

## ANNEX E-1

### Department of Agriculture Philippine Rural Development PROJECT

#### TEMPLATE FOR RURAL/FARM-TO-MARKET ROADS

Name of Road: Rehabilitation of Brgy. Little Panay – Katipunan-Kasilak FMR  
 Location: Brgy. Little Panay and Katipunan-Kasilak  
 Implementing LGU: Province of Davao del Norte  
 Estimated number of beneficiaries: 1, 913 household.  
 New or Rehab: Concreting  
 Estimated Total Cost: **P 78,012,038.26**

Issue (Potential Impact)	Assessment (Sample assessments)	Mitigation Measure	Schedule/ Duration of the Mitigation Measures	Instrument of Implementation (POW, Contract, IDP, or O&M Plan)*	Responsible Unit
1. Temporary increase in sedimentation during construction	<input type="checkbox"/> Topography of the road alignment necessitate massive earthmoving and cutting of clayey or loose topsoil <input checked="" type="checkbox"/> Cut materials will consist mainly of hard rocks and are unlikely to generate significant sediments	<input checked="" type="checkbox"/> Earthmoving/cutting of slopes to be done during dry months <input type="checkbox"/> Proper disposal and compaction of spoils <input type="checkbox"/> No measures required	During Sub grade preparations (BAR CHART/S-Curve)	POW/DED	Contractor
2. Potential contamination of surface and groundwater with oil/grease	<input type="checkbox"/> Waste oil and grease from equipment could contaminate surface water <input checked="" type="checkbox"/> There will be no or insignificant amount of waste oil/grease	<input checked="" type="checkbox"/> Proper handling and disposal of waste oil and grease	Before Start of the SP	Contract	Contractor

3. Potential contamination with human waste	<input checked="" type="checkbox"/> Construction workers would be temporarily housed in a base camp <input checked="" type="checkbox"/> Workers would be mostly locals and are expected to go home to their respective houses after works	<input checked="" type="checkbox"/> Set up adequate latrine/toilet facility at the base camp	Before start of the SP	Contract	Contractor
4. Potential disruption of traffic flow	<input checked="" type="checkbox"/> The access road and/or segments to be rehabilitated need is vital to daily activities of the residents and farmers and need to be kept open to traffic during construction <input type="checkbox"/> The construction will not affect daily movement of residents and farmers	<input checked="" type="checkbox"/> Keep the road open to traffic flow and minimize disruptions along the access road and/or construction area; Provide adequate warning signs and traffic personnel when necessary; <input checked="" type="checkbox"/> Undertake regular maintenance measures on the passable portions of the roads <input type="checkbox"/> No measures needed	During the implementations of SP	Contract	Contractor
5. Potential dust/mud nuisance during construction	Roads could become powdery during dry days and muddy during rainy days of the construction period <input type="checkbox"/> Access road and/or the construction/ rehabilitation works passes through a populated area  <input checked="" type="checkbox"/> Access road and/or construction/ rehabilitation does not pass through any populated area	<input type="checkbox"/> Undertake sprinkling of road (including access roads) during dry days, and filling up of potholes during rainy days, especially in residential areas  <input checked="" type="checkbox"/> Set up speed limits for vehicles, especially within residential areas	During sub grade and aggregate sub base course preparation (BAR CHART/S-Curve)	POW /DED	contractor

		[ ] No measures needed			
6. Landslide/ erosion of exposed road sides resulting in sedimentation of waterways	<p>[ ] The road will traverse a mountainous area necessitating deep cuts on mountainsides, particularly between station ____ and ____, etc (check DED for deep cuts)...</p> <p>[ ] The exposed slopes will likely consist of highly erodible loose materials</p> <p>[ ] The cut slopes will be hard materials that would resist erosion</p> <p>[V ] The road passes through a relatively benign terrain, cuts will be minimal</p> <p>[ ] The rehabilitation work does not involve additional road cuts</p>	<p>[ ] Include slope protection works at the following stations: _____ _____</p> <p>..etc..</p> <p>(Specify the type/s of slope protection to be applied at each section- Consult with the Municipal Engineer:</p> <p>[ ] Bioengineering with geomat and cover crop</p> <p>[ ] Fast growing shrub species</p> <p>[ ] Riprap</p> <p>[ ] Gabions</p> <p>[ ] Terracing</p> <p>[ ] Concrete protection wall</p> <p>[V] Others <b>Guard railings @ Stations 5+250 – 5+500 and 5+900 – 6+100</b></p>	After construction of the road segment (BAR CHART/S-Curve)	DED/POW	contractor
7. Inadequate drainage resulting in flooding or ponding	<p>[V ] The road will block runoff, resulting in flooding on one side of the road during rainy days.</p> <p>[ ] Drainage issues unlikely</p>	<p>[V ] Installation of cross drain between stations: <b>RCPC (0+180, 3+954.12, 4+091.36, 6+545.43, 6+571.65,6+608.43 and 6+913</b></p>	1 <sup>st</sup> month of the activity (BAR CHART/S-Curve)	DED/POW	Contractor

		<b>3 Barrel Box Culvert (7+503.98)</b>			
8. Potential increase use of pesticides due to intensification of cash crop production in the area	<input type="checkbox"/> There is an ongoing IPM program of DA in the service area  <input checked="" type="checkbox"/> Farmers in the service area have not been trained on IPM	<input checked="" type="checkbox"/> DA to continue to support IPM program <input type="checkbox"/> LGU to Coordinate with DA on IPM training		Capacity Building Plan O&M Plan; Capacity Building Plan	DA PLGU/LGU/B LGU
9. Potential acceleration of denudation of the upland/hilly areas due to intensification of crop production	<input type="checkbox"/> The proposed road will connect to the market an upland/hilly area where farmers are currently practicing erosive farming techniques. The road could help accelerate the denudation of the upland/hillsides rendering them unproductive in a few years. <input checked="" type="checkbox"/> The road connects only lowland farms to the market	<input checked="" type="checkbox"/> DA to coordinate with LGU for the introduction of sustainable upland farming systems in the area  <input type="checkbox"/> No measure required		O&M Plan; Capacity Building Plan	DA PLGU/LGU/B LGU
10. Potential increased in encroachments of human activities into the nearby public forest	<input type="checkbox"/> The proposed road will improve human access to the nearby public forest, resulting in increased slash and burn cultivation, illegal logging and poaching. <input checked="" type="checkbox"/> The proposed road does not improve access to a public forest	<input type="checkbox"/> Coordinate with DENR for the enactment of ordinance deputizing the local community to enforce forestry laws <input checked="" type="checkbox"/> No measure required			
11. Local employment	<input checked="" type="checkbox"/> Construction will provide local employment opportunities	<input checked="" type="checkbox"/> Hiring priority shall be given to qualified local residents; Implement RI Manual on local hiring	During the Implementation of the SP	Contract	Contractor and BLGU
	<input type="checkbox"/> Construction does not provide any local employment opportunities	<input type="checkbox"/> No measures required			

12. Conversion of Land-use/natural habitat due to quarry	[ ] the proposed quarry site is within a private land and need to convert existing land-use [x] Quarry site is existing and proven as a good source of quarry materials	[x] Quarry materials will be procured to existing quarry sites	During the Implementation of the SP		Contractor
13. Potential damage to existing road due to hauling of quarry materials	[ x] source of quarry materials is <u>25</u> km. (Item 201 and Item 200) Transportation of quarry materials from source to FMR will not cause damage to existing FMR	[x] regular maintenance and repair of existing road	During the Implementation of the SP		Contractor

Prepared by:

  
**MS. MARIA LOURDES D. LAURON, MSLRG**  
SES Focal Person

Noted by:

  
**ENGR. JOSIE JEAN R. RABANOZ, MPA**  
PPMIU Head