will be totally maintained by the barangay people to be sustainable throughout its life span. Appropriate Ordinances and policies towards the adoption of the operational policies and collection of road user's fees will be the responsibility of both the LGU of Baliguian and the BLGU of Diculom and Milidan as these are the Units directly responsible for the project.

5.4 Implementation schedule of the sub-project (project duration, estimated start and end of construction)

Project duration is estimated at 330 calendar days or 11 months. This includes allowances for unworkable days during rainy days. It is estimated that the project will start at the later part of 1st quarter of 2014 and may end in early part of 2015.

5.5 Project monitoring and supervision

As mentioned earlier, project monitoring is the responsibilities of the LGU through the MPMIU and the Municipal Engineering Office with the assistance from RPCO and PSO.

5.6 Operation and Maintenance scheme

It is inherent upon the barangay population affected by the road or using the road to maintain the improved road. Hand tools were provided after project completion.

The Barangay Road Operation Maintenance Team will be organized and trained to undertake the requisite and prompt maintenance of the road.

It will be the responsibility of the concerned LGUs to see to it that this group performs the duty as agreed during the project turn-over.

D. Social Assessment

6.1 Project Beneficiaries

The beneficiaries of the proposed Rehabilitation of Junction National Highway, Mamawan-Diculom-Milidan Farm to Market Road are the 1,941 households of

the three barangays. They were consulted through a series of community meetings at their respective community center led by the Municipal and Barangay Officials (Please see attached minutes of meetings). The meetings were attended by the various sector of the community such as men, women, youth and elders. They confirmed that the identified road section is their top priority infrastructure project and guarantee full support for the realization of the said project. The proposed road will serve as the main access of the barangay to connect with the provincial road and to the poblacion, where the market, social and medical services are available

6.2 Indigenous Cultural Community/Indigenous Peoples (ICC/IP) –

The proposed project is not within and will not traverse an ancestral domain or neither affects the Subanen Tribe community living within the road influence area. The Subanen Tribe are known of their skills as upland farmers where the proposed project will greatly help and alleviate their economic hardships.

Separate consultation was conducted specifically to the Subanen Tribe to consult and confirm that the proposed project will bring positive impacts to the tribe. As a result, last July 8, 2013 the tribe issued Resolution No. 13-01 series of 2013 endorsing the proposed project

6.3 Site and Right-of-Way acquisition

The proposed site is an existing barangay road with a total length of 6.5 kilometers. Majority of the existing road width within the road alignment is not enough to satisfy the required width of 10 meters. During the road widening it was expected that private lands, which are mostly agricultural and idle lands, would be affected.

To ensure the smooth implementation of the project, respective Barangay Officials and local communities assured the right of way for the project. There are 27 Landowners identify by lgu who's voluntarily donated portion of their property within the right of way. The Local Government Units will shoulder expenses for the notarization and resurvey of the affected lands as part of the agreement between the donor and donee. (Please see attached entitlement survey form 1)

6.4 Damage to standing crops, houses and/or properties

The proposed project will not caused significant damage to standing crops and/or properties. Damage to crops is limited since vegetation along the roadside is shrubs and few coconut trees. Houses and other structures were built and established outside the right of way.

6.5 Physical displacement of persons

The project will not result to relocation of houses. During the road survey, there are no houses and other structures within the road right of way that would be affected by the project.

6.6 Economic displacement of persons

There are about 27 project-affected persons of the proposed project. However, they are not considered as economically displaced persons because the acquired right of way area for the road widening is insignificant compared to their total

landholdings and it will not reduced access and loss of their traditional livelihood sources.

E. Environmental Safeguard Aspects

7.1 Natural habitat

The proposed site is not within an officially declared or proposed protected area of natural habitat. There are two (2) creeks and two (2) moderately flowing streams that will be traversed by the proposed farm to market road. There are no identified important species present in the above water bodies. Vegetations along the roadside are mostly shrubs and coco trees.

7.2 Physical Cultural Resources –

There are no physical cultural resources present within the proposed road and its road influence area.

7.3 Terrain, Soil Types and Rainfall

The terrain of the proposed road is relatively rolling. The initial 2.50 kilometers is a descending terrain with average grades of -15%. There are segments steeper than 15% but limited to 40 meters in length. The soil type within the project site is relatively loose.

7.4 Drainage Situations and Flooding Potential

Some road segment is relatively flat which is susceptible to flooding during heavy rains and there are no line canals and cross drain to accommodate floodwaters. Thus, there is a need to establish adequate cross drains to prevent flooding.

7.5 Impacts during Construction

(a) Proper handling of construction wastes –Temporary waste disposal facilities must be provided by the contractor in consonance with the government regulations re: Proper Waste Disposal.

(b) *Construction noise mitigation* - There are houses and establishments along and nearby the construction site especially along the built areas. The construction involves the operation of heavy equipment and will undoubtedly generate loud noise. As a mitigating measures work activities should be avoided during quiet periods of the day.

(c) Temporary erosion and sediment control –The topography of the road alignment do not necessitate massive earth moving and cutting of clayey or loose topsoil, and this would result or generate significant sediment. Natural drainage system is also present on the proposed site so that there are no measures required for the provision of filter barriers or settling basins for the runoff discharged.

(d) Safety – Contractor must provide safety precautionary construction

gadgets to ensure the life of the workers. Standard construction safety protocols must also be observed for the Safety of workers and the public.

F. Financial Costs

8.1 Total Financial Cost (Investment Cost)

Project preparation cost includes cost of survey, preparation of detailed engineering design and feasibility study and other miscellaneous cost. This is estimated at 5% of the project base (direct) cost or at **Php 2,684,954.22**. Meanwhile, the cost of engineering control and supervision during the construction stage of the project is at 5% of the base cost or **Php 2,684,954.22**.

These two cost items are non-sharable and is the responsibility of the Municipality of Baliguian.

Below summarizes the cost of the project reflecting the above-mentioned cost parameters.

Table 6. Summary of Financial Cost

Cost Parameters	Percent of Base Cost	Amount
I. Project Preparation Phase	5%	2,963,443.36
Survey		
Detailed Engineering Design		
Feasibility Study		
II. Construction Phase (EPC)		
Project Base Cost		59,268,867.16
Overhead, Contingencies & Misc.	7%	4,148,820.70
Contractor's Profit	8%	4,714,509.37
Taxes	12%	8,179,103.67
Estimated Project Cost		76,338,300.90
III. Other Cost		
Engineering Control and Supervision	5%	2,963,443.36
Over all Project Cost		82,265,187.61

8.2 Project Financing and Cost Sharing

The cost sharing arrangements is limited to the Estimated Project Cost (EPC) involving the direct (Materials, Equipment and Labor) Cost and indirect cost covering Overhead, Contingencies and Miscellaneous Expenses (OCM), Contractor's profit and Taxes.

The estimation of indirect cost is based on the DPWH Order No. 72, Series of 2012. On that same Department Order, Taxes is computed at 12% of the Direct Cost plus OCM of 7% plus Contractor's Profit of 8%.

Percentage of Cost sharing is at 80% Loan Proceeds, 10% from the GOP and 10% as the LGU equity.