GEM

GROWTH WITH EQUITY IN MINDANAO PROGRAM

INFRASTRUCTURE PROGRAM ENVIRONMENTAL PLAN 2008

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1.0 INTRODUCTION

1.1 GEM-3 Infrastructure Program

1.1.1 Rationale and Objective

The USAID/Growth with Equity in Mindanao-3 (GEM-3) Program covers a wide range of activities to be implemented in conflict-affected areas in Mindanao. GEM-3 serves the dual purpose of both contributing to consolidation of peace and making possible the expansion of economic opportunity.

The program includes infrastructure development which comprises the largest single component of the GEM-3 Program. The main objective of the infrastructure development program is the construction and improvement of critically needed infrastructure in largely agricultural production areas located in the conflict-affected areas of Mindanao. Approximately half of the roughly 10,000 barangays in Mindanao are considered to be "conflict affected". These barangays are situated in the Autonomous Region in Muslim Mindanao (ARMM) and in the other regions, such as, Zamboanga Peninsula (Region IX), Northern Mindanao (Region X), Southern Mindanao (Region XI), Central Mindanao (Region XII) and Caraga (Region XIII).

The infrastructure development program component of the USAID/GEM-3 Program will be implemented for five years (2008 – 2013) at a total cost of up to approximately US$ 65 million.

About 1000 small-scale projects (referred to as Barangay Infrastructure Projects or BIPs) and about 15-20 larger Regional Impact Projects (RIPs) will be constructed during the five-year life of the GEM-3 Program. BIPs will generally have construction costs of between $5,000 and $50,000. RIPs construction costs will generally be less than $1 million each, but some RIPs may cost up to $4 million.

1.1.2 Description of Infrastructure Projects

1.1.2.1 Barangay Infrastructure Projects

The scope and scale of BIP projects to be implemented under the GEM-3 Program are similar to those in GEM-2. The proposed construction and rehabilitation works for BIPs are described below:

1. Construction of warehouses and solar dryers for grains and seaweed. The warehouse dimensions are expected to occupy approximately 64 sq. m floor area, with about 9 sq. m. for office space, and/or minor facilities such as toilets. It will be locating in $\leq$ 1,000 sq. m land area. The solar dryers are concrete slabs $\leq$ 500 sq.m outdoor space for grains, and $\leq$ 100 sq. m stilt-type slotted bamboo platform for seaweeds.

2. Development of small spring and well water supply systems. This subproject will involve tapping springs (discharge rate ≤10 lps) and drilling shallow tube wells (depth ≤30 m) to convey water to communal faucets located in nearby villages. The service area is about ≤ 100 hectares. Additionally, it may include hand pumps, pipelines, and elevated storage tanks, and furnishing water treatment (disinfection) facilities. Spring flow or groundwater abstraction will be regulated to meet flow requirements for Level I and Level II water supply development. Watershed integrity is a major environmental consideration in the selection of water supply source. Estimated water supply yields, planned users and sustainability of water use will be determined. Drinking water quality shall be within prescribed standards. Operation and maintenance system will be put in place or will be enhanced.

3. Expansion of small water supply systems. These subprojects will extend existing water supply systems that serve rural villages. The work could include repair, refurbishing or limited upgrading of existing spring or well water supply systems with or without pipelines, storage tanks or communal faucets where water is conveyed by gravity or by pressure pump driven by solar power or fuel. Service area ≤100 has, and water yield ≤10 lps.

4. Upgrading of existing rural roads and bridges. Conceivable roadwork will include limited clearing of vegetation cover, grading, and laying and compacting one to two layers of graded gravel on existing roads, and possible stabilization of gravel roades (by bitumens, cement, calcium chloride or liquid stabilizer treatment), where necessary, or application of Portland cement concrete pavement (PCCP); bridge approaches will be repaired and other drainage structures such as culverts and side ditches will be extended, rehabilitated or replaced. Roads will likely be ≤ 10 km long with two-lane carriageway ≤ 6.8 m wide, and may include provision of slope protection structures.

5. New construction or upgrading of existing small pre-cast concrete boat or fish landings. Most of this work will consist of fixing or extending existing jetties as well as providing boat landings made of pre-cast concrete or mortared (or stone masonry) causeway ≤ 500 m long and ≤ 3 m wide, with concrete top pavement; pre-cast concrete landing platform ≤ 10 sq. m. and pre-cast concrete jetty head ≤ 25 sq. m. Reinforced concrete stairway-type landing structure (Length ≤ 150 m) with adjoining mortared or stone masonry protection on each side (total length ≤ 100 m) resting on side slope of waterway. Construct small open shed (≤ 50 m^2) on concrete floor on top of the stairway. No reclamation work or resettlement will be involved, and no significant areas of mangrove forests will be cleared.

6. Upgrading of small existing irrigation canals and conveyance structures. This will consist of providing concrete lining or regrading canals and

repairing broken parts of existing conveyance structures, i.e., turnouts, gates, etc.

7. Construction/upgrading of drainage and flood control facilities. These subprojects could include (a) construction of new box or pipe cross culvert (total length ≤15 m, diameter 0.5-1.5 m) or cross-sectional opening 0.30-9.00 m^2, and earth ditches and lined canals (total length ≤ 1,000 m), (b) repair of side ditches overflow structure and side pipe culverts (total length of ≤1,000 m, and diameter of 0.5 – 1.5 m). (c) Repair of overflow structures (spillway) that will entail improvement of existing culverts and concrete or mortared end encasement across a road alignment where water overflows at high level of water inundation during peak rainy days.

8. Construction of small buildings. These modest buildings could possibly include (a) sheds (≤ 120 sq.m) for use to house cold storage and/or post-harvest treatment and VHT facilities; (b) agricultural trading posts or for product display, market day bazaar; and (c) community centers (≤ 300 sq. m) for use in meetings, training, cultural affairs, etc.

9. Construction of footbridges and pedestrian walkways. These subprojects include (a) construction of new suspension footbridge across waterways, and (b) rock mounted or pre-cast concrete platform pedestrian walkways between coastal buildings or houses on stilts. The footbridge (≤ 60 m length and 1.5-2.0 m width, with a bottom elevation of 4m) will be built with a pathway made of a 4" thick concrete slab resting on a Truss Type Steel spans supported by high tensile steel cable wires that are resting on a concrete abutment on both ends. The pathway will be provided with pipe railings and wire mesh on both sides along its entire length and 3m concrete approaches on both ends. This also includes construction of a covered or uncovered, concrete-paved walkway with total length ≤ 300 m and a width of 3 m, including provision of a waiting area with benches. Any clearing of coastal vegetations, such as nipa and mangrove, should be avoided, prevented or minimized.

10. Construction of rainwater collector and storage facility. Collection of rainwater from roof of community building (≤ 300 sq. m floor area) conveyed through roof gutters and downspout to a concrete or steel storage tank from where water is conveyed by gravity to communal faucets with or without transmission and distribution pipelines.

11. Construction/ upgrading of road-related slope protection and bridge abutment/ approaches. Slope protection structures could include (a) side cut protection measure consisting of mortared stone or masonry wall ≤10 m high and ≤ 150 m long, with road re-gravelling ≤ 150 m, if required, (b) embankment slope protection measure consisting of mortared stone or masonry wall ≤10 m high and <300 m long with backfilling and road regravelling ≤150 m, if required, and (c) bridge approach structure

consisting grouted riprap wall <100 m made of rock boulders 6-8 inch diameter on each sides of the upper and lower bridge approaches, including gravelling ≤30 m over the existing width of the roadway from both ends of the bridge following embankment filling. Slope protection on bridge abutments and bridge approaches will entail laying of concrete approach slab (≤20 m long and ≤7 m wide) and road connection (≤500 m long and ≤7m wide) with or without pavement.

12. Construction/upgrading of rural electrification facilities. These subprojects could include (a) tapping and extending transmission line from an existing power line with total length ≤ 10 km and without ROW acquisition. Electrical fixtures could include wooden posts (≤10 m high and 0.3 m diameter) at maximum of 45 m interval per post. ROW acquisition, if any, should be completed prior to the physical works; and perhaps (b) limited installation of ≤ 10 KW small solar panels (total surface area ≤50 m^2) on aluminum mounting assembly over the ground or the roof of school or community building.

1.1.2.2 Regional Impact Projects

RIP subprojects include individual or packages of mutually supporting infrastructure that will have a "transformational" effect on the provinces in which they are undertaken. These projects are envisioned to catalyze the expansion of existing business and industry, or make possible emergence of new business and industry. The scope and scale of possible RIP infrastructure activities are described below.

1. Upgrading of existing roads and bridges. This work will include repair and upgrading of existing rural roads usually less than 20 km long with two-lane carriageway, providing roadside drains as well as building or improving cross culverts. Most of the roads are likely to have surfacing of gravel or bitumen, cement, calcium chloride or liquid stabilized treated gravel. For gravel roads, concrete paving for certain reaches of the road will be considered in areas susceptible to erosion or areas with high traffic and built up with dwellings/establishments. Bridges that may be required will, in most cases, are replacements from timber to concrete that have spans of ≤ 80 m, without ROW acquisition, and include provision of slope protection of bridge approaches. The work could include repair or limited upgrade of existing bridge or approaches of an existing bailey bridge; or total replacement of an existing bridge along a passable road link.

2. Upgrading of existing water supply services. Activities could include drilling a tube well, supplying pumping facilities, laying a conveyance pipeline, constructing gravity storage tanks, providing a distribution system, installing communal or individual household taps (Level III water system), and furnishing disinfection (chlorination) facilities. The improvement will be confined to existing and functioning water supply

source. The same water source shall be used. No land acquisition is required. Water quality shall be within prescribed standards. Water treatment, if it exists, shall be functioning. An operations and maintenance system is in place. Estimated water supply yields, planned users and sustainability of water use will be determined.

3. Upgrading of existing municipal port facilities. The focus of these subprojects will be to rehabilitate existing or restore former port facilities in the original location. Work could consist of extending or repairing docking platforms, repairs to parapets, constructing small passenger terminal buildings, improving the access road and transition ramps, providing other minor buildings such as storage sheds and guardhouses, construction of specialized ramp (i.e., roll-on-roll-off ramp with length $\leq$ 30 m and docking paraphernalia such as dolphins, mooring bollards, etc. Any pier extension shall be less than 100 meters. No new breakwaters or other marine structures shall be constructed. No reclamation work and resettlement are expected and existing navigational channel shall not change. Depths and channel conditions shall not change by more than 2 meters. All additional buildings, if any, shall be confined to existing right of way (ROW). No changes in utility, drainage, or internal transportation system. Grading in port area shall be less than 0.5 meters and no mangrove forests will be cleared as a result of the improvement.

4. Upgrading of existing communal irrigation facilities. The subprojects could include repairing or constructing a new intake, excavating an existing or new canal, and providing water management and conveyance structures. One embankment of a canal could be made wide enough to serve as a rural road. Works shall be limited to existing irrigation system, most of which will have service areas of under 150 ha. The length of the main canals shall not change more than 200 meters. The width of the cross section shall not change by more than 2.0 meters. To improve irrigation efficiency, concrete canal lining will be considered in areas with highly permeable soils. No new ROW, land acquisition or compensation is required. Ancillary structures shall not exceed the existing ROW.

5. Upgrading of drainage and flood control systems. This type of work could include constructing erosion protection such as retaining walls and gabions as well as excavating drains. Necessary ancillary structures such as small bridges and culverts could also be included. The rehabilitation works shall be limited to existing drainage system. No change in alignment is required. The outfall has the required capacity. The length of the main drains shall not change by more than 300 meters. The width of the cross section shall not change by more than 2.0 meters. No new ROW, land acquisition or compensation is required.

6. Upgrading of existing airport runway facilities. The works may include improvements that involve extension/widening of the existing runway

length (≤ 2.0 km, width ≤ 60 m) and apron or repairing of deteriorated section of runway using Portland cement concrete (PCC); and possible provision of runway lighting, security fence and navigational aids.

1.2 GEM-3 Infrastructure Work Program

1.2.1 BIP Work Program

The BIP Work Program is designed to achieve full implementation of approximately 1,000 projects within the five-year life of the GEM-3 Program (2008 – 2013). Up to 125 BIPs, subject to the availability of funds, will be constructed during the first year of the contract, about 250 BIPs will be constructed per year during years 2 to 4, and 125 BIPs during year 5. The BIP Work Program for Year 1 is shown in **Annex 1.**

In Year 1, USAID concurrence will be secured for the proposed first 50 BIPs within Feb to May 2008 to initiate the implementation of the work program. By project type, almost 24% of the total BIPs are expected to comprise road, footbridge and drainage rehabilitation or improvement works, while about 32% involves construction of post-harvest facilities, and the remaining 44% includes provisions for community water supply, boat landing and others. By project location, there will be slightly higher number of projects to be constructed in Western Mindanao than in Central Mindanao. Projects in Northern Mindanao are only expected to be constructed in Year 1 if additional obligated funds are received. It is projected that the first 50 BIPs planned for Year 1 will start to be completed in May through October 2008. The estimated total cost for implementation of the BIP Work Program for Year 1 is approximately US$1.0 million to $1.5 million, subject to the availability of funds.

1.2.2 RIP Work Program

It is planned to fully implement approximately 15-20 "transformational" RIP projects or packages of projects with regional impact within five-year life of the GEM-3 Program. The work program envisions that construction of 4 RIPs will be initiated during the first year of the contract, and up to 5 RIPs, subject to the availability of funds, will be initiated per year during years 2 to 4 of the contract. The proposed RIP Work Program for Year 1 is shown in **Annex 2.**

Four RIP projects will be given priority consideration to initiate implementation in Year 1. These projects are briefly described below:

1. Jolo Mainland Water Supply Improvement. The project scope of work is expected to comprise the following components: (i) construction of concrete water tank, (ii) rehabilitation of existing unserviceable pipelines and installation of new main and secondary pipelines, (iii) installation of additional fire hydrants, (iv) installation of water chlorination treatment facility, (v) construction of fence surrounding pumping station areas, and

(vi) installation of distribution lines and water meters. The project is expected to be completed within about 120 calendar days at an estimated cost of about PHP 24 million pesos.

2. Jolo Airport Runway Improvement. The proposed improvements will entail upgrading of the existing runway. The scope of work of project is yet to be determined and defined in consultation with the Department of Transport and Communication (DOTC). GEM shall allocate 240 calendar days and an estimated cost of about PHP 100 million pesos to implement its component of the project.

3. Bongao (Sanga-Sanga) Airport Runway Improvement. The proposed improvements will entail upgrading of the existing runway. The scope of work of project is yet to be determined and defined in consultation with the Department of Transport and Communication (DOTC). The project is expected to be completed within about 240 calendar days at an estimated cost of about PHP 100 million pesos.

4. Tawi-Tawi Bridge/Road Improvement. Depending of the available budget of DPWH and on the delineation of project components between GEM and DPWH, the project has two main components: bridge construction (Bridge A = 80 m long and Bridge B = 280 m long), and road improvement. The bridges will be bailey-type steel bridges resting on steel/concrete piles with embankment and slope protection on bridge approaches. The road improvement project will complement the construction of the Tawi-Tawi Bridge. The project is expected to be completed within about 240 calendar days at an estimated cost of about PHP 100 million pesos.

2.0 ENVIRONMENTAL PLAN

An Environmental Plan is required for review and approval by USAID before construction of any BIP and RIP subprojects shall begin under the GEM-3 Program.

The GEM-3 Environmental Plan is formulated to ensure compliance with the existing environmental policies and regulations promulgated by the U.S. Code of Federal Regulation Title 22, 216 (22 CFR 216) and by the Philippine Environmental Impact Statement (EIS) System (P.D. 1586) and its implementing rules and regulations (DENR Administrative Order 2003-30).

The Environmental Plan defines the environmental process, procedures and requirements that will guide and facilitate (i) the environmental screening and review of all BIP and RIP subprojects proposed for implementation under the GEM-3 Program, and (ii) the environmental monitoring of compliance of environmental impact mitigation measures implemented during project construction phase.

2.1 Environmental Screening and Review of Projects

2.1.1 USAID Environmental Screening Process and Procedure

The Environmental Plan will employ an environmental screening and review process to provide a step-by-step procedure that will serve as a guide in conforming to the environmental policy, regulations and implementing guidelines of USAID. The result of the screening review will be useful in determining the extent of environmental impact of BIP and RIP subprojects before implementation is approved by USAID.

The environmental screening and review process and procedures prescribed in the USAID Environmental Procedures (22 CFR 216) that was adopted in GEM-2 CIP and MSIP subprojects will be used in GEM-3 BIP and RIP subprojects. These procedures involve three steps, namely:

Step 1. Determine the nature of the project according to its impact to the environment using the category checklist (see below).

Step 2. Based on the category, conduct the environmental review and prepare the necessary documentation and report.

Step 3. Once documentation and report is completed, seek clearance from the appropriate USAID Officer/s.

The chart below illustrates the procedural steps described above for the environmental screening and review of each of the proposed BIP and RIP subprojects.

Environmental Screening and Review Process		
Category 1: Very low risk	No further review needed	CTO/USAID Project Officer review & approval
Category 2: No significant environmental impact with adequate mitigation & monitoring	Environmental Review	Review and approval by CTO/USAID Project Officer and Mission Environmental Officer (MEO).
Category 3: Potentially significant environmental impact	Environmental Review Environmental Assessment	Review and approval by CTO/USAID Project Officer, MEO, Mission Director and Bureau Environmental Officer (BEO)
Category 4: Significant environmental impact	Consultation with USAID for prior determination if project can be funded and/or required environmental assessment could be made.	

Step 1. Determination of Environmental Categories of Projects

The types of BIP and RIP subprojects recommended under the GEM-3 Program are likely to fall under Category 1 (Very low environmental risk) and Category 2 (No significant environmental risk). Since project types are practically similar in GEM-2 and GEM-3, the categorization in GEM-2 is being proposed herein to be adopted in GEM-3. A checklist of the types of projects listed under each category is provided below.

Checklist 1 : For Category 1 projects - Very Low Environmental Risk Projects which include, but are not limited to:

i. Construction of small warehouse (6m x 8m) with office space (3m x 3m floor area) and adjoining solar dryers;
ii. Construction of small buildings (less than 15m x 15m), such as farm packing sheds and agricultural trading posts and community centers, etc.

Checklist 2: For Category 2 projects - No Significant Environmental Risk Projects which include, but not limited to:

i. Improvement of existing port facilities or restoration of former port facilities in the original location with any pier extension less than 50 meters.
ii. Improvement/expansion of existing water supply systems to convey water to communal faucets and/or to water meters for household connections; including installation of shallow and deeper lift hand pumps. (Water quality testing for coliform, arsenic, nitrite and nitrate, among others, will be done)
iii. Improvement of existing roads (less than 10 km long) and bridges (equal to or less than 280 m).
iv. Improvement or repair of small irrigation canals and conveyance structures (length of main canals shall not change more than 100 m and width of cross section shall not change by more than 2 m).
v. Improvement of drainage and flood control systems (length of main canals shall not change more than 100 m and width of cross section change by more than 2 m).
vi. Any activity not listed in Category 1.

As a policy, the GEM-3 Program will refer any project identified and determined to pose potentially significant adverse environmental impacts (Category 3) to USAID for prior approval. A USAID approved scoping statement is required before the start of construction. Category 4 projects will require consultation with USAID for prior determination if project can be funded and/or required environmental assessment could be made.

Step 2. Preparation of Environmental Documentation

For BIP subprojects determined to fall under Category 1, no further environmental review is required. A brief Activity Description of the subprojects is provided. An Approval Sheet for Certification of Categorical Exclusion is prepared, according to the prescribed reporting format shown in **Annex 3**.

For BIP and RIP subprojects determined to fall under Category 2, an environmental review is required. An Environmental Screening Review Report (ESR) with a cover-page Summary of Environmental Review and Approval Sheet is prepared, according to the prescribed reporting format shown in **Annex 4**.

Step 3. Application for Environmental Clearance.

The Request for Certification of Categorical Exclusion for Category 1 BIP subprojects will be officially submitted by GEM to USAID Cognizant Technical Officer (CTO) for review and approval of issuance of environmental clearance, as was adopted in GEM-2.

The ESR Report/Summary of Environmental Review for Category 2 BIP and RIP subprojects will be officially submitted by GEM for review and approval of environmental clearance by the USAID/CTO and USAID/Mission Environmental Officer (MEO), as was adopted in GEM-2.

2.1.2 DENR Environmental Screening Procedures

EIS Categorical Exemption. DENR Administrative Order 2003-30 provides the implementing guidelines and procedures for the environmental screening and review of projects to facilitate compliance with the Philippine Environmental Impact Statement (EIS) System (PD. 1586) and its implementing rules and regulations (DENR Administrative Order 2003-30).

On February 14, 2008 DENR-EMB approved the Request for Categorical Exemption of GEM-3 infrastructure subproject types that are determined to be outside the scope of the EIS Requirements. Based on the EMB guidelines for environmental impact determination and project categorization, categorically exempted projects are allowed to immediately proceed to implementation without further environmental review and documentation. Refer to **Annex 5.**

Initial Environmental Examination. The preparation and submission of an Initial Environmental Examination (IEE) Report is the prescribed level of environmental review and documentation for proposed infrastructure projects determined to be within the scope of the Philippines EIS System.

The basic information requirement and content outline of the IEE Report are comparable with the ESR Report for Category 2 subprojects. The general similarity allows easier and faster reformatting of the ESR Report to prepare the

IEE Report for the proposed project. This was adopted in GEM-2 and will be employed in GEM-3. The prescribed IEE reporting format is shown in **Annex 6.**

The IEE Report will be officially submitted to the respective Regional DENR EMB Directors for review and approval of issuance of Environmental Compliance Certificate (ECC).

A procedural flow diagram for the preparation and submission of ESR/IEE documentation and reports is shown in **Annex 7.**

2.2 Environmental Compliance Monitoring Process

The Environmental Plan incorporates a construction-phase environmental monitoring process, procedures and requirements prescribed in the respective environmental procedural manuals of USAID (21CFR126) and DENR (DAO 2003-30). The specific tasks/activities include:

- Monitor project compliance with the conditions set in the Environmental Compliance Certificate (ECC).

- Monitor compliance with the Environmental Management Plan (EMP) for the construction project and with applicable laws, rules and regulations.

- Monitor compliance with the specific safety, health and environmental provisions in the Civil Works Contract for the construction project.

- Report and communicate monitoring results to provide a basis for timely decision-making and effective planning and management of environmental measures through the monitoring of actual project impacts vis-à-vis the predicted impacts in the ESR or IEE.

All GEM-3 BIP and BIP construction projects will have environmental compliance monitoring, as was done in GEM-2 CIPs and RIPs. The conduct of construction phase environmental monitoring involves the following procedural steps:

Step 1. Setting up a Monitoring Program.

Step 2. Implementing the Monitoring Activities.

Step 3. Reporting of Monitoring Results.

2.2.1 Setting-up a Monitoring Program.

The Civil Works Contract Agreement for RIP construction projects requires the Contractor to prepare and submit a Safety, Traffic and Environmental Plan (STEP) before the start of construction. STEP preparation is not required for BIP construction projects.

The STEP incorporates three component plans, namely: (1) Project Safety Plan, (2) Site Environmental Plan, and (3) Traffic Control Plan.

1. Project Safety Plan. The Plan shall cover, but not be limited to, the following items:

    - Methods of promoting an awareness of site safety, environmental protection and industrial health amongst all persons directly or indirectly associated with the Works;
    - Proposals for on-site publicity, on-site training courses for all workmen on the site and at all levels of supervision and management
    - Incentive schemes for the promotion of compliance with safety measures and other similar measures

2. Site Environmental Plan. The Plan shall cover, but not be limited to, the following items:

    - storage of volatile liquids and toxic materials
    - waste control and management
    - control related to the used of existing roads and bridges by Contractor's vehicles

3. Traffic Control Plan. The Plan shall cover the means and methods the Contractor intends to take for proper and adequate control of traffic during the course of the Works. This Plan shall address requirements under the Specification "Maintenance and Protection of Traffic" and shall include but not be limited to:

    - the traffic control equipment proposed to be used for the Works;
    - traffic control signage including location and sign descriptions;
    - how and when traffic control flagmen will be used;
    - traffic control means during both working and non-working periods;
    - traffic control means and devices for night and off-hour periods;
    - traffic control measures for each stage of construction.

GEM shall provide advisory and facilitation assistance to Contractors in the preparation and submission of STEP through the holding of (1) a Pre-Construction Conference, (2) Technical Coordination Meetings, and (3) Follow-

on Consultations and Dialogues. These activities are implemented in coordination with the staff of GEM Infrastructure and Contracts Departments.

Pre-Construction Conference. During the Pre-Construction Conference, the Infra-Environment Team takes the opportunity to inform and make the BIP and RIP Contractors aware of the environmental compliance monitoring process and procedures, roles and responsibilities and commitments for implementation, as prescribed in the Civil Works Contract. The consultation process is documented and a signed Statement of Commitment publicly confirms this agreement.

Technical Coordination Meeting. A follow-on Technical Conference is conducted at the GEM Area Office which includes the conduct of a STEP Workshop. The Environment Staff presents and discusses the content outline and reporting format for the STEP preparation, and explains the implementation procedures and requirements, including the conduct of Safety Meetings and the preparation of Safety Reports.

Follow-on Consultation Meetings and Dialogues. The Contractor is encouraged to consult with the Environment Team during the preparation of the Draft STEP, as deemed necessary. A Draft STEP is prepared by the Contractor and submitted for review and comments by the concerned staff of the Infra-Environment Team and the Construction Supervision Team. A Final STEP is submitted for final review and approval by the Deputy Program Manager of GEM Infrastructure Division and Contracts Department. The content outline of a STEP for a RIP construction project is shown in **Annex 8.**

2.2.2 Conduct of Construction Site Environmental Monitoring

A standardized Environmental Monitoring Form (EMF) is prepared for each type of BIP and RIP construction projects. A sample of selected EMF for BIP and RIP project types is provided in **Annex 9.**

The basic information contained in the EMF includes:

1. Project Identification. Describes the construction project by providing information on the name or title of the project, its general location, and the duration of construction works; and identifies and defines the scope of responsibilities of designated construction management personnel involved in the works.

2. Environmental Monitoring Indicators. Consist of clear statements of performance parameters that will indicate compliance with the safety, health and environmental management provisions in the Civil Works Contract, including stipulations in the project's EMP and ECC.

3. Compliance Performance Measures. The level of compliance performance by Contractor is measured in terms of the number of environmental impact mitigating measures (i.e. monitoring indicators) implemented at the construction site and that were observed and noted during the field construction inspection. The compliance performance measurement is repeated daily throughout the duration of the construction period.

The project EMF is used as a compliance performance checklist. When used, it records and reports monitoring data and information generated during field construction inspection. The YES and NO columns are provided and are ticked off accordingly to indicate compliance or non-compliance performance with the specific safety, health and environmental impact mitigating measures or monitoring indicators. An NA column is provided to indicate "not applicable" and is ticked off when compliance to a particular environmental mitigating measure is not required at the time of field construction inspection. Adequate space also is provided in the EMF to write any additional information, remarks or explanation for the response indicated in the check columns, as may be necessary.

The Environment Staff assigned at the GEM Area Office is primarily responsible in the execution of the environmental monitoring activities in close coordination with the Field Construction Inspector of GEM and Safety Officer of the Contractor. The Environment Staff conducts independent site inspection to personally check with the Field Construction Inspector and Safety Officer on the progress of environmental monitoring, to validate the monitoring results and responds to issues and concerns related to the monitoring works, among others.

As necessary, USAID project staff and MEO or his representative may conduct monitoring trips to construction site to ensure compliance to USAID environmental regulations, among others.

2.2.3 Reporting of Monitoring Results

The reporting and communication of environmental monitoring data and compliance performance information serves to provide documentary evidence of the effectiveness of the environmental management measures adopted during construction.

The Field Construction Inspector keeps a daily record of environmental compliance performance by the Contractor based on the identified and defined monitoring indicators in the EMF. The EMF is accomplished and submitted to the assigned Area Office Environment Staff every two weeks for the duration of the construction period.

The Environment Staff analyzes the reported monitoring data in the EMF and determines a compliance performance rating (expressed as percentage of total

number of monitoring indicators exhibited) for Safety, Traffic and Environmental Management for the period covered.

The STEP performance rating for the monitoring period is incorporated in the estimation of billing for the completed work or deliverables by Contractor. Sanction and penalty is imposed for poor or non-compliance by Contractor with the provisions of the STEP.

The schematic flow diagram of the construction-site environmental compliance monitoring is shown in **Annex 10**.

GEM will make environmental monitoring results available to USAID, upon request.

3.0 ENVIRONMENTAL PLAN IMPLEMENTATION

The Environmental Plan will be implemented in parallel with the implementation of respective BIP and RIP Work Programs during the five-year life of the GEM-3 Program.

The Environmental Plan will implement the environmental screening and review of every BIP and RIP subproject to secure the necessary environmental clearance by USAID and DENR before the start of construction works, and conduct construction-site environmental monitoring of projects.

The Environmental Work Plan is shown in **Annex 11**.

3.1 RIP Environmental Work Plan.

Initially, during the first year, four RIP subprojects will be subject to the environmental screening review process, according to USAID and DENR procedural guidelines and technical requirements.

1. Jolo Mainland Water Supply Improvement Project. A component (construction of one elevated storage tank and faucets) is a former CIP subproject executed under the GEM-2 Program. USAID environmental clearance was issued in September 13, 2006, based on review and approval of the ESR.

   GEM-3 is recommending this subproject, with an expanded scope of work, for implementation under the RIP Program. Determined to fall under Category 2 (no significant environmental impact), the proposed project will require a new ESR to be prepared according to the prescribed reporting format. The ESR will be submitted for review and approval by USAID prior to start of construction.

Similarly, an IEE will be prepared by Jolo Mainland Water District (as Project Proponent), according to the prescribed DENR reporting format. The IEE will be submitted for review and approval of ECC issuance by the DENR-Environmental Management Bureau (EMB) Regional Director and DENR Secretary of the ARMM. GEM will provide advisory and facilitation assistance to the Local Water Utility Administration/Jolo Mainland Water District (LWUA/JMWD) in the implementation of these environmental procedures and technical requirements.

The environmental work will entail the preparation of a Project Profile which describes the expanded scope of work, preliminary site development plan and conceptual design, proposed time frame and estimated project cost. Baseline project information will be gathered from site inspection, field investigations, technical review, consultation and dialogue, among others. It will also identify and address priority issues and concerns related to the environmental impacts of project activity. Public consultation and social acceptability of projects will be part of the environmental process. As necessary, a Multi-Partite Monitoring Team will be created for the project during construction phase in coordination with the DENR PENRO/CENRO, as lead local environmental agency.

2. Jolo Airport Runway Improvement Project. The project proposes to undertake improvements of the existing runway. The main scope of work entails less than 50% extension/widening of the existing runway.

A Feasibility Study for Jolo Airport Improvement has been commissioned by DPWH/DOTC and will commence in February 2007. It is anticipated that an Environmental Assessment Study (i.e. IEE) will be incorporated into the scope of work of the FS. GEM will advise that the preparation and submission of the IEE for the project would conform to the prescribed environmental guidelines and technical requirements of DENR-EMB (i.e DAO 2003-30). DOTC will submit the IEE for review and approval of ECC issuance by the DENR-EMB Regional Director and DENR Secretary of the ARMM. GEM will provide facilitation assistance to DPWH/DOTC in the implementation of these environmental procedures and technical requirements.

GEM will be responsible for clearing the project with USAID. The proposed project is determined to fall under Category 2 (Projects with no significant environmental impact) and as such requires further environmental review and documentation. The ESR will be prepared according to the approved reporting format and will be submitted for review and approval by the USAID Cognizant Technical Officer (CTO) and the USAID Mission Environment Officer (MEO).

The related environmental tasks/activities include data generation and collection, project profiling, key stakeholders consultation, public participation and social acceptability process, among others.

3. Bongao (Sanga-Sanga) Airport Runway Improvement Project.The project proposes to undertake improvements of the existing runway. The main scope of work entails less than 50% extension/widening of the existing runway.

The Pre-Feasibility Study for the Sanga-Sanga Airport was undertaken under the Southern Philippines Airport Development Project done by COWI-NACO Consultants. The three-phased development plan has been prepared. Phase 1 runway improvement has been completed.

At the outset, any environmental assessment reports prepared and environmental approvals for Phase I and Phase II airport project components for information and reference. The Project Profile prepared by the RIP Team will be reviewed.

Based on DENR-EMB Guidelines (DAO 2003-30), the proposed airport improvement project falls within the scope of the EIS requirements; and an IEE will be prepared as the level of environmental review and documentation. GEM will advise the DOTC (Project Proponent) on its counterpart responsibility for the preparation and submission of IEE and securing ECC from DENR-EMB ARMM prior to start of construction. GEM will also provide facilitation assistance to DPWH/DOTC to ensure compliance with DENR environmental guidelines and regulations.

GEM will be responsible in clearing the project with USAID. The proposed project is determined to fall under Category 2 and requires further environmental review and documentation. The ESR will be prepared according to approved reporting format and submitted for review and approval by the USAID CTO and the USAID MEO.

The related environmental tasks/activities include data generation and collection, project profiling, key stakeholders consultation, public participation and social acceptability process, among others.

4. Tawi-Tawi Bridge/Road Improvement Project. The project scope of work will involve two components: bridge construction and road improvement. Two bailey-type steel bridges will be constructed on steel/concrete piles with embankment and slope protection structures on bridge approaches. The road improvement may involve improvement of the Sanga-Sanga-Bangalian road section (7.8 km long) and the Lapid-Lapid-Saldang-Batu-Batu road section (8.6 km long), and new construction of 430-m long PCCP or gravel roadway with 6.7 m wide carriageway connecting with

Bridge A and Bridge B on Bakhaw Dakula Islet. GEM may possibly be involved in both bridge and road component projects.

The road rehabilitation/improvement will not involve ≥ 50% increase in length or width. Based on DENR-EMB Guidelines, the project falls within the scope of the EIS requirement and is classified under Project Category B and as such requires an IEE, as the level of environmental analysis and documentation to secure ECC for this project category.

DPWH-ARMM Tawi-Tawi District Office has prepared an IEE for the road-bridge-road construction project in January 2005. Presumably, the IEE was submitted to DENR-ARMM for review and approval of ECC issuance. This will be verified. GEM will obtain copy of the IEE and ECC for the project and conduct due diligence review to determine if the IEE and ECC cover the scope of work for the project components being proposed under the GEM-3 Program. Based on the results of the diligence review, GEM will inform DPWH-PMO and/or DPWH-ARMM Tawi-Tawi District Office if a new IEE and ECC will be required for the proposed bridge/road. GEM will provide advisory and facilitation assistance to DPWH-PMO/ARMM on IEE preparation and ECC application.

GEM will be responsible for clearing the project with USAID. The proposed project is determined to fall under Project Category 3 and will require scoping and EA. The Scoping Statement and EA Report will be prepared according to the approved reporting format and submitted for review and approval by the CTO/USAID Project Officer, MEO, Mission Director and Bureau Environmental Officer (BEO).

3.2 BIP Environmental Work Plan.

GEM will prepare and submit Requests for Certification of Categorical Exclusion for the initial 25 concurred BIPs starting February 2007. Subsequently, GEM will perform the environmental screening and review for the succeeding 100 concurred BIPs to secure USAID environmental approval prior to start of construction. GEM will inform concerned infrastructure units upon notification of issuance of the USAID Environmental Clearance/Approval.

3.3 Environmental Clearance Performance Reporting.

A monthly summary performance report will be prepared by the GEM-PMO Environment Office and distributed to the respective GEM PMO and Area Offices and concerned staff. The report will provide information on (1) the number of ESR/IEE in preparation by GEM, (2) the number of ESR/IEEs submitted and under review by USAID/DENR, and (3) the number of ESR/IEEs approved by USAID/DENR. A Sample ESR Performance Report is shown in **Annex 12.**

The monthly performance report will provide additional remarks on any identified issues, concerns and problems which may affect the progress of ESR/IEE works (such as LGU certification, field survey data, concept design drawings) or could cause or result in deferment or cancellation of ESR/IEEs preparation or submission (e.g. LGU counterparts, ecological critical areas, ROW acquisition, peace and order situation, social conflict).

All ESR and IEE Reports will be kept on file at the GEM-PMO Environment Office. Duplicate copies will be stored at the respective Area Environment Offices. A centralized database of ESR/IEE Performance Reporting System will be maintained and made accessible to other users within the GEM-3 Program.

GEM will make environmental clearance reports available to USAID, upon request.

3.4 Environmental Compliance Performance Reporting.

A Monthly Environmental Compliance Monitoring Report will be prepared to present a summary of the environmental monitoring and compliance performance activities undertaken for all the BIP and RIP projects on-going construction in the GEM regional areas of Western Mindanao, Northeastern Mindanao, and Central/Southern Mindanao. A sample Environmental Compliance Monitoring Report is shown in **Annex 13**.

A compliance performance rating will be calculated for the on-going BIP and RIP construction by regional areas. The performance rating is expressed as percentage proportion of total number of construction projects in the regional area that fully and satisfactorily implemented or complied with all the identified environmental impact mitigating measures (or monitoring indicators) during the monitoring period . The performance rating scale is established as follows:

Excellent = 97-100% of all construction projects in the region with full compliance performance;
Good = $\geq$ 85% of all construction projects in the region with full compliance performance; and
Poor = < 85% of all construction projects in the region with full compliance performance.

A Certificate of Compliance (refer to **Annex 14**) will be awarded to the Contractors who satisfactorily complied and implemented their contractual responsibilities and obligations as provided in their approved STEP or environmental compliance monitoring action plan during the construction phase of the project. This highlights the environmental compliance process and recognizes the environmental compliance performance of Contractors during the project implementation.

Annex 1

BIP YEAR 1 WORK PROGRAM

Year 1 BIP Work Program

Table 1.A. Consolidated		Year 1											
Project Stage	Year 1 Target	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Completed	50					5	8	7	12	9	6	2	1
Contracted	50				8	15	11	8	7	1			
Approved to Bid	50			8	15	11	8	7	1				
Concurred	50		14	13	9	8	6						

Table 1.B. Western Mindanao		Year 1											
Project Stage	Year 1 Target	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Completed	20					2	4	3	5	3	2	1	
Contracted	20				4	7	4	3	2				
Approved to Bid	20			4	7	4	3	2					
Concurred	20		7	6	3	3	1						

Table 1.C. Central Mindanao		Year 1											
Project Stage	Year 1 Target	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Completed	20					2	3	2	5	5	2		1
Contracted	20				3	5	5	3	3	1			
Approved to Bid	20			3	5	5	3	3	1				
Concurred	20		5	5	3	3	4						

Table 1.D. Northern Mindanao		Year 1											
Project Stage	Year 1 Target	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08
Completed	10					1	1	2	2	1	2	1	
Contracted	10				1	3	2	2	2				
Approved to Bid	10			1	3	2	2	2					
Concurred	10		2	2	3	2	1						

BIP CONCURRENCES	TOTAL	Jan-08	Feb	Mar	Apr	May	Jun	Unit Cost Per Type	Estimated Cost	LGU	68%
TC								1,293,732.69	-	Coop	32%
ROAD	3		2	1				2,752,680 04	8,258,040.11		
BL	2		1		1			1,607,286.78	3,214,573.57		
WS	1		1					1,555,478.30	1,555,478.30		
BRIDGE	3			1		1	1	2,082,736.23	6,248,208.69		
DRAINAGE	6		2	2	1	1		660,596.86	3,963,581 16		
OTHERS	19		3	4	4	4	4	464,018.92	8,816,359.46		
GWSD								1,716,858 65	-		
SWSD								2,059,926.50	-		
GSD	14		4	4	3	2	1	509,110.40	7,127,545 62		
SSD	2		1					928,592.68	1,857,185.36		
IRRIG								2,732,901 78	-		
TOTAL	50		14	13	9	8	6	Total Estimated Cost of BIPs for Year 1 ($1=Php41)	Php41,040,972.27		
			50						$1,000,999.32		

Annex 2

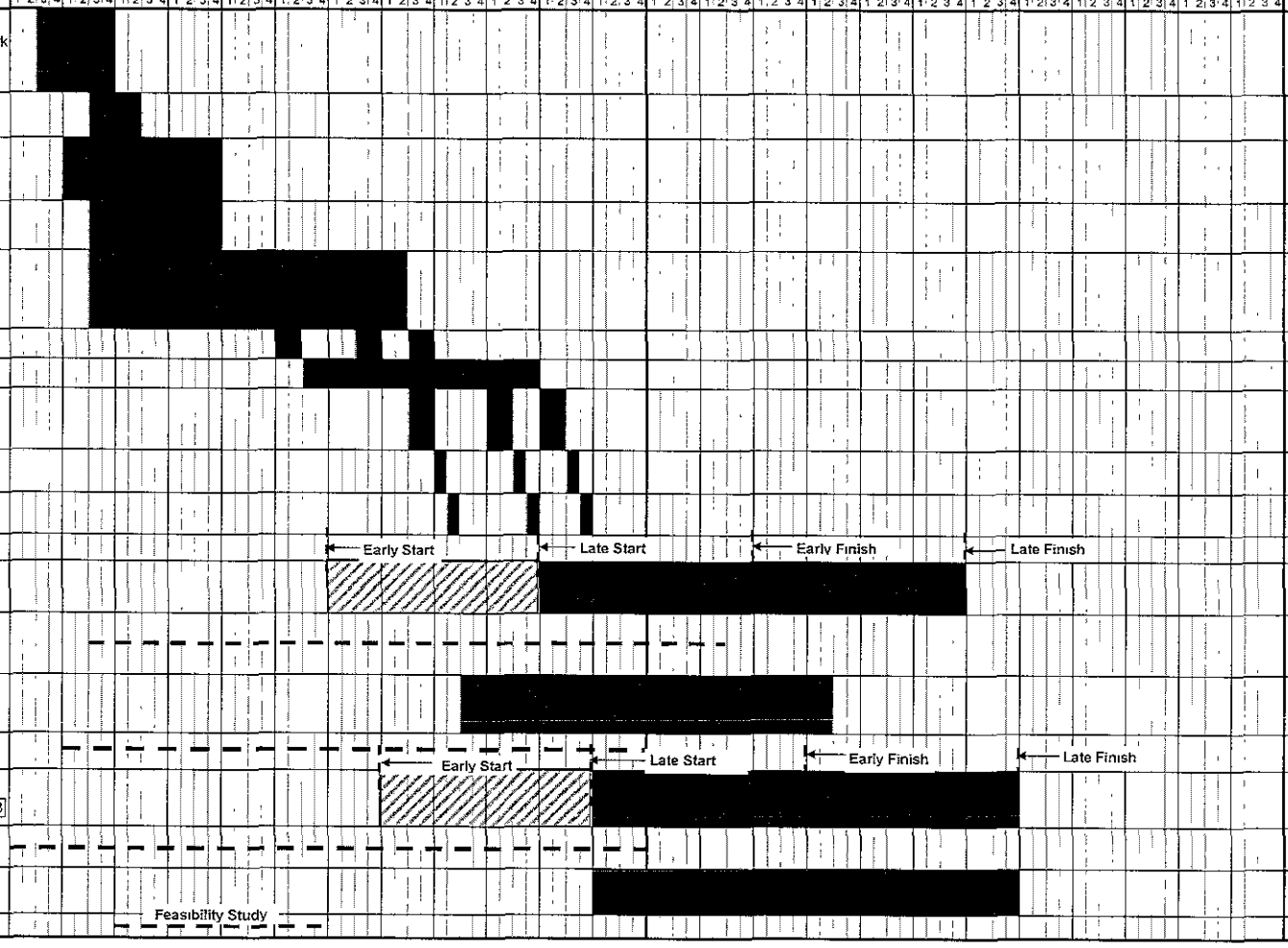
RIP Work Program

GEM 3 WORK PLAN

Infrastructure: Regional Impact Projects (RIP)

TAWI-TAWI ROAD IMPROVEMENT, JOLO WATER SUPPLY IMPROVEMENT, AND BONGAO AND JOLO RUNWAY REHABILITATION PROJECTS

	Activity	MONTH - DURATION	Staffing Required to Meet Targets
1.	Prepare Project Profile and preliminary design of immediate work improvement, cost estimates, work on counterpart		RIP PMO & Infra Selection and Counterpart
2	Submit Project Profile to USAID for concurrence		RIP PMO & Infra Selection and Counterpart
3	Prepare ESR, Environmental Requirements for issuance of ECC by DENR		Environmental Group / A Andaya
4.	Procurement for Services of Pre-Engineering and Detailed Design		RIP PMO & Infra Selection and Counterpart, RIP Design Team
5	Topo Survey, Geotechnical and Detailed Engineering Design, Technical Specifications, BOQ and Cost Estimates		RIP PMO & Infra Selection and Counterpart, RIP Design Team
6.	Request to BID from USAID		Contract's Team
7.	Tendering and Evaluation of Bids		Contract's Team / RIP PMO
8	Request for Award from USAID/ Approval by USAID of Award, 14 cd		Contract's Team
9	Contract signing, letter of Award, NTP		Contract's Team
10.	Pre-construction and start-up meetings		Contract's Team & RIP
11.	Construction Stage	Early Start / Late Start / Early Finish / Late Finish	
	a Tawi-Tawi Road Improvement, 240 cd (Php120Million) [1]		M Nyquist, A Buluran, A Gabunada, R Ampoloquio, N Aml, 1-QA/QC Engr, & 1-Site Engineer
	a.1 Proponent's Counterpart: Construction of the Bridge Component by DPWH [1]		RIP Western Mindanao and Infra Selection and Counterpart
	b Jolo Water Supply Improvement, 120 cd (Php100 Million) [2]		M Nyquist, A Buluran, E Siason, A Gabunada, A Viduya, N Asain, 1-QA/QC Engr, & 1-Site Engineer
	b 1 Counterpart by LWUA Design and Construction [2]	Early Start / Late Start / Early Finish / Late Finish	RIP Western Mindanao and Infra Selection and Counterpart
	c. Bongao Runway Upgrading Project, 240 cd (Php120 Million) [3]		M Nyquist, A Buluran, A Gabunada, R Ampoloquio, E Badin, 1-QA/QC Engr, & 1-Site Engineer
	c 1 Proponent's Counterpart Runway Rehabilitation [3]		RIP Western Mindanao and Infra Selection and Counterpart
	d Jolo Runway Upgrading Project, 240 cd, (Php120 Million) [4]		M Nyquist, A Buluran, E Siason, A Gabunada, R Torno, 1-QA/QC Engr, & 1-Site Engineer
	d.1 Proponent's Counterpart [4]	Feasibility Study	



Notes

1 Tawi-Tawi Road Improvement

a Based on the best available information, the Tawi-Tawi Bridge will be constructed by DPWH beginning Feb 2008 Design of the Tawi-Tawi Bridge and Road components are reportedly completed We need to obtain copies of the design, BOQ and the technical specifications of both the bridge and road components If the design of the road is completed, the implementation will be shortened by at least 4 months and therefore construction may commence by mid-year 2008

b Contracts to interface with Infra-RIP in the implementation stage

2 Jolo Water Supply Improvement

a The Program of Work is currently being prepared by LWUA and will be available by 1st week of March 2008. The specific counterpart by LWUA and GEM3 portion would only be determined by then Meawhile, the RIP Team will go ahead with its own assessment of the Jolo Water Supply System and the required improvement to be undertaken

b RIP Team and Infrastructure Selection Counterpart Management Team should collaborate with LWUA to expedite preparation of the Program of Works so that this can be used for GEM3 Project Proposal Profile In the same manner, the RIP Team should collaborate with LWUA Engineering in the Pre-Engineering and Detailed Design Preparation in expeditious manner

c Contracts to interface with Infra-RIP in the implementation stage

3 Bongao Runway Rehabilitation

a A portion of the runway rehabilitation has been completed Based on the best available information another portion of the runway will be constructed by a contractor of DOTC The contract price of the 2nd portion based on the available information is Php30 Million The remaining 600 meters and/or the extension may be undertaken by GEM3

b Contracts to interface with Infra-RIP in the implementation stage

4 Jolo Runway Rehabilitation

a A Feasibility Study is to be conducted and selection of consultants by DOTC is underway If the FS is started by March 2008, the draft Final Report (with the Preliminary Design and Costs) might be available the earliest by May 2008 The preliminary Design and Cost Estimates will be the basis of the GEM Project Profile/Proposal can be prepared by 2nd week of February and can be submitted to USAID at the middle March 2008, for concurrence

b Contracts to interface with Infra-RIP in the implemetation stage

GEM 3 WORK PLAN
Infrastructure: Regional Impact Projects (RIP)
JOLO WATER SUPPLY IMPROVEMENT PROJECT

	Activity	MONTH - DURATION	Staffing Required to Meet Targets
		Year 2008: Q1 (Jan, Feb, Mar); Q2 (Apr, May, Jun); Q3 (Jul, Aug, Sep); Q4 (Oct, Nov, Dec) — Year 2009: Q1 (Jan, Feb, Mar); Q2 (Apr, May, Jun); Q3 (Jul, Aug, Sep); Q4 (Oct, Nov, Dec)	
1	Prepare Project Profile and preliminary design of immediate work improvement, cost estimates, work on counterpart, 30 cd		RIP PMO & Infra Selection and Counterpart
2.	Submit Project Profile to USAID for concurrence, 14 cd		RIP PMO & Infra Selection and Counterpart
3.	Prepare ESR, Environmental Requirements for issuance of ECC by DENR, 30 cd		Environmental Group / A Andaya
4	Procurement for Services of Pre-Engineering and Detailed Design, 45 cd (By Others)		RIP PMO & Infra Selection and Counterpart, RIP Design Team
5	Topo Survey, Geotechnical and Detailed Engineering Design, Technical Specifications, BOQ and Cost Estimates		RIP PMO & Infra Selection and Counterpart, RIP Design Team
6	Request to BID from USAID, 14 cd		Contract's Team
7.	Tendering and Evaluation of Bids, 60 cd		Contract's Team / RIP PMO
8.	Request for Award from USAID/ Approval by USAID of Award, 14 cd		Contract's Team
9.	Contract signing, letter of Award, NTP, 7 cd		Contract's Team
10	Pre-construction and start-up meetings, 7 cd		Contract's Team & RIP
11	Construction Stage, 210 cd (Php100 Million)		M Nyquist, A Buluran, E Siason, A Gabunada, N Asain, A. Viduya, 1-QA/QC Engr, & 1-Site Engineer
12	Counterpart by LWUA		RIP Western Mindanao & Infra Selection & Counterpart

Note.

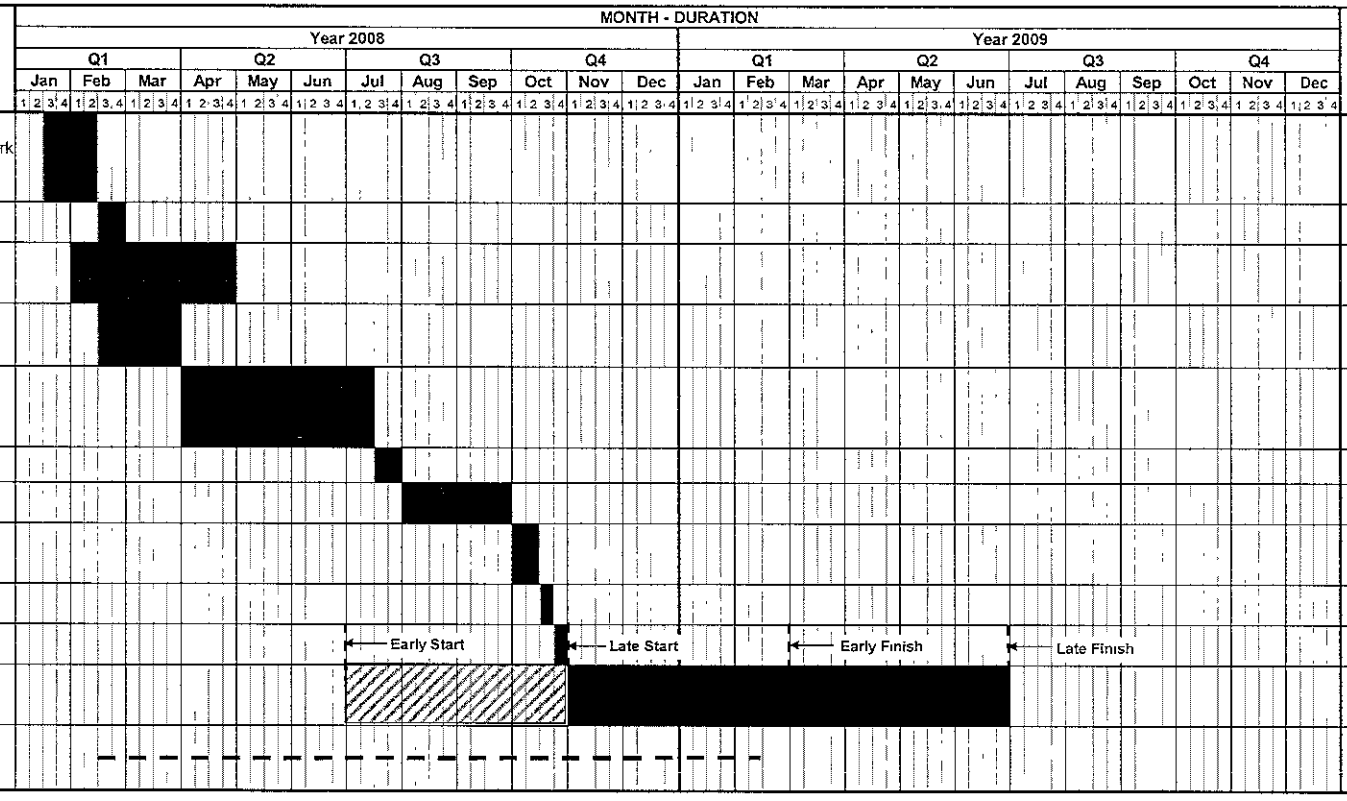
a The Program of Work is currently being prepared by LWUA and will be available by 1st week of March 2008 The specific counterpart by LWUA and GEM3 portion would only be determined by then Meawhile, the RIP Team will go ahead with its own assessment of the Jolo Water Supply System and the required improvement to be undertaken

b RIP Team and Infrastructure Selection Counterpart Management Team should collaborate with LWUA to expedite preparation of the Program of Works so that this can be used for GEM3 Project Proposal Profile In the same manner, the RIP Team should collaborate with LWUA Engineering in the Pre-Engineering and Detailed Design Preparation in expeditious manner

c Contracts to interface with Infra-RIP in the implementation stage

GEM 3 WORK PLAN
Infrastructure: Regional Impact Projects (RIP)
TAWI-TAWI ROAD PROJECT

	Activity	MONTH - DURATION	Staffing Required to Meet Targets
1.	Prepare Project Profile and preliminary design of immediate work improvement, cost estimates, work on counterpart, 30 cd		RIP PMO & Infra Selection and Counterpart
2	Submit Project Profile to USAID for concurrence, 14 cd		RIP PMO & Infra Selection and Counterpart
3	Prepare ESR, Environmental Requirements for issuance of ECC by DENR, 30 cd		Environmental Group / A Andaya
4.	Procurement for Services of Pre-Engineering and Detailed Design, 45 cd		RIP PMO & Infra Selection and Counterpart, RIP Design Team
5	Topo Survey, Geotechnical and Detailed Engineering Design, Technical Specifications, BOQ and Cost Estimates 105 cd		RIP PMO & Infra Selection and Counterpart, RIP Design Team
6.	Request to BID from USAID, 14 cd		Contract's Team
7	Tendering and Evaluation of Bids, 60 cd		Contract's Team / RIP PMO
8	Request for Award from USAID/ Approval by USAID of Award, 14 cd		Contract's Team
9	Contract signing, letter of Award, NTP, 7 cd		Contract's Team
10.	Pre-construction and start-up meetings, 7 cd		Contract's Team & RIP
11	Construction Stage, 240 cd (Php120 Million)		M Nyquist, A Buluran, A. Gabunada, R. Ampoloquio, N Amil, 1-QA/QC Engr, & 1-Site Engineer
12.	Proponent's Counterpart Construction of the Bridge Component by DPWH		RIP Western Mindanao & Infra Selection & Counterpart



Note

a Based on the best available information, the Tawi-Tawi Bridge will be constructed by DPWH beginning Feb 2008 Design of the Tawi-Tawi Bridge and Road components are reportedly completed We need to obtain copies of the design, BOQ and the technical specifications of both the bridge and road components If the design of the road is completed, the implementation will be shortened by at least 4 months and therefore construction may commence by mid-year 2008.

b Contracts to interface with Infra-RIP in the implementation stage

GEM 3 FIRST YEAR WORK PLAN 2008
Infrastructure: Regional Impact Projects (RIP)
BONGAO RUNWAY UPGRADING PROJECT

	Activity	MONTH - DURATION	Staffing Required to Meet Targets
		Year 2008: Q1 (Jan, Feb, Mar) · Q2 (Apr, May, Jun) · Q3 (Jul, Aug, Sep) · Q4 (Oct, Nov, Dec); Year 2009: Q1 (Jan, Feb, Mar) · Q2 (Apr, May, Jun) · Q3 (Jul, Aug, Sep) · Q4 (Oct, Nov, Dec)	
1.	Prepare Project Profile and preliminary design of immediate work improvement, cost estimates, work on counterpart, 45 cd		RIP PMO & Infra Selection and Counterpart
2	Submit Project Profile to USAID for concurrence, 14 cd		RIP PMO & Infra Selection and Counterpart
3.	Prepare ESR, Environmental Requirements for issuance of ECC by DENR, 30 cd		Environmental Group / A Anoaya
4.	Procurement for Services of Pre-Engineering and Detailed Design (By Contracts), 45 cd		RIP PMO & Infra Selection and Counterpart, RIP Design Team
5.	Topo Survey, Geotehcnical and Detailed Engineering Design, 105 cd		RIP PMO & Infra Selection and Counterpart, RIP Design Team
6	Request to BID from USAID, 14 cd		Contract's Team
7	Tendering and Evaluation of Bids, 60 cd		Contract's Team / RIP PMO
8	Request for Award from USAID/ Approval by USAID of Award, 14 cd		Contract's Team
9	Contract signing, letter of Award, NTP, 7 cd		Contract's Team
10	Pre-construction and start-up meetings, 7 cd	← Early Start · ← Late Start · ← Early Finish · ← Late Finish	Contract's Team & RIP
11	Construction Stage, 240 cd (Php120 Million)		M. Nyquist, A. Buluran, A Gabunada, R Ampoloquio, E Badiri, 1-QA/QC Engr, & 1-Site Engineer
12	Counterpart Runway Rehabilitation (2nd Portion)		RIP Western Mindanao & Infra Selection & Counterpart

Note

a A portion of the runway rehabilitation has been completed Based on the best available information another portion of the runway will be constructed by a contractor of DOTC The contract price of the 2nd portion based on the available information is Php30 Million The remaining 600 meters and/or the extension may be undertaken by GEM3

b Contracts to interface with Infra-RIP in the implementation stage

GEM 3 FIRST YEAR WORK PLAN 2008
Infrastructure: Regional Impact Projects (RIP)

JOLO RUNWAY UPGRADING PROJECT

	Activity	MONTH - DURATION	Staffing Required to Meet Targets
		Year 2008: Q1 Jan Feb Mar; Q2 Apr May Jun; Q3 Jul Aug Sep; Q4 Oct Nov Dec — Year 2009: Q1 Jan Feb Mar; Q2 Apr May Jun; Q3 Jul Aug Sep; Q4 Oct Nov Dec	
1	Prepare Project Profile and preliminary design of immediate work improvement, cost estimates, work on counterpart, 45 cd		RIP PMO & Infra Selection and Counterpart
2	Submit Project Profile to USAID for concurrence, 14 cd		RIP PMO & Infra Selection and Counterpart
3	Prepare ESR, Environmental Requirements for issuance of ECC by DENR, 30 cd		Environmental Group / A Angaya
4	Procurement for Services of Pre-Engineering and Detailed Design (By Contracts), 45 cd		RIP PMO & Infra Selection and Counterpart, RIP Design Team
5	Topo Survey, Geotehcnical and Detailed Engineering Design, 105 cd		RIP PMO & Infra Selection and Counterpart, RIP Design Team
6	Request to BID from USAID, 14 cd		Contract's Team
7	Tendering and Evaluation of Bids, 60 cd		Contract's Team / RIP PMO
8	Request for Award from USAID/ Approval by USAID of Award, 14 cd		Contract's Team
9	Contract signing, letter of Award, NTP, 7 cd		Contract's Team
10	Pre-construction and start-up meetings, 7 cd		Contract's Team & RIP
11	Construction Stage, 240 cd (Php120 Million)		M. Nyquist, A Buluran, E Siason, A Gabunada, R Torno, 1-QA/QC Engr, & 1-Site Engineer
12	Proponent's Counterpart	FEASIBILITY STUDY	RIP Western Mindanao & Infra Selection & Counterpart

Note

a A Feasibility Study is to be conducted and selection of consultants by DOTC is underway If the FS is started by March 2008, the draft Final Report (with the Preliminary Design and Costs) might be available the earliest by May 2008 The preliminary Design and Cost Estimates will be the basis of the GEM Project Profile/Proposal can be prepared be 2nd week of February and can be submitted to USAID at the middle March 2008, for concurrence

b Contracts to interface with Infra-RIP in the implementation stage

Annex 3

Certification of Categorical Exclusion Reporting Format

GROWTH WITH EQUITY IN MINDANAO (GEM) 3 – PROGRAM
2/F Damosa Business Center, Damosa Complex, Mamay Road, Lanang, Davao City 8000

CERTIFICATION FOR CATEGORICAL EXCLUSION

Activity/Project	
Project Implementing Partners	
Project Name	
Project Duration	
Project Description	

Certification:

I, the undersigned, certify that:

1. The information in this form is correct and complete.
2. Those responsible for implementing this project will monitor and assess its impact on the environment to assure that the project complies with environmental requirements established under the Code of Federal Regulations 22 CFR 216.

_____ _____
Contractor/Grantee Date

Approved: Disapproved: Date:

USAID Project Officer/CTO: _____ _____ _____

Attachment A
ACTIVITY DESCRIPTION

1.0 Project Background

No.	Project Name	CN #	Project Location	Project Proponent	Project Beneficiaries*
Community Center Construction (1)					
1					
Grains Solar Dryer Construction (4)					
2					
3					
4					
5					

2.0 Activity Description.

The project scope of work, estimated cost and construction timeframe are also provided in the summary table below.

Project Type	Qty (units)	Project Scope of Work (per unit)	Project Scale Limits (for Category 1 BIP)	Estimated Cost (Pesos)	Timeframe

3.0 Environmental Screening

4.0 Environmental Management

Annex 4

Environmental Screening Review (ESR) Reporting Format

SUMMARY OF ENVIRONMENTAL REVIEW

Project	
Project Implementing Partners	
Project Name	
Project Duration	
Project Description	
Project Category, Recommended Determination and Documentation	

Certification: I, the undersigned, certify that:

1. The information in this form is correct and complete.
2. The following actions have been and will be taken to assure that the project complies with environmental requirements established under the Code of Federal Regulations 22 CFR 216:
   - ☑ Those responsible for implementing this project have received training and/or documents describing essential design elements and best practices for activities of this nature.
   - ☑ These design elements and best practices will be followed in implementing this activity, unless USAID specifically request a change.
   - ☑ Any specific mitigation and monitoring measures described in the environmental review will be implemented in their entirely.
   - ☑ Compliance with the conditions will be regularly confirmed and documented by on-site inspections during the project and its completion.

_____ _____
Contractor/Grantee Date

	Approved:	Disapproved:	Date:
USAID Project Officer:	_____	_____	_____
USAID MEO:	_____	_____	_____

GROWTH WITH EQUITY IN MINDANAO (GEM) – 3 PROGRAM

ENVIRONMENTAL SCREENING REVIEW REPORT

1.0 BACKGROUND, RATIONALE AND EXPECTED RESULTS

2.0 ACTIVITY DESCRIPTION

Succinctly describe location, siting, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during implementation, how intervention will operate and any ancillary development activities that are required to build or operate the primary activity (e.g., road to a facility, need to quarry or excavate borrow material, need to lay utility pipes to connect with energy, water source or disposal point or any other activity needed to accomplish the primary one but in a different location). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these.

Project Component Activities

Project Development Phases	Activity Description and Assigned Responsibilities	Responsible Parties
Planning and Design Phase		
Pre-Construction Phase		
Construction Phase		
Post Construction/ Turnover		
Operation and Maintenance		
Implementation Schedule and Funding		

3.0 ENVIRONMENTAL BASELINE INFORMATION

Affected environment, including essential baseline information available for all affected locations and sites, both primary and ancillary activities. This information could be presented in a tabular form.

(Sample Matrix) **Environmental Baseline Information**

Site Characteristics	Environmental Parameters	Description
Geographic Location	Latitude	
	Longitude	
Local Topography	Terrain /Slope	
	Elevation	
Local Geology	Soil Type	
	Minerals	
Local Hydrology	Sea/River/Creek	
Local Climate	Climate type	
	Annual Rainfall	
Natural Physical Hazards	Earthquakes/Volcanic	
	Landslide/Erosion	
	Flooding	
Vegetation Cover	Type	
	Coverage area	
Protected Areas	Forest	
	Inland/Coastal Waters	
Land Area and Existing Land Use	Area	
	Land Classification/Use	
Population (2000)	Total Population	
	Total Household	
	Ethnic Group (%)	
Local Economy	Total Labor force	
	Main Income source	
Basic Services and Infrastructures	Water supply	
	Sanitary toilets	
	Electricity	
	Transportation	
	Communication	
	Education	
	Health	
	Social Welfare	
	Police/Fire Protection	

4.0 EVALUATION OF PROJECT ISSUES WITH RESPECT TO POTENTIAL ENVIRONMENTAL IMPACT

Include impacts that could occur before construction starts during implementation, as well as any problems that might arise with restoring or reusing the site, if the facility or activity were completed or cease to exist. Explain direct, induced and cumulative effects on various components of the environment (e.g., air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archeological or other cultural resources, people and their communities, land use, traffic, waste disposal, water supply, energy, etc.). Indicate positive impacts and how the natural resources base will be sustainably improved.

***(Sample Matrix)* Environmental Impact Screening Matrix for Road Upgrading Project**

Project Activities	Potential Environmental Issues and Concerns Arising from Project Activities	None or Insig Impact	Significant Impact			Duration of Impact	
			Low	Mod	High	Short-term	Long-term
Pre-construction Stage	Affect existing forested area						
	Require tree cutting or vegetation clearing						
	Remove permanent structures of value						
	Damage cultural and historic resources						
	Impair local aesthetic or scenic resources						
	Require additional land for ROW acquisition						
	Cause relocation and resettlement						
	Damage present local service facilities						
	Damage to properties or belongings						
	Impose additional demand on local services						
	Restrict public access to the area						
	Pose human health and safety hazards						
	Create job opportunities/local hired labor						
Construction Stage	Affect existing forested area						
	Generate excess excavation materials						
	Generate construction wastes and debris						
	Induce topsoil erosion/deposition						
	Pose human health and safety hazards						
	Require dump site for waste disposal						
	Impose additional demand for local services						
	Affect pedestrian/vehicular traffic flow						
	Create increased demand for aggregates						
	Create job opportunities/local hired labor						
Post-Construction & Operation Stage	Affect existing forested area						
	Reduce waste generation and disposal						
	Restore/improve scenic value of roadway						
	Control/regulate road inundation/flooding						
	Offer all-weather year-round access to area						
	Increase volume of traffic flow						
	Save travel time and vehicle operating cost						
	Reduce traffic accident and safety hazards						
	Provide support in increasing local economy						
	Promote/ support in peace development						

Note: + means potential beneficial impact

5.0 RECOMMENDED MITIGATION ACTIONS (MONITORING AND EVALUATION)

For example, indicate measures that will be taken to avoid, reduce or compensate for impacts, such as restoration of borrow or quarry areas, replanting vegetation, compensation

for any relocation of homes and residents. Indicate how mitigative measures will be monitored to ensure that they accomplish their intended result or what monitoring might be needed for impacts that one is uncertain about.

(Sample Matrix) **Environmental Management Plan (EMP) for Road Upgrading Project**

Impact Mitigation and Enhancement Measures	Primary Responsible Parties	Monitoring Indicator(s)	Monitoring Method	Monitoring Frequency	Monitoring Cost	Monitoring Responsibility
Implement good site and environmental management practices. - Protection of vegetation and sensitive habitats. - Preservation of environmental quality. - Conservation of natural resources.	Contractor	Percentage of total vegetation area cleared at task end	Visual inspection and record review	Middle and end of site clearing task	Low	GEM
		Frequency of pollution events arising from construction works.	Visual inspection and record review	Start, mid and end of construction	Low	GEM
		Frequency of aggregates delivery by legitimate suppliers.	Spot check of delivery receipts with Contractor	Start and during construction	Low	GEM
Implement good safety and traffic management practices. - Safety of workers and public from road accidents or injuries. - Prevention of damage or destruction of properties as a result of the Works.	Contractor	Workers supplied safety devices, gears and uniforms; traffic signs and signals installed.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM
		Workers provided bunkhouse, water supply and sanitary facilities.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM
		Workers protected from nuisance noise, dust and vibration.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM
		Pedestrian and motorist provided alternate access to construction area.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM LGU
Help strengthen local capability for enforcement and monitoring of environmental compliance.	GEM LGU	LGU provided information and orientation on post-construction monitoring of compliance with environmental responsibilities.	Environmental Compliance Monitoring Plan	Prior to turnover	Low	GEM USAID

6.0 **Other Information** (as appropriate)

Where possible, include photos of the site and surroundings, topographic and/or forest cover maps, site location plan and conceptual design drawings, certificate of public consultation & acceptability including a statement of commitment for counterpart environmental responsibilities, and water quality testing, if applicable.

Annex 5

DENR-EMB Letter of Approval on the Request for Categorical Exemption of Projects

Republic of the Philippines
Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
DENR Compound, Visayas Avenue, Diliman, Quezon City 1116
Telephone Nos.: 925-47-93 to 97
Email : emb@emb.gov.ph
Visit us at http://www.emb.gov.ph

JUL 2 2 2004

GROWTH WITH EQUITY IN MINDANAO
MANILA OFFICE
RECEIVED
DATE: 8/13/04 BY:

Armando Andaya
Environmental Specialist
GROWTH WITH EQUITY IN MINDANAO PROGRAM
c/o Louis Berger Group Inc.
Unit 3, 12 Floor Export Bank Plaza
Sen. Gil Puyat Avenue, corner Pasong Tamo
Makati City, Philippines

Re : Request for Categorical Exemption from the Environmental Impact Statement (EIS) Requirement GEM-2 Community Infrastructure Program

Dear Mr. Andaya:

This is in response to your letter we received last July 7, 2004 requesting for categorical exemption from the Philippine EIS Requirement for your Growth with Equity in Mindanao Phase 2 (GEM-2) Project with funding assistance from the United States Agency for International Development (USAID).

Please be informed that the projects as enumerated in the attached matrix are not covered by the Philippine EIS System, as such project implementation can commence after securing relevant permits from other government agencies. However, the proposed construction of ≥ 300 meters boat / fish landings (at riverbank or foreshore area), requires you to submit an Initial Environmental Examination (IEE) Report to our EMB Regional Office to secure an Environmental Compliance Certificate (ECC). Riverbanks or foreshore areas are considered Environmental Critical Areas (ECA), thus an ECC must be secured prior to implementation of the project.

For your information and guidance.

Very truly yours,

JULIAN D. AMADOR
Director

Allan/ C: my documents/GEM2

GEM PROGRAM
DAVAO CITY
TRANSMITTED
DATE: 8/16/04
BY : 8/19/04

GEM PROGRAM
DAVAO CITY
RECEIVED
DATE: 8/13/04
BY :

PROJECT TYPE	SCOPE OF WORK	GEM-2 Project Descriptions	EMB GUIDELINES (projects not covered by the EIS System)
Level 1 and Level 2 water systems	Rehabilitation	Service area ≤ 100 has; water supply source discharge rate ≤ 10 lps	Level 1 and Level 2 water supply projects
Rural Road (Farm to Market)	Rehabilitation/ Improvement	Total Length ≤ 5 km; two lane carriageway ≤ 6-meter wide; without or ≤ 50 % of ROW acquisition	Rehabilitation of roads with less than 50% increase in width and rehabilitation without acquisition of right of way
Pedestrian Passageway (footbridge/ covered walkway)	Construction	Total length ≤ 150 meters, single lane walkway	All pedestrian overpass
Bridge	Rehabilitation/ Improvement/ Construction	Bridge span ≤ 50 m, without or ≤ 50 % ROWA total length ≤ 50 m; 6-m width carriageway, without or ≤ 50% ROWA	Construction of bridges with span less than 50 meters and rehabilitation involving increase of width ≤ 50 % with ROWA, or bridge rehabilitation without ROWA
Drainage	Construction	Total length of 1,000 meter of earth ditches, lined canals, and/or ≤ 15 meter pipe/box culverts ranging from 0.5 to 5.0 meter in diameter or maximum dimension/opening	Drainage and culverts are part of the road. Construction and rehabilitation therefore they are not covered by the EIS system
Boat/ Fish Landings (at river bank or foreshore area	Rehabilitation/ Improvement Construction	Rock causeway ≤ 200 meter and width ≤ 3 meters, with concrete top pavement, landing platform ≤ 10 sq. m and pier head ≤ 25 sq.m ≤ 300 meters boat/fish landings	Rehabilitation and construction of existing boat/fish landings are not covered by the EIS system
Communal Irrigation System	Rehabilitation/ Improvement Construction	Service area ≤ 300 hectares; total length of irrigation canal ≤ 5 km Service area ≤ 300 hectares, total length of irrigation canal ≤ 5 km	irrigation project having a service area of ≤ 300 hectares
Warehouse (for grains and seaweeds, vegetable and fruits) trading centers	Construction	64 sq meter floor area with adjoining 9 sq. m. office space located in < 1000 sq. m. land area	Buildings and similar structures having a total land area less than 1,000 sq. m
Solar dryers (for grains and seaweeds)	Construction	Grain solar dryer occupying a land ≤ 500 square meter of outdoor space	multipurpose building with solar dryers having an area less than 1,500 square meters
Community Centers, Multipurpose Buildings	Construction	Floor area less than 1,000 sq. meters	-do-

Annex 6

INITIAL ENVIRONMENTAL EXAMINATION (IEE) REPORTING FORMAT

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Region XII

I. **Name of Proponent** :

II. **Address** :

III. **Project Name or Title** :

IV. **Project Location** : **(Refer to Attachment)**
Municipality(ies) :
Province(s) :

V. **Project Description**

I hereby certify that the above information is true to my knowledge and I shall be liable if found to be untrue.

_____ Date Filed

_____ Signature of Proponent of Authorized Representative

(Do Not Write Below this Line)

To be filled up by DENR-EMPAS

I. **Project Category**

_____ Project is an ECP
_____ Project is within an ECA _____ ECA Category
_____ Project is neither an ECP or located in an ECA _____ Kalakalan 20 Project

II. **Attached Documents**

_____ Location map (1:50,000) _____ Project Description _____ Certification of CENRO

III. **Recommendation:**

_____ Require IEE _____ Require EIS _____ Require additional information
_____ Not covered by the EIS _____ Issue Certificate of Non-Coverage

_____

Screening Officer

INITIAL ENVIRONMENTAL EXAMINATION

1.0 Project Description

1.1 Basic Project Information

Project Name or Title :

Name of Proponent :
Contact Person :
Address :

1.2 Project Location

1.3 Project Purpose/Rationale

1.4 Description of Project Phase

1.4.1 Pre-Construction/Construction Phase

a. Surface development plan and schedule.

b. Surface development area.

c. Area for civil works.

d. Major construction activities.

e. Types of equipment to be used.

f. Source of construction materials.

g. Support services and facilities requirement and availability.

h. Estimates of total cut soil volume.

i. Total manpower requirement.

j. Project cost.

1.4.2 Operation Phase

a. Project operation schedule and duration.

b. Manpower requirement.

1.4.3 Abandonment Phase

a. Facilities to be abandoned.

b. Description of site rehabilitation/restoration plan.

2.0 Baseline Environmental Conditions

a. Study Methodology.

b. Description of Existing Condition

c. Description of Future Environmental Conditions Without the Project.

d. Proof of Project's Social Acceptability

3.0 Impact Identification, Prediction and Evaluation

a. Summary Matrix of Predicted Environmental Issues/Impacts

b. Brief Discussion of Potential Issues/Impacts Related to project Location, Planning and Design

c. Brief Discussion of Potential Issues/Impacts Related to Construction Works

d. Brief Discussion of Potential Issues/Impacts Related to Road Facility Operation

***(Sample)* Summary Matrix of Predicted Environmental Issues/Impacts**

Project Development Stages and Activities	Description of Potential Environmental Impact Targets	Type of Impact	Magnitude of Impact	Reversibility of Impact	Time Scale of Impact
Project Sitting, Planning and Design Stage	Degradation of land resources and value	Negative	None/Low	Reversible	Short-term
	Degradation of water resource and value	Negative	None/Low	Reversible	Short-term
	Degradation of air resources and value	Negative	None/Low	Reversible	Short-term
	Degradation of living resources and value	Negative	None/Low	Reversible	Short-term
	Degradation of human resources and value	Negative	None/Low	Reversible	Short-term
Construction Stage - Mobilization of equipment and labor - Earthworks - Material sourcing - Formworks - Road concreting - Drainage and slope protection structure - Demobilization and abandonment	Loss of vegetation	Negative	None/Low	Reversible	Short-term
	Spoil generation	Negative	None/Low	Reversible	Short-term
	Solid waste generation	Negative	None/Low	Reversible	Short-term
	Dust generation	Negative	None/Low	Reversible	Short-term
	Traffic-related accident risk	Negative	None/Low	Reversible	Short-term
	Siltation of drainage or waterways	Negative	None/Low	Reversible	Short-term
	Noise generation	Negative	None/Low	Reversible	Short-term
	Increase of surface runoff flow	Negative	None/Low	Reversible	Short-term
	Alteration of local topography	Negative	None/Low	Reversible	Short-term
	Impair public health and safety	Negative	None/Low	Reversible	Short-term
	Create water pollution	Negative	None/Low	Reversible	Short-term
	Increase social problems/crime rate	Negative	None/Low	Reversible	Short-term
	Generate excess excavation materials	Negative	None/Low	Reversible	Short-term
	Generate construction wastes and debris	Negative	None/Low	Reversible	Short-term
	Damage to properties or belongings	Negative	None/Low	Reversible	Short-term
	Cause erosion/siltation	Negative	None/Low	Reversible	Short-term
	Cause flooding or drainage problem	Negative	None/Low	Reversible	Short-term
	Increase health and safety hazards/risks	Negative	None/Low	Reversible	Short-term
	Increase demand for local services	Negative	None/Low	Reversible	Short-term
	Create social conflict with local residents	Negative	None/Low	Reversible	Short-term
	Restrict public access to the area	Negative	None/Low	Reversible	Short-term
	Increase wastewater generation	Negative	None/Low	Reversible	Short-term
	Create livelihood opportunities, local hiring	Positive	None/Low	Reversible	Long-term
	Generate employment	Positive	None/Low	Reversible	Long-term
	Increase in economic activities	Positive	None/Low	Reversible	Long-term
Post-Construction & Operation Stage	Solid waste generation	Negative	None/Low	Reversible	Short-term
	Traffic related accident risk	Negative	None/Low	Reversible	Short-term
	Public health hazard	Negative	None/Low	Reversible	Short-term
	Water pollution problem	Negative	None/Low	Reversible	Short-term

4.0 Environmental Management Plan

a. Recommended Mitigation and Monitoring Issues

b. Institutional Responsibilities and Agreements

(Sample) **Environmental Management Plan for Kibayao-Kilangan Road Upgrading Project**

Impact Mitigation and Enhancement Measures	Primary Responsible Parties	Monitoring Indicator(s)	Monitoring Method	Monitoring Frequency	Monitoring Cost	Monitoring Responsibility
Implement good site and environmental management practices. - Protection of vegetation and wildlife - Preservation of environmental quality - Conservation of natural resources.	Contractor	Percentage of total vegetation area cleared at task end.	Visual inspection and record review	Middle and end of site clearing task	Low	GEM
		Frequency of pollution events arising from construction works	Visual inspection and record review	Start, mid and end of construction	Low	GEM
		Frequency of aggregates delivery by legitimate suppliers	Spot check delivery receipts with Contractor	Start and during construction	Low	GEM
Implement good safety and traffic management practices. - Safety of workers and public from road accidents or injuries - Prevention of damage or destruction of properties as a result of the Works.	Contractor	Workers supplied safety devices, gears and uniforms; traffic signs and signals installed.	Visual inspection and record review	Daily to weekly to end of construction	Low	GEM
		Workers provided bunkhouse, water supply and sanitary facilities.	Visual inspection and record review	Daily to weekly to end of construction	Low	GEM
		Workers protected from nuisance noise, dust and vibrations	Visual inspection and record review	Daily to weekly to end of construction	Low	GEM
		Pedestrian and motorist provided alternate access to construction area	Visual inspection and record review	Daily to weekly to end of construction	Low	GEM
Help strengthen -- local capability for enforcement and monitoring of environmental compliance as stipulated in the MOA between GEM and concerned LGU.	GEM	LGU provided information and orientation on implementation of environmental measures.	Environmental compliance monitoring plan	Prior to turnover	Low	GEM

5.0 Other Information (as appropriate)

Where possible, include photos of the site and surroundings, topographic and/or forest cover maps; list the names of any reference materials or individuals consulted.

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Region- ARMM

I. Name of Proponent(s) & Address :

II. Project Name or Title :

III. Project Location : **(Refer to Attachment A)**
- **Municipality** :
- **Province** :
- **Region** :

IV. Project Description

I hereby certify that the above information is true to my knowledge and I shall be liable if found to be untrue.

_____ Date Filed

_____ Signature of Proponent of Authorized Representative

(Do Not Write Below this Line)

To be filled up by DENR-EMPAS

I. Project Category

_____ Project is an ECP
_____ Project is within an ECA _____ ECA Category
_____ Project is neither an ECP or located in an ECA _____ Kalakalan 20 Project

II. Attached Documents

_____ Location map (1:50,000) _____ Project Description _____ Certification of CENRO

III. Recommendation:

_____ Require IEE _____ Require EIS _____ Require additional information
_____ Not covered by the EIS _____ Issue Certificate of Non-Coverage

_____ Screening Officer

INITIAL ENVIRONMENTAL EXAMINATION

1.0 BACKGROUND, RATIONALE AND EXPECTED RESULTS

Table 1. Project Background Information

Background	
Rationale	
Expected Results	

2.0 ACTIVITY DESCRIPTION

(Sample) Project Component Activities

Project Development Phases	Activity Description and Assigned Responsibilities	Responsible Parties
Planning and Design Phase		
Pre-Construction Phase		
Construction Phase		
Post Construction/ Turnover		
Operation and Maintenance		
Implementation		

3.0 ENVIRONMENTAL BASELINE INFORMATION

(Sample) **Environmental Baseline Information**

Site Location Characteristics	Environmental Parameters	Description
Geographic Location	Latitude (Roadway)	
	Longitude (Roadway)	
Local Topography	Terrain/Slope (Roadway)	
	Elevation/ (Roadway)	
Local Geology	Soil Type	
	Minerals	
Local Hydrology	Inland Water	
	Present Use	
	Sensitive habitats/species	
Local Climate	Climate type	
	Annual Rainfall	
Natural Physical Hazards	Earthquakes/Volcanic	
	Landslide/Erosion	
	Flooding	
Forest/ Vegetation Cover	Type	
	Coverage area	
Land Area and Existing Land Use	Municipal land Area	
	Land Classification & Use	
Population (Census 2000)	Total Population	
	Total Households	
	Ethnic Group (%)	
Local Economy	Total Labor force	
	Main Income source	
Basic Services and Infrastructures	Water supply	
	Sanitary toilets	
	Electricity	
	Transportation	
	Communication	
	Education	
	Health	
	Social Welfare	
	Mosque	
	Police/Fire Protection	

4.0 EVALUATION OF PROJECT ISSUES WITH RESPECT TO POTENTIAL ENVIRONMENTAL IMPACT

(Sample) Environmental Impact Screening Matrix for Road Upgrading Project

Project Activities	Potential Environmental Issues and Concerns Arising from Project Activities	None or Insig Impact	Significant Impact			Duration of Impact	
			Low	Mod	High	Short-term	Long-term
Pre-construction Stage	Affect existing forested area	✔					
	Require tree cutting or vegetation clearing						
	Remove permanent structures of value						
	Damage cultural and historic resources						
	Impair local aesthetic or scenic resources						
	Require additional land for ROW acquisition						
	Cause relocation and resettlement						
	Damage present local service facilities						
	Damage to properties or belongings						
	Impose additional demand on local services						
	Restrict public access to the area						
	Pose human health and safety hazards						
	Create job opportunities/local hired labor						
Construction Stage	Affect existing forested area						
	Generate excess excavation materials						
	Generate construction wastes and debris						
	Induce topsoil erosion/deposition						
	Pose human health and safety hazards						
	Require dump site for waste disposal						
	Impose additional demand for local services						
	Affect pedestrian/vehicular traffic flow						
	Create increased demand for aggregates						
	Create job opportunities/local hired labor						
Post-Construction & Operation Stage	Affect existing forested area						
	Reduce waste generation and disposal						
	Restore/improve scenic value of roadway						
	Control/regulate road inundation/flooding						
	Offer all-weather year-round access to area						
	Increase volume of traffic flow						
	Save travel time and vehicle operating cost						
	Reduce traffic accident and safety hazards						
	Provide support in increasing local economy						
	Promote/ support in peace development						

Note: + means potential beneficial impact

5.0 RECOMMENDED MITIGATION ACTIONS (MONITORING AND EVALUATION)

(Sample) **Environmental Management Plan (EMP) for Road Upgrading Project**

Impact Mitigation and Enhancement Measures	Primary Responsible Parties	Monitoring Indicator(s)	Monitoring Method	Monitoring Frequency	Monitoring Cost	Monitoring Responsibility
Implement good site and environmental management practices. - Protection of vegetation and sensitive habitats. - Preservation of environmental quality. - Conservation of natural resources.	Contractor	Percentage of total vegetation area cleared at task end	Visual inspection and record review	Middle and end of site clearing task	Low	GEM
		Frequency of pollution events arising from construction works.	Visual inspection and record review	Start, mid and end of construction	Low	GEM
		Frequency of aggregates delivery by legitimate suppliers.	Spot check of delivery receipts with Contractor	Start and during construction	Low	GEM
Implement good safety and traffic management practices. - Safety of workers and public from road accidents or injuries. - Prevention of damage or destruction of properties as a result of the Works.	Contractor	Workers supplied safety devices, gears and uniforms; traffic signs and signals installed.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM
		Workers provided bunkhouse, water supply and sanitary facilities.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM
		Workers protected from nuisance noise, dust and vibration.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM
		Pedestrian and motorist provided alternate access to construction area.	Visual inspection and record review	Daily to weekly until end of construction	Low	GEM LGU
Help strengthen local capability for enforcement and monitoring of environmental compliance.	GEM LGU	LGU provided information and orientation on post-construction monitoring of compliance with environmental responsibilities.	Environmental Compliance Monitoring Plan	Prior to turnover	Low	GEM USAID

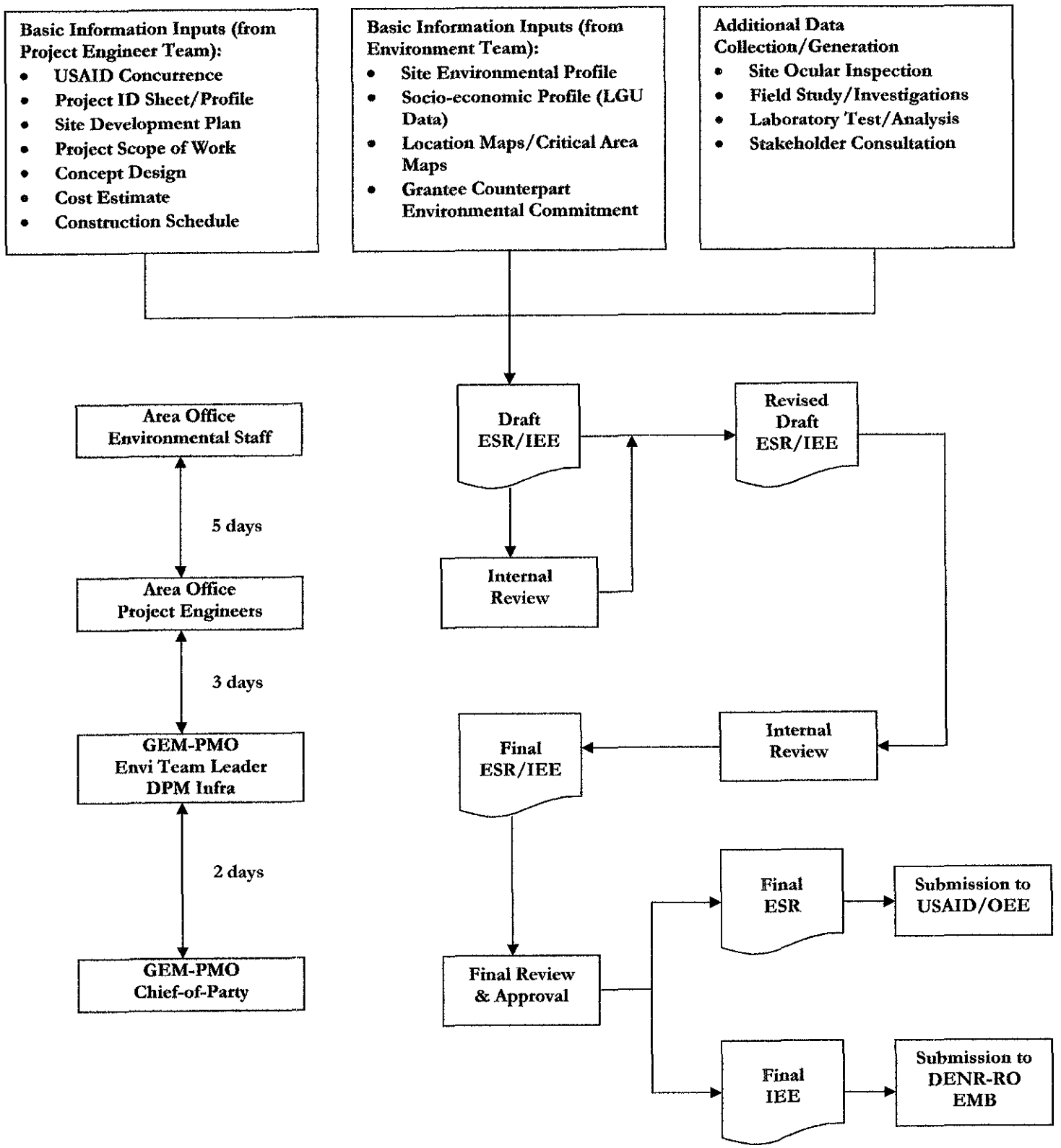
4.0 Other Information (as appropriate)

Where possible, include photos of the site and surroundings, topographic and/or forest cover maps; list the names of any reference materials or individuals consulted.

Annex 7

ESR/IEE Procedural Flow Diagram

Procedural Flow for ESR/IEE Report Preparation and Submission



Annex 8

STEP Content Outline

SAFETY, TRAFFIC & ENVIRONMENTAL PLAN (STEP)

Content Outline

1.0 INTRODUCTION

1.1 Project Activity Description
- 1.1.1 Scope of Work
- 1.1.2 Construction Schedule
- 1.1.3 Manpower Schedule
- 1.1.4 Equipment Schedule
- 1.1.5 Bill of Quantities
- 1.1.6 Structural Details

1.2 Project Site Environmental Plan
- 1.2.1 Work Zone
- 1.2.2 Service Facilities and Utilities
- 1.2.3 Off-site Areas of Concern

2.0 SAFETY, TRAFFIC & ENVIRONMENTAL PLAN

2.1 Contractor's Statement of Responsibility for Safety, Traffic and Environmental Compliance

2.2 Organizational Structure and Manpower for Safety, Traffic and Environmental Compliance
- 2.2.1 Safety Officer
- 2.2.2 Communication Lines]

2.3 Project Safety Plan
- 2.3.1 Safety Personnel
- 2.3.2 Safety Devices and Services
- 2.3.3 Safety Meetings and Reports
- 2.3.4 Safety Inspections and Actions
- 2.3.5 Safety Information and Training
- 2.3.6 Notification of Accidents

2.4 Traffic Control Plan
- 2.4.1 Traffic Management Personnel
- 2.4.2 Traffic Control Devices and Services
- 2.4.3 Traffic Coordination with LGU
- 2.4.4 Road Accident Prevention

2.5 Environmental Protection Plan
- 2.5.1 Environmental Protection Personnel
- 2.5.2 Quarry and Aggregate Extraction
- 2.5.3 Vegetation Removal/ Cutting
- 2.5.4 Construction Water Use
- 2.5.5 Air Pollution Prevention and Control
- 2.5.6 Water Pollution Prevention and Control
- 2.5.7 Noise and Vibration Control
- 2.5.8 Construction Waste Management

3.0 PLAN IMPLEMENTATION

3.1 Compliance Monitoring and Reporting

3.2 Billing and Payment for Compliance

Annex 9

ENVIRONMENTAL MONITORING FORMS FOR RIP AND BIP

GROWTH WITH EQUITY IN MINDANAO - 3 PROGRAM

ENVIRONMENTAL MONITORING FORM (RIP)

INSTRUCTIONS: The Field Inspector will accomplish the FORM daily. Indicate as Yor N the appropriate column to indicate level of compliance with the environmental management measures listed below If compliance could not be determined for a particular environmental management measure, marked the column as "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on Submit the accomplished and signed FORM to the Environment Task Group bi-monthly

PROJECT NAME: _____ **LOCATION:** _____

Period: _____ to _____

1. Safety Compliance

MPT Mitigation Measures	Method of Measuring Daily Compliance	Daily Rating of Compliance (per Calendar Day) - Check on a daily basis and indicate Y, N, or NA														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Safety Officer Present	Based on whether the Approved Safety Officer was Present on site															
Provision of Hard Hats	Based on whether the workers were all provided with hard hats - if indicated on the approved safety plan															
Provision of Safety Vests & Proper Flagging (Traffic Control Personnel)	Based whether the Traffic Control Personnel were equipped with proper safety vests and flagging															
Provision of Protective Footwear	Based on whether protective footwear was supplied if in the Contractor's Approved Safety Plan															
Excavations Barricaded	Based on whether the excavated areas were properly barricaded															
Provisions for Pedestrians	Based on whether proper provisions for pedestrians are provided thru the worksite (if and where required)															
Provision of First Aid Facility.	Based on whether an acceptable first aid facility is provided (per the specifications) or not															
Monthly Safety Meeting	Based on whether or not the Contractor held their monthly safety meeting (only indicate 0% or 100% in summary)															
Avoidance of accidents, by Implementing proper Safety Measures.	Based on whether there are any traffic accidents due to the Contractor's negligence in providing safety to the motorists Indicate N for all the preceeding days the cause of the accident existed															
Protection of Workers & Pedestrians from Traffic	Based on whether an acceptable method of shielding the workers and pedestrians from traffic has been provided															

2. Traffic Compliance

MPT Mitigation Measures	Method of Measuring Daily Compliance	Daily Rating of Compliance (per Calendar Day) - Check on a daily basis and indicate Y, N, or NA														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number of signs per Traffic Plan	Based on whether the number of traffic signs supplied meet the total number indicated on the Contractor's Traffic control Plan - OR as directed by the Engineer															
Number of misc traffic control Devices per Traffic Plan	Based on whether the number of traffic control devices supplied met the specifications vs the total number indicated on the Contractor's Traffic Control Plan OR as directed by the Engineer															
Maintenance and Replacement of Signs and Traffic Control Devices.	Based on whether the number of traffic signs and traffic control devices are properly maintained (cleaned, supplied with power, replaced etc)															
Provision od Traffic Directors/Flagmen	Based on whether the Traffic required Directors were actually present and performing their work properly															
Provision of Lighting/Flashing Warning Lights for Nightime Operations	Based on whether the Construction Lighting (for night work) and Flashing Warning lights were present															
Construction Materials NOT Restricting Traffic Lanes	Based on the whether excess materials and debris DID NOT encroach on the traffic lanes															
Proper Maintenance of Temporary Roads	Based on the number of days the Temporary Roads are properly maintained															
Reasonable Traffic due to the provision of proper Traffic Control measures	Based on whether traffic was NOT excessive due to the Contractor's disregard for these traffic control devices															

3. Environmental Compliance

MPT Mitigation Measures	Method of Measuring Daily Compliance	Daily Rating of Compliance (per Calendar Day) - Check on a daily basis and indicate Y, N, or NA														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Trees ang vegetation are maintained and protected within allocated project area	Based on whether the trees/vegetation are properly maintained & protected and whether any damages are promptly made good A site vegetation map should be prepared at the onset of the work for monitoring															
Mangrove, coral, seaweed and marine life within and adjacent to site is protected	Based on whether the sensitive areas are properly protected and not damaged															
The shoreline and seabed within and adjacent to site is protected	Based on the whether the sensitive area is properly protected and not damamged															
The river and tidal flows are not affected by the works within and adjacent to sites	Based on whether the river and tidal flows were unnecessarily restricted															
Existing important structures are preserved or protected within allocated project area	Based on whether the important structures were properly preserved & protected															
Exposed topsoil and excavated areas are properly covered too minimize erosion	Based on whether the topsoil and excavated areas were covered (in excess of reasonable construction time)															
Surface drainage flow unobstructed by construction activities	Based on the whether the surface water was obstructed and free-draining (or collectected and dewatered)															
Dust Control such as water spraying is being performed	Based on whether the open excavation and especially the travelway has been adequately sprayed to control dust on the non-rainy days Indicate N/A for rainy days															
Proper noise and vibration control	Based on whether Reasonable Noise and Vibration Control measures (ie mufflers for heavy equipment etc) were in place															
Construction aggregate, materials and supplies are transported and stored properly.	Based on whether the materials and supplies are transported and stored properly															
Excess construction materials, debris, waste and refuse are sotred or disposed of properly and safely	Based on whether the excess materials and debris is properly stored or disposed off															
Construction materials not encroaching on (road and / or marine) traffic and posing a hazard to motorists	Based on whether the construction materials, equipment or debris are obstructing traffic															
Designated disposal area or dumpsite is operated onsite	Based on the whether there is an approved designated dumpsite (per SEP) being used															
Burning of waste is avoided or prevented	Based on whether there were ANY occurrences.															
Waste management unit or responsible person is designated to perform onsite	Based on the whether there is a responsible person or unit designated and actually on site															

Prepared by:	Concurred By:	Certified By:	Received By:
Field Engineer (GEM) / Date	Contractor Representative / Date	Contractor Representative / Date	GEM Envi Staff / Date

GEM

GROWTH WITH EQUITY IN MINDANAO-3 PROGRAM

ENVIRONMENTAL MONITORING FORM (BIP)
(Warehouse & Solar Dryer Construction)

Instruction: The Field Inspector will accomplish the FORM at least every week or as often he/she issues the Site Order Book (Form No.F-10) to the contractor. Tick off the appropriate column to indicate level of compliance with the specific environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, tick the Column marked "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Submit the accomplished and signed FORM to the Environment Task Group immediately.

PROJECT TITLE	Concurrence No.	NAME AREA CONSTRUCTION ENGINEER (GEM)	SIGNATURE	DATE
PROJECT LOCATION		NAME OF FIELD INSPECTOR (GEM)	SIGNATURE	DATE
CONSTRUCTION PERIOD	Date Started	NAME OF COUNTERPART STAFF (CONTRACTOR)	SIGNATURE	DATE
	Date Completed			

Environmental Mitigation Measures	Compliance			Additional Information/ Remarks
	Yes	No	NA	
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.				
1.1 Trees and vegetation maintained and protected within allocated project area				
1.2 Existing important structures preserved or protected within allocated project area				
1.3 Exposed topsoil and excavated areas properly covered to minimize erosion				
1.4 Surface drainage flow unobstructed by construction activities				
1 5 Onsite erosion or flooding incidents avoided or prevented by proper implementation				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.				
2.1 Living accommodation for workers adequate				
2.2 Safe water supply and toilet facilities provided.				
2.3 Protective clothing, footwear, gears, and safety devices provided/used, as needed.				
2.3 Nuisance noise, dust and vibrations are minimized; public annoyance is avoided.				
2.4 First-aid, emergency response and contingency measures available				
3.0 SITE WASTE MANAGEMENT : Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils, chemicals, etc)				
3.1 Suitable container provided for type of waste being generated				
3.2 Sufficient number of containers provided for type of wastes being collected				
3.3 Adequate size of containers provided for type of wastes being handled				
3.4 Waste containers located at designated area for intended use				
3.5 Waste storage facility provided onsite, as needed				
3.6 Waste segregation practiced onsite				
3.7 Waste recovery/recycle/reuse practiced onsite				
3.8 Burning of non-biodegradable wastes avoided				
3.9 Designated disposal area or dumpsite operated onsite				
3.10 Waste management unit or responsible person present				
4.0 SITE TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.				
4.1 Set-up detour or alternate route to facilitate safe access to or through project area				
4.2 Inform public of road safety and security related to traffic or near project area				

GROWTH WITH EQUITY IN MINDANAO-3 PROGRAM

MF-WS No. 1

ENVIRONMENTAL MONITORING FORM (BIP)
(Water System Subprojects)

Instruction: The Field Inspector will accomplish the FORM at least every week or as often he/she issues the Site Order Book (Form No.F-10) to the contractor. Tick off the appropriate column to indicate level of compliance with the specific environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, tick the Column marked "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Submit the accomplished and signed FORM to the Environment Task Group immediately.

PROJECT TITLE	Concurrence No.	NAME AREA CONSTRUCTION ENGINEER (GEM)	SIGNATURE	DATE
PROJECT LOCATION		NAME OF FIELD INSPECTOR (GEM)	SIGNATURE	DATE
CONSTRUCTION PERIOD	Date Started	NAME OF COUNTERPART STAFF (CONTRACTOR)	SIGNATURE	DATE
	Date Completed			

Environmental Mitigation Measures	Compliance			Additional Information/ Remarks
	Yes	No	NA	
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.				
1.1 Trees and vegetation are maintained and protected within allocated project area.				
1.2 Existing important structures are preserved or protected within allocated project area.				
1.3 Exposed topsoil and excavated areas are properly covered to minimize erosion.				
1.4 Surface drainage flow unobstructed by construction activities.				
1.5 Public is informed (through signage and/or written/ verbal notification) of restricted access to construction site.				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.				
2.1 Living accommodation for construction workers is adequately provided, if required.				
2.2 Safe water supply and toilet facilities at construction site or campsite are adequately provided.				
2.3 Protective clothing, footwear, gears, and safety devices are adequately provided, as needed.				
2.3 Nuisance noise, gaseous emissions and vibrations are avoided, prevented or minimized.				
2.4 First-aid measures are readily available and adequately provided.				
2.5 Contingency measures for fire, explosion or other emergency situation onsite are adequately provided.				
3.0 SITE WASTE MANAGEMENT : Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils, chemicals, etc)				
3.1 Construction aggregate, materials and supplies are transported and stored properly.				
3.2 Excess construction materials, debris, waste and refuse are stored or disposed of properly and safely.				
3.3 Adequate size of containers provided for type of wastes being handled				
3.4 Construction materials not posing hazard to motorists.				
3.5 Designated disposal area or dumpsite is operated onsite.				
3.6 Waste recovery/recycle/reuse is practiced onsite.				
3.7 Burning of non-biodegradable wastes is avoided or prevented.				
3.8 Waste management unit or person is designated to perform onsite.				
4.0 SITE TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.				
4.1 Detour or alternate route is set-up to facilitate safe access to or through project site..				
4.2 Inform public of road safety and security related to traffic or near project area.				
4.3 Proper warning and signal devices are installed at or near construction site, particularly at night.				

GEM

GROWTH WITH EQUITY IN MINDANAO-3 PROGRAM

MF-RR No. 1

ENVIRONMENTAL MONITORING FORM (BIP)
(Road Rehabilitation/ Upgrading Subprojects)

Instruction: The Field Inspector will accomplish the FORM at least every week or as often he/she issues the Site Order Book (Form No.F-10) to the contractor. Tick off the appropriate column to indicate level of compliance with the specific environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, tick the Column marked "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Submit the accomplished and signed FORM to the Environment Task Group immediately.

PROJECT TITLE	Concurrence No.	NAME AREA CONSTRUCTION ENGINEER (GEM)	SIGNATURE	DATE
PROJECT LOCATION		NAME OF FIELD INSPECTOR (GEM)	SIGNATURE	DATE
CONSTRUCTION PERIOD	Date Started Date Completed	NAME OF COUNTERPART STAFF (CONTRACTOR)	SIGNATURE	DATE

Environmental Mitigation Measures	Compliance			Additional Information/ Remarks
	Yes	No	NA	
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.				
1.1 Trees and vegetation are maintained and protected within allocated project area.				
1.2 Existing important structures are preserved or protected within allocated project area.				
1.3 Exposed topsoil and excavated areas are properly covered to minimize erosion.				
1.4 Surface drainage flow unobstructed by construction activities.				
1.5 Public is informed (through signage and/or written/ verbal notification) of restricted access to construction site.				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.				
2.1 Living accommodation for construction workers is adequately provided, if required.				
2.2 Safe water supply and toilet facilities at construction site or campsite are adequately provided.				
2.3 Protective clothing, footwear, gears, and safety devices are adequately provided, as needed.				
2.3 Nuisance noise, gaseous emissions and vibrations are avoided, prevented or minimized.				
2.4 First-aid measures are readily available and adequately provided.				
2.5 Contingency measures for fire, explosion or other emergency situation onsite are adequately provided.				
3.0 SITE WASTE MANAGEMENT : Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils, chemicals, etc)				
3.1 Construction aggregate, materials and supplies are transported and stored properly.				
3.2 Excess construction materials, debris, waste and refuse are stored or disposed of properly and safely.				
3.3 Adequate size of containers provided for type of wastes being handled				
3.4 Construction materials not posing hazard to motorists.				
3.5 Designated disposal area or dumpsite is operated onsite.				
3.6 Waste recovery/recycle/reuse is practiced onsite.				
3.7 Burning of non-biodegradable wastes is avoided or prevented.				
3.8 Waste management unit or person is designated to perform onsite.				
4.0 SITE TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.				
4.1 Detour or alternate route is set-up to facilitate safe access to or through project site..				
4.2 Inform public of road safety and security related to traffic or near project area.				
4.3 Proper warning and signal devices are installed at or near construction site, particularly at night				

GROWTH WITH EQUITY IN MINDANAO-3 PROGRAM

ENVIRONMENTAL MONITORING FORM (BIP)
(Community Center/ Small Buildings)

Instruction: The Field Inspector will accomplish the FORM at least every week or as often he/she issues the Site Order Book (Form No.F-10) to the contractor. Tick off the appropriate column to indicate level of compliance with the specific environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, tick the Column marked "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Submit the accomplished and signed FORM to the Environment Task Group immediately.

PROJECT TITLE	Concurrence No.	NAME AREA CONSTRUCTION ENGINEER (GEM)	SIGNATURE	DATE
PROJECT LOCATION		NAME OF FIELD INSPECTOR (GEM)	SIGNATURE	DATE
CONSTRUCTION PERIOD	Date Started	NAME OF COUNTERPART STAFF (CONTRACTOR)	SIGNATURE	DATE
	Date Completed			

Environmental Mitigation Measures	Compliance			Additional Information/ Remarks
	Yes	No	NA	
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.				
1.1 Trees and vegetation maintained and protected within allocated project area				
1.2 Existing important structures preserved or protected within allocated project area				
1.3 Exposed topsoil and excavated areas properly covered to minimize erosion				
1.4 Surface drainage flow unobstructed by construction activities				
1.5 Onsite erosion or flooding incidents avoided or prevented by proper implementation				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.				
2.1 Living accommodation for workers adequate				
2.2 Safe water supply and toilet facilities provided.				
2.3 Protective clothing, footwear, gears, and safety devices provided/used, as needed.				
2.3 Nuisance noise, dust and vibrations are minimized; public annoyance is avoided.				
2.4 First-aid, emergency response and contingency measures available				
3.0 GOOD WASTE MANAGEMENT PRACTICES: Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils,chemicals, etc)				
3.1 Suitable container provided for type of waste being generated				
3.2 Sufficient number of containers provided for type of wastes being collected				
3.3 Adequate size of containers provided for type of wastes being handled				
3.4 Waste containers located at designated area for intended use				
3.5 Waste storage facility provided onsite, as needed				
3.6 Waste segregation practiced onsite				
3.7 Waste recovery/recycle/reuse practiced onsite				
3.8 Burning of non-biodegradable wastes avoided				
3.9 Designated disposal area or dumpsite operated onsite				
3.10 Waste management unit or responsible person present				
4.0 TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.				
4.1 Set-up detour or alternate route to facilitate safe access to or through project area				
4.2 Inform public of road safety and security related to traffic or near project area				

ENVIRONMENTAL MONITORING FORM (BIP)
(Bridge/Culverts/Footbridge Subprojects)

Instruction: The Field Inspector will accomplish the FORM at least every week or as often he/she issues the Site Order Book (Form No.F-10) to the contractor. Tick off the appropriate column to indicate level of compliance with the specific environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, tick the Column marked "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Submit the accomplished and signed FORM to the Environment Task Group immediately.

PROJECT TITLE	Concurrence No.	NAME AREA CONSTRUCTION ENGINEER (GEM)	SIGNATURE	DATE
PROJECT LOCATION		NAME OF FIELD INSPECTOR (GEM)	SIGNATURE	DATE
CONSTRUCTION PERIOD	Date Started	NAME OF COUNTERPART STAFF (CONTRACTOR)	SIGNATURE	DATE
	Date Completed			

Environmental Mitigation Measures	Compliance			Additional Information/ Remarks
	Yes	No	NA	
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.				
1.1 Trees and vegetation are maintained and protected within allocated project area.				
1.2 Existing important structures are preserved or protected within allocated project area.				
1.3 Exposed topsoil and excavated areas are properly covered to minimize erosion.				
1.4 Surface drainage flow unobstructed by construction activities.				
1.5 Public is informed (through signage) of restricted access to construction site.				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.				
2.1 Living accommodation for construction workers is adequately provided, if required.				
2.2 Safe water supply and toilet facilities at construction site or campsite are adequately provided.				
2.3 Protective clothing, footwear, gears, and safety devices are adequately provided, as needed.				
2.3 Nuisance noise, gaseous emissions and vibrations are avoided, prevented or minimized.				
2.4 First-aid measures are readily available and adequately provided.				
2.5 Contingency measures for fire, explosion or other emergency situation onsite are adequately provided.				
3.0 SITE WASTE MANAGEMENT : Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils, chemicals, etc)				
3.1 Construction aggregate, materials and supplies are transported and stored properly.				
3.2 Excess construction materials, debris, waste and refuse are stored or disposed of properly and safely.				
3.3 Adequate size of containers provided for type of wastes being handled				
3.4 Construction materials not posing hazard to motorists.				
3.5 Designated disposal area or dumpsite is operated onsite.				
3.6 Waste recovery/recycle/reuse is practiced onsite.				
3.7 Burning of non-biodegradable wastes is avoided or prevented.				
3.8 Waste management unit or person is designated to perform onsite.				
4.0 SITE TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.				
4.1 Detour or alternate route is set-up to facilitate safe access to or through project site.				
4.2 Inform public of road safety and security related to traffic or near project area.				
4.3 Proper warning and signal devices are installed at or near construction site, particularly at night.				

GEM

GROWTH WITH EQUITY IN MINDANAO-3 PROGRAM

MF-PT No. 1

ENVIRONMENTAL MONITORING FORM (BIP)
(Boatlanding/ Small Port Subprojects)

Instruction: The Field Inspector will accomplish the FORM at least every week or as often he/she issues the Site Order Book (Form No.F-10) to the contractor. Tick off the appropriate column to indicate level of compliance with the specific environmental management measures listed below. If compliance could not be determined for a particular environmental management measure, tick the Column marked "NA" or Not Applicable. Give additional information or remarks, if any. Use the back page of this FORM for additional space to write on. Submit the accomplished and signed FORM to the Environment Task Group immediately.

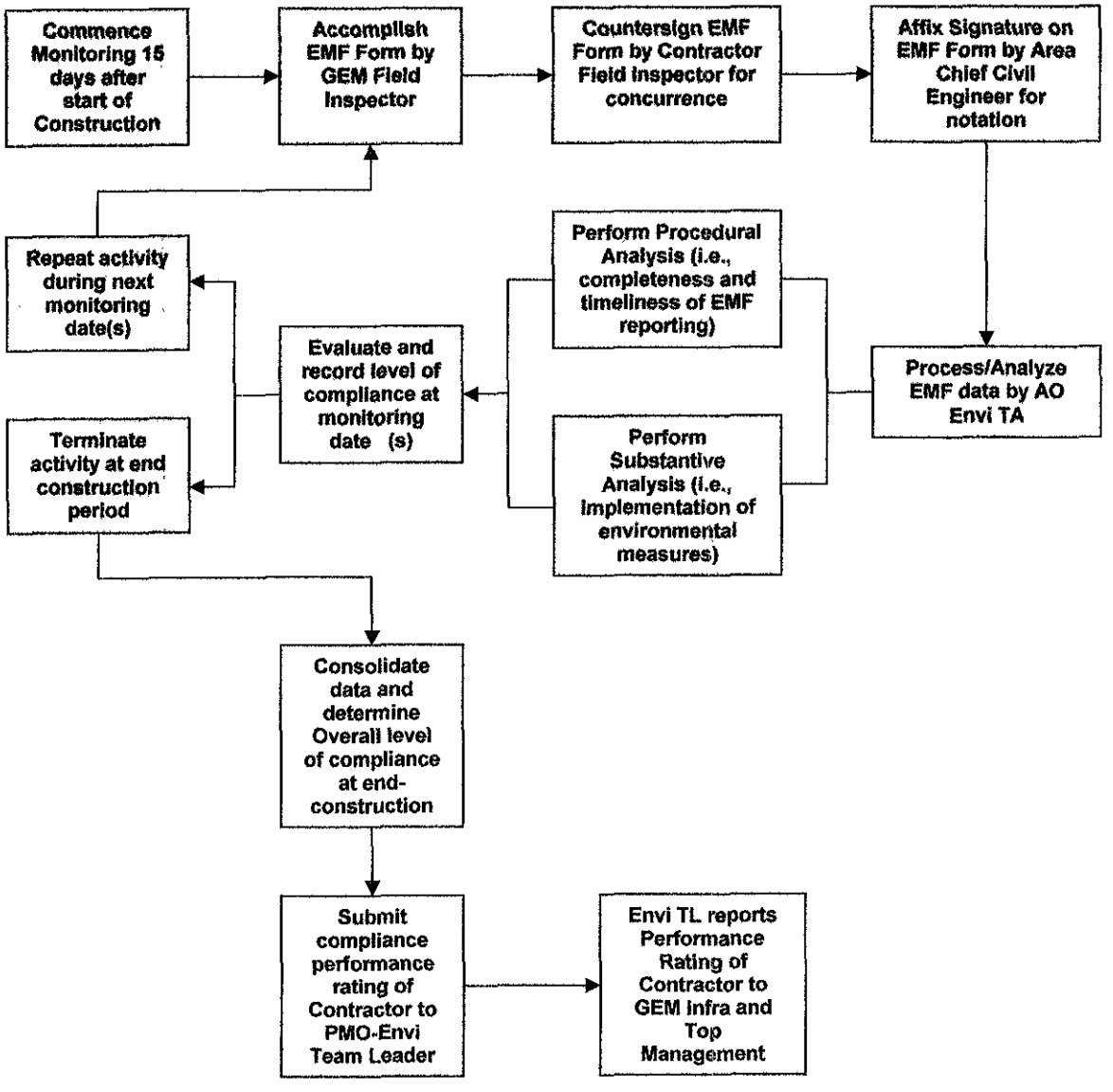
PROJECT TITLE	Concurrence No.	NAME AREA CONSTRUCTION ENGINEER (GEM)	SIGNATURE	DATE
PROJECT LOCATION		NAME OF FIELD INSPECTOR (GEM)	SIGNATURE	DATE
CONSTRUCTION PERIOD	Date Started	NAME OF COUNTERPART STAFF (CONTRACTOR)	SIGNATURE	DATE
	Date Completed			

Environmental Mitigation Measures	Compliance			Additional Information/ Remarks
	Yes	No	NA	
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.				
1.1 Mangrove, corals, seaweeds, and other marine life at or near construction area are protected.				
1.2 Permanent structures, utilities and facilities at or near construction area are protected.				
1.3 Damage or destruction of sea/riverbed or shoreline at or near construction area is avoided or prevented.				
1.4 Obstruction to current and tidal flow at or near construction area is avoided or prevented.				
1.5 Public is informed (through signage and/or verbal/ written notification) of restricted access to construction site.				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.				
2.1 Living accommodation for construction workers is adequately provided, if required.				
2.2 Safe water supply and toilet facilities at construction site or campsite are adequately provided.				
2.3 Protective clothing, footwear, gears, and safety devices are adequately provided, as needed.				
2.3 Nuisance noise, gaseous emissions and vibrations are avoided, prevented or minimized.				
2.4 First-aid measures are readily available and adequately provided.				
2.5 Contingency measures for fire, explosion or other emergency situation onsite are adequately provided.				
3.0 SITE WASTE MANAGEMENT : Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils, chemicals, etc)				
3.1 Construction aggregate, materials and supplies are transported and stored properly.				
3.2 Excess construction materials, debris, waste and refuse are stored or disposed of properly and safely.				
3.3 No Construction materials or wastes were left floating or submerged at or near construction area.				
3.4 Construction equipment or machine did not pose hazard to boats and sea crafts.				
3.5 Designated disposal area or dumpsite is operated onsite.				
3.6 Waste recovery/recycle/reuse is practiced onsite.				
3.7 Burning of non-biodegradable wastes is avoided or prevented.				
3.8 Waste management unit or person is designated to perform onsite.				
4.0 SITE TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.				
4.1 Detour or alternate route is set-up to facilitate safe access to or through project site..				
4.2 Inform public of road safety and security related to traffic or near project area.				
4.3 Proper warning and signal devices are installed at or near construction site, particularly at night.				

Annex 10

Environmental Compliance Monitoring Schematic Flow Diagram

Construction-Phase Environmental Compliance Monitoring and Reporting

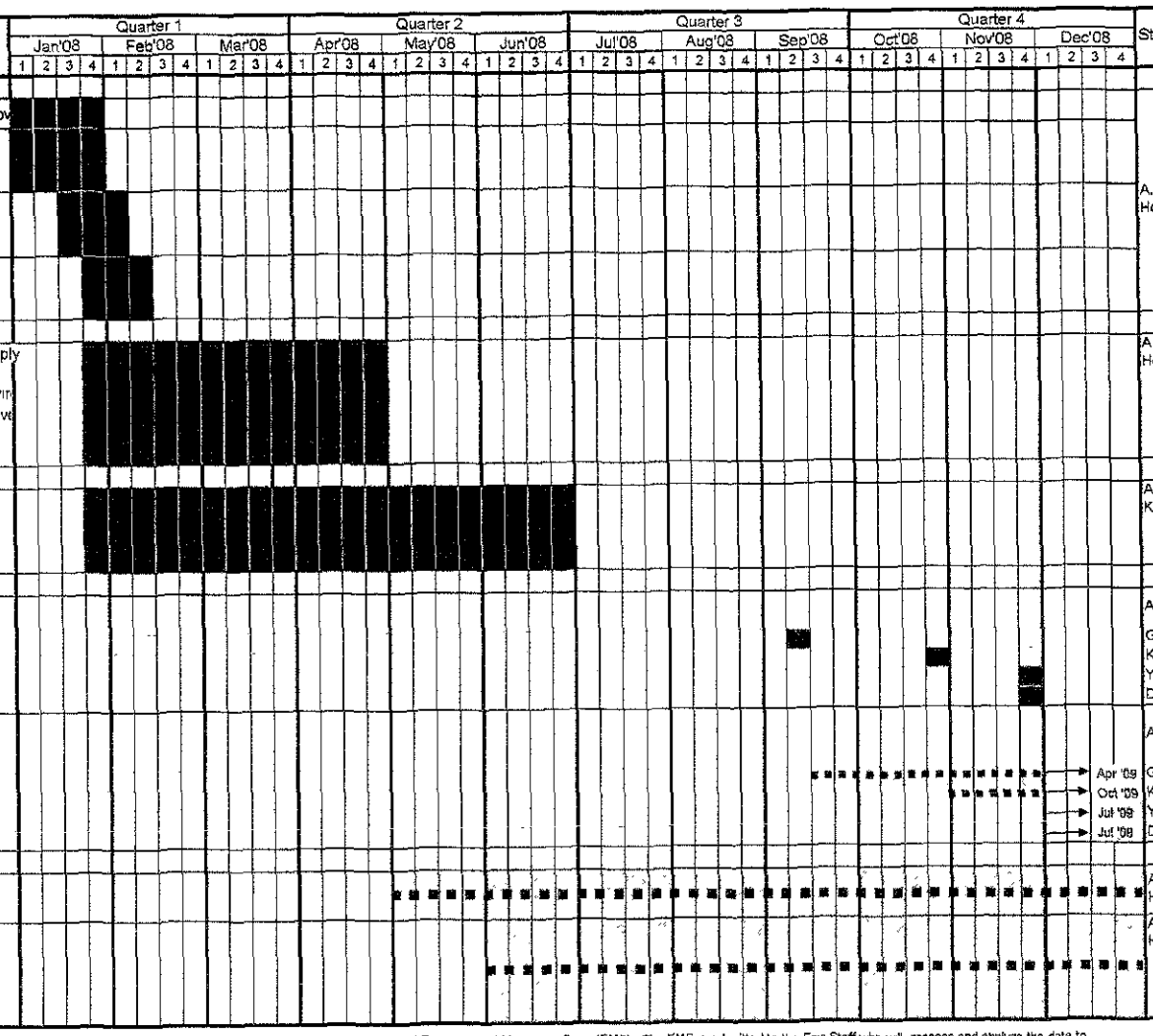


Annex 11

ENVIRONMENTAL WORK PLAN

GEM-3 First Year Work Plan: Infra-Environment

TARGETS AND TASKS	Staffing Required to Meet Targets
1.0 Environmental Workplan, Procedural Guidelines and Standards	
1.1 Prepare and submit GEM-3 Environmental Workplan for USAID Approv	
1 2 Standardize Environmental Procedures, Tools and Instruments, Reporting and Documentation Forms for GEM-3 Infrastructure Program to conform to USAID and DENR Environmental Guidelines.	A.Andaya (Lead), G Dizon, Y Honrade, K.Dequito and D Tingkahan
1 3 Apply for Extension of Effectivity Date of the EIS Categorical Exemption for the GEM-2 Infrastructure Projects issued by the DENR-EMB to cover the 5-year GEM-3 Infrastructure Program.	
1 4 Request USAID Concurrence/Approval for the Adoption of the the GEM-2 Umbrella IEE Environmental Procedures and Requirements and use in the 5-year GEM-3 Infra Program	
2.0 Environmental Screening Review and Approval (4 RIPs)	
2.1 Prepare and Submit ESR & IEE for 4 RIPs Jolo Mainland Water Supply Improvement, Jolo Airport Runway Ugrading, Bongao Airport Runway Upgrading & Tawi-tawi Bridge/Road Improvement Subprojects for Envir mental Clearance/ Approval by USAID & DENR-EMB ARMM, respective Report and Communicate Monthly Environmental Clearance Performance to Infra Units Concerned	A Andaya (Lead), G Dizon, Y Honrade, K.Dequito and D Tingkahan
3.0 Environmental Screening Review and Approval (50 BIPs)	
3 1 Prepare and Submit ESR/IEE for Concurred BIPs to secure Environmental Clearance Certification from USAID/DENR, Report and Communicate Monthly Environmental Clearance Performance to Infra Units Concerned	A Andaya (lead); G Dizon, Y Honrade, K Dequito and D Tingkahan
4.0 Construction-Phase Environmental Monitoring (4 RIPs)	
4.1 Pre-Construction Conference/STEP Preparation Workshop and and Facilitation Assistance Meetings with Contractors for the ff RIPs: a Jolo Mainland Water Supply Improvement Project b Tawi-tawi Bridge/ Road Improvement Project c. Bongao Airport Runway Upgrading Project c. Jolo Airport Upgrading Project	A Andaya (Lead) G Dizon (Technical Support) K. Dequito (Technical Support) Y. Honrade (Technical Support) D Tingkahan (Technical Support)
4 2 Construction Site Environmental Monitoring and Reporting of Compliance Performance by Contractors in coordination with the GEM Construction Team, for the following RIPs a Jolo Mainland Water Supply Improvement Project b Tawi-tawi Bridge/ Road Improvement Project c Bongao (Sanga-sanga) Airport Runway Upgrading Project c Jolo Airport Runway Upgrading Project	A Andaya (Lead) G Dizon (Technical Support) K Dequito (Technical Support) Y Honrade (Technical Support) D Tingkahan (Technical Support)
5.0 Construction-Phase Environmental Monitoring (50 BIPs)	
5 1 Pre-Construction Conference/Environmental Plan Preparation Workshop and Facilitation Assistance Meetings with Contractors	A Andaya (Lead), G Dizon, Y Honrade, K Dequito and D Tingkahan
5 2 Construction Site Environmental Monitoring and Reporting of Compliance Performance by Contractors in coordination with the GEM Construction Team Assigned to particular BIP Project, including capacity building in environmental monitoring process, procedures and requirements	A Andaya (Lead), G Dizon, Y. Honrade K Dequito and D Tingkahan



GEM Field Inspectors perform the actual site inspection, recording and reporting of environmental compliance by Contractor by accomplishing the prescribed Environmental Monitoring Form (EMF) The EMF is submitted to the Env Staff who will process and analyze the data to determine the level of compliance with the environmental performance parameters then prepares the appropriate monthly environmental compliance report which is disseminated to GEM & Contractor's Construction Management Team

■ ■ ■ ■ Environmental Staff performs independent validation of Environmental Monitoring Results & Compliance on site on scheduled dates during the construction period

Annex 12

SAMPLE ESR PERFORMANCE REPORT

MONTHLY ENVIRONMENTAL CLEARANCE PERFORMANCE REPORT
Infrastructure - Environment Unit

I. ESR Preparation and USAID Approval Update

As of :	January 11, 2008	
ESR Procedural Activities	Total Count	Central Mindanao	Western Mindanao
A. ESR in Preparation by GEM (BIP & RIP)	0	0	0
B. ESR under USAID Review	1	1	0
C. ESR with USAID Approval	2	2	0
Total Count	**3**	**3**	**0**

II. Environmental Clearance Issuance Update

As of:	January 11, 2008	
Environmental Review & Approval	**BIP**	**RIP**
A. Submitted to USAID for Environmental Clearance		
B. Approved Environmental Clearance by DENR		
C. Approved Environmental Clearance by USAID		

PERIODIC PERFORMANCE REPORT ON ENVIRONMENTAL CLEARANCE FOR BIPs & RIPs

As of the date

Project Name/Title	Concur. No.	Location		ESR Preparation and Documentation			
		Central Mindanao	Western Mindanao	DRAFT ESR (AO)	Final Draft ESR (PMO)	Status	Remarks
A. ESR in Preparation							
BIP							
RIP							
B. ESR under USAID Review							
BIP							
RIP							
C. ESR with USAID Approval							
BIP							
RIP							

LEGEND: **Status/Stages of Engineering Activities**

- Under Review by DPM **(URD)**
- Verification and Studies Stage **(VSS)**
- Design/Packaging Stage **(DPS)**
- Bidding and Bid Evaluation Stage **(BBES)**
- Contract Award and Pre-construction Stage **(CAPS)**

Annex 13

Sample Environmental Compliance Monitoring Report

Sample Report

GROWTH WITH EQUITY IN MINDANAO 3 (GEM 3) PROGRAM
A Project of the United States Agency for International Development
THE LOUIS BERGER GROUP, Inc.

USAID
FROM THE AMERICAN PEOPLE

SAFETY, TRAFFIC, AND ENVIRONMENTAL PROTECTION COMPLIANCE MONITORING SUMMARY REPORT

(As of the date)

Total Number of Projects: 5

Part A. STEP Performance/Parameter Implementation*

Rating Scale		Frequency Distribution	
		Actual Count	Percentage (%)
Safety	Excellent	2	40
	Good	1	20
		2	40
Traffic	Excellent	1	20
	Good	1	20
		3	60
Environmental Protection	Excellent	3	60
	Good	1	20
		1	20

Part B. Overall Project Performance in STEP Plan Implementation**

Rating Scale		Frequency Distribution	
		Actual Count	Percentage (%)
Excellent	Excellent (97-100%)	45	50
Good	Good (>85%)	22	24
	Poor (<85%)	23	26
Total		**90**	**100**

** Refer to the attached worksheets for the details*

Sample Tally

Environmental Compliance Monitoring Sheet (RIP)

(as of the date)

GEM	EMB STEP MONTHLY PERFORMANCE RATING																						FREQUENCY COUNT									PERFORMANCE RATING						Issues/ Remarks	Action Taken
Project Name	2007																						TOTAL			Per Parameter									AVERAGE			RATING				
	Jan-07			Feb-07			Mar-07			Apr-07			May-07			Jun-07			Jul-07			Aug-07						Safety (S)			Traffic (T)			Envi Prot. (EP)								
	S	T	EP	S	T	EP	S	T	EP	S	T	EP	S	T	EP	S	T	EP	S	T	EP	S	T	EP	Excellent (E)			E			E			E			SAFETY	TRAFFIC	ENVI	S	T	EP		
CENTRAL MINDANAO																																									
1 Celsada Bridge																74	36	100	100	100	100	94	100	100	6	1	2	1	1	1	2		1	3			89	79	100	G		E		Completed
																		E	E	E	E	G	E	E																		
2 Bumbaran Road	82	90	93	93	100	95	88	100	93	89	100	93	76	79	95	78	60	95	75	60	95				3	15	9		3	6	3	3	3		9		79	85	94		G	G		Completed
		G	G	G	E	G	G	E	G	G	E	G			G			G			G																					
3 Cotabato Comm Center							100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	18			6			6			6			100	100	100	E	E	E		Completed
							E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E																			
WESTERN MINDANAO																																									
4 Maluso Port Improvement	100	100	100	100	100	100	100	100	100	100	100	100													16		2	6			4		2	6			100	67	100	E		E		Completed
	E	E	E	E	E	E	E	E	E	E	E	E																														
5 Bongao Water Supply							19	35	84	70	88	75	75	74	80	77	98	92	74	86	80	100	100	92	2	6	10	1		5	1	3	2		3	3	69	80	84					Completed
									G		G						G	G		G		E	E	G																		
																						Total			45	22	23	14	4	12	16	6	8	15	12	3	87	82	96	G		G		

* STEP – Safety, Traffic and Enviornmental Protection

Sample Monthly Reporting Format

GROWTH WITH EQUITY IN MINDANAO 3 (GEM 3) PROGRAM
A Project of the United States Agency for International Development
THE LOUIS BERGER GROUP, Inc.

USAID
FROM THE AMERICAN PEOPLE

ENVIRONMENTAL COMPLIANCE MONITORING SUMMARY REPORT
(As of the date)

Total Number of Projects: _____

Completed Projects: _____ or _____ %

On-going Projects: _____ or _____ %

Suspended Projects: _____ or _____ %

Part A. Environmental Monitoring Report Submission Performance Review & Analysis*

Rating Scale		Project Frequency Distribution	
		Actual Count	Percentage (%)
C	Compliant (100%)	0	
NC	Non-Compliant (<100%)	0	
Total		**0**	**0**

Part B. Contractor's Environmental Compliance Performance Review & Analysis*

Rating Scale		Project Frequency Distribution	
		Actual Count	Percentage (%)
Excellent	Excellent (97-100%)	0	
Good	Good (>85%)	0	
	Poor (<85%)	0	
Total		**0**	**0**

** Refer to the attached worksheets for the details*

Sample Tally Sheet

Part A. Environmental Monitoring Report Submission Performance Review & Analysis

NORTHERN AND EASTERN MINDANAO

TOTAL NO. OF PROJECTS:
COMPLETED: or
ON-GOING CONSTRUCTION: or
SUSPENDED PROJECTS: or

Concur No.	CIP No.	PROJECT TITLE	LOCATION	MONITORING PERIOD																		EMF RESULTS ANALYSIS				COMPLIANCE PERFORMANCE	
				Wk 01	Wk 02	Wk 03	Wk 04	Wk 05	Wk 06	Wk 07	Wk 08	Wk 09	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16	Wk 17	Wk 18	Wk 19	Wk 20	Submitted (x)	Non Submitted (o)	Suspended (s)	Completed (c)	Submission (%)	Rating
Grains Warehouse and Solar Dryer (GWSD)																											
Seaweeds Warehouse and Solar Dryer (SWSD)																											
Footbridges and Public Waiting Sheds (FB and PWS)																											
Irrigation, Drainage, and Reinforced Concrete Pipe Culverts and Box Culverts (DR)																											
Roads and Bridges (RD)																											
Water Supply (WS)																											

Legend:

- X - EMF Submitted
- O - EMF Not Submitted
- S - Project Suspended
- C - Project Completed
- FS - Full Submission
- PH - Partial High Submission
- PL - Partial Low Submission
- NS - No Submission

Sample Tally Sheet

Part B. Contractor's Environmental Compliance

Performance Review & Analysis

NORTHERN AND EASTERN MINDANAO

Community Infrastructure Projects (CIP)	Actual Count	%
Excellent		
Good		
[redacted]		
Total/No. of Projects	0	######

No.	Concurrence Number	CIP Number	Project Name/Title	Project Type	Name of Contractor	Compliance Percentage		Performance Rating	Remarks (Environmental Concerns)	Actions Taken
						% Y	% N			
Community Infrastructure Projects (CIP)										
Grains Warehouse and Solar Dryer (GWSD)										
1										
Seaweeds Warehouse and Solar Dryer (SWSD)										
1										
Footbridges and Passenger Waiting Sheds (FBPWS)										
1										
Community Center and Trading Center (CTC)										
1										
Boat Landings (BL)										
1										
Irrigation, Drainage, and Reinforced Concrete Pipe Culverts and Box Culverts (DR)										
1										
Roads and Bridges (RD)										
1										
Water Supply (WS)										
1										
				Average						

Sample EMF per Project Tallying Sheet

Project Title/Name:
Location:
Concurrence No.:
CIP No.:
NTP Issue Date:
Start Date:
Proposed Completion Date:
No. of Monitoring Weeks:
Name of Inspector: **Name of Contractor:**

Monitoring Categories	Reply Tally/ Dates of Submission	Total		Percentage		Remarks	Actions Taken
		Yes	No	Yes	No		
1.0 SITE ENVIRONMENTAL MANAGEMENT: Promote environmental protection and general cleanliness and orderliness at construction area and surroundings.							
1.1 Trees and vegetation are maintained and protected within allocated project area.		0	0				
1.2 Existing important structures are preserved or protected within allocated project area.		0	0				
1.3 Exposed topsoil and excavated areas are prpoerly covered to minimize erosion		0	0				
1.4 Surface drainage flow unobstructed by construction activities.		0	0				
1.5 Public is informed (through signage and/or wirtten/verbal notification) of restricted access to construction site.		0	0				
2.0 SITE HAZARD AND HEALTH AND SAFETY MANAGEMENT: Promote health of workers and nearby residents and ensure safety from risks of accidents and injuries at or near construction area.							
2.1 Living accomodation for construction workers is adequately provided, if required.		0	0				
2.2 Safe water supply and toilet facilities at construction site or campsite are adequately provided		0	0				
2.3 Protective clothing, footwear, gears, and safety devices are adequately provided, as needed.		0	0				
2.4 Nuisance noise, gaseous emissions and vibrations are avoided, prevented or minimized		0	0				
2.5 First-aid measures for fire, explosion or other emergency situation onsite are adequately provided.		0	0				
2.6 Contingency measures for fire, explosion or other emergency situation onsite are adequately provided.		0	0				
3.0 SITE WASTE MANAGEMENT : Implement good practices in collection, storage and disposal of construction wastes (garbage, debris, discarded cans, bottles, paper, plastics, wood, metals, oils, chemicals, etc)							
3.1 Construction aggregate, materials and supplies are transported and stored properly.		0	0				
3.2 Excess construction materials, debris, waste and refuse are stored or disposed at designated dump site.		0	0				
3.3 Construction materials not posing hazard to motorists		0	0				
3.4 Waste recovery/recycle/reuse is practiced onsite		0	0				
3.5 Burning of non-biodegradable wastes is avoided or prevented.		0	0				
4.0 SITE TRAFFIC MANAGEMENT: Facilitate safe access and flow of vehicular and pedestrian traffic at and near construction area; and to avoid road accidents and injuries, and damage to properties.							
4.1 Detour or alternate route is set-up to facilitate safe access to or thorugh project site.		0	0				
4.2 Inform public of road safety and security related to traffic or near project area.		0	0				
4.3 Proper warning and signal devices are installed at or near construction site, particularly at night.		0	0				
Total Yes 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0			Project N 0	
Total No 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	**Rating:**				Location: 0 Concurre 0	

Annex 14

SAMPLE CERTIFICATE OF COMPLIANCE

Growth with Equity in Mindanao - 3 Program

Funded by the U.S. Agency for International Development (USAID) & implemented in partnership with the Mindanao Economic Development Council (MEDCo)

presents this

Certificate of Compliance

to

Contractor of:

_____
Name of Project

_____
Location

In Recognition of their Satisfactory Compliance with Contractual Safety, Traffic & Environmental Protection (STEP) Obligations and Responsibilities during Project Construction Period.

_____ *to* _____
Start Date Completion Date

As Attested by Recorded/Reported Outstanding Performance by Contractor in Implementing:

Excellent Health and Safety Measures
Excellent Traffic Management
Excellent Site Environmental Management

Given this__ of_____, 200__ at the GEM Project Management Office, Ladislawa Bldg., Ladislawa Avenue, Buhangin, Davao City.

ANGELITO A. BULURAN
RIP Team Leader

ARMANDO A. ANDAYA
Infra-Environmental Team Leader