PROJECT: REHABILITATION OF BO-BANDAJUMA ROAD
COUNTRY: SIERRA LEONE

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT SUMMARY

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1. Introduction

The project involves the update of feasibility studies of the road from Bo to Bandajuma in the southeast of Sierra Leone, which is part of the Freetown-Monrovia Trans-West African Coastal Highway. The rehabilitation of Bo-Bandajuma road will involve overlaying Asphalt Concrete on the existing carriage way without major realignments. However, in most trading centers, roadside businesses have encroached on the carriageway which has triggered the need for resettlement and compensation. On the state of the road, it be briefly noted that, from the Bo towards Bandajuma and for its first 3.5km, the road deterioration has ranged from loss of paved surfaces, to development of gaping pot holes, stretches of mudflats and some impassable sections. The main areas of deterioration are within 15 km from Bo with a worst portion with glaring potholes at 24+000km. Its unpaved shoulders have equally developed sections with deep potholes. There are sections beyond 24+000km where motorists have created by-passes outside the carriageway to avoid large gaping potholes/pools of water.

2. Policy, Legal and Administrative Framework

Policy Framework: The GoSL National Environmental Policy of 1994 emphasizes the need for Sierra Leone to pursue development on a sustainable path implying the need for sound environmental and natural resources exploitation and management. Therefore, this road project needs to comply with the National Environment Policy objectives as well as other environment provisions in a number of policy instruments in order to ensure compliance of the project works. Other policy and legal instruments of relevance to the road project include; the Sierra Leone Vision 2025, the National HIV/AIDS Policy for Sierra Leone 2002, The SLRA Strategy and Investment Plan 2009-2012, the National Population Policy 2009, the National Health Policy 2002; and the Land National Policy 2004. These provide sectoral frameworks for the mainstreaming of their thematic areas into the planned rehabilitation of Bo-Bandajuma road project.

Legal Framework: Legislations governing environmental issues in Sierra Leone and of relevance to the road project include: the Constitution of the Republic of Sierra Leone of 1991; the Environment Protection Act (EPA), 2008; the Forestry Act, 1988; Sierra Leone Roads Authority Act 2010; The Road Maintenance Fund Administration Act, 2010The Factories Act, 1974; the Domestic Violence Act, 2007 and the Local Government Act, 2004. These legal instruments outline compliance requirements during the various stages of implementation of this road project.

Applicable Bank Policies: The Bank’s Strategy for 2013-2022 emphasizes the need to achieve inclusive growth and transition to green growth in development interventions. In line with this, the Bank has published its Integrated Safeguards System (ISS) that consolidates and revamps its existing environmental and social safeguards. The ISS is designed to promote the sustainability of project outcomes by protecting the environment and people from the potentially adverse impacts of projects. The ISS embodies the Integrated Safeguards Policy Statement and five Operational Safeguards. The Integrated Safeguards Policy Statement sets out the basic tenets that guide and underpin the Bank’s approach to environmental safeguards. The Bank’s Operational Safeguards include:
a. Operational Safeguard 1 for environmental and social assessment, governing the process of determining a project’s environmental and social category and the resulting environmental and social assessment requirements;
b. Operational Safeguard 2 which consolidates the policy commitments and requirements set out in the Bank’s policy on involuntary resettlement;
c. Operational Safeguard 3 on Biodiversity and ecosystem services which aims to conserve biological diversity and promote the sustainable use of natural resources;
d. Operational Safeguard 4 addresses pollution prevention and control, hazardous materials and resource efficiency which covers a range of key impacts of pollution, waste, and hazardous materials for which there are agreed international conventions, as well as comprehensive industry-specific and regional standards, including greenhouse gas accounting, that other multilateral development banks follow; and
e. Operational Safeguard 5 focusing on labor conditions, health and safety which addresses the Bank’s requirements for workers’ conditions, rights and protection from abuse or exploitation.

These policy instruments have informed the ESIA process for the Bo-Bandajuma road project to ensure the project is both environmentally and socially sound meeting not only national environmental requirements but also, international commitments which the Republic of Sierra Leone is a signatory to.

Administrative Framework: Some of the environmental assessment and monitoring agencies in the road sector include:

- The Environment Protection Agency-EPA: a statutory agency for the protection of the environment and for other related matters. With reference to the road project, the EPA has the overall responsibility of approving and monitoring the project’s compliance in line the Approval Conditions as well as other standards relating to environment;
- Sierra Leone Roads Authority-SLRA: a semi-autonomous government entity responsible for the administrative control, planning, development and maintenance of all roads and related structures including bridges and ferries. With regard to the environmental and social aspects of this road project, SLRA’s Environmental Division will take the responsibility of monitoring compliance during implementation and operational stages of the road project;
- Road Maintenance Fund Administration (RMFA): principally to secure and manage the funds in a cost effective manner so as to ensure timely routine and periodic maintenance of the core road network; and
- Sierra Leone Road Transport Corporation- SLRTC: will be instrumental in monitoring road safety aspects during the implementation and operation of the road in line with its mandate.

Others include Ministry of Works and Infrastructure, Ministry of Lands, Country Planning and Environment (MLCPE), the National HIV/AIDS Secretariat, lower administrative entities such as Provisional Administrative Structures (especially the Provisional Committees), the Chiefdoms, the District Budget Oversight Committees and the Civil Society Organizations.

3. Project Description and Justification

Project Description: The transport infrastructure of Sierra Leone comprises a road network of about 11,000 km; one major port and inland waterway consisting of services and privately
owned passenger boats; and one international and nine domestic airports. Of the public road network of 11,300 km, some 8,000 km were functionally classified in the National Road System, leaving 3,000 km making up local networks and unclassified roads and tracks. 80% of the freight and passenger transport need in Sierra Leone is channeled through the road network, 2.5% through air transport and 17.5% through inland marine transport. A large part of its trunk and tertiary roads are in poor state (including Bo-Bandajuma road). This 46 km road from Bo to Bandajuma is located south of Bo District, centrally serving the eastern and western parts of it. To the east, there are links to Gerihun and Blama on the Kenemahighway and westward to Sumbuya in Moyamba District. Southward from Bandajuma, there is the Pujehun road as well as the Potoru to Fairo road towards the Mano River Bridge and Liberia. No doubt, the Bo-Bandajuma road is definitely the hub of transport network linking the regional headquarter cities of Bo and Kenema to Pujehun and Liberia. It is therefore part of the Freetown-Monrovia Trans-West African Coastal Highway.

**Project Activities:** The objective of the project is to enhance mobility, promote efficient, affordable transport services along the Bo-Bandajuma road and improve the livelihoods in the project area of influence and to neighbouring Liberia. The identified project components include; rehabilitation of the entire 46.2km providing an asphaltic concrete overlay of depth varying between 50 and 120mm (as a function of the encountered deflections) with widening of the wearing to either 7.0 or 7.2 with shoulders between 1.25 and 1.5m which serve as pedestrian walkways thereby checking accidents on the pedestrian traffic. There will also be reinstatement of cross drainages within wetland sections to allow for normal stream flows; installation of road furniture to improve traffic safety and installation of speed calming infrastructures (humps and rumble strips) in urban centres to check speed limits on the motorists. The project environmental and social impact mitigation measures will include; sensitization of communities in project area on HIV/AIDS/STIs and related diseases; gender; road safety and environmental protection. Implementations of the project will likely trigger resettlement and compensation issues which are being addressed in the RAP alongside this ESIA.

**Project Justification:** The Bo-Bandajuma road is part of the West African Coastal Corridor linking Sierra Leone to Liberia as part of the Freetown-Monrovia Trans-West African Coastal Highway and therefore, once this section is rehabilitated, linkages in the region will be enhanced. In addition, the road project will enhance road safety by reinstatement of road signaling and marking as well as speed calming measures which will all check traffic movement through rural settings. The purpose of the project is to improve the living standards and expand the productive capacity of the population of Sierra Leone by improved access to the transport sector and to attain a sustainable, safe road network that facilitates economic growth and the improvement of living in Sierra Leone.

In addition, the road traverses agricultural areas Koribondo, Buuma and Mamboima which are main producers of export crops such as coffee, rubber, bitter kola, kola nuts, spices and palm oil. Therefore, it will provide improve transportation of such produce to markets and to the sea for export. Cassava is also produced in these areas and is processed to *gari* though locally consumed, some is exported to neighboring Guinea and Liberia hence, the Bo-Bandajuma road is important for both internal and export trade in Sierra Leone.

Furthermore, the road will also improve access to health facilities which has remained a challenge to communities along the Bo-Bandajuma road. It’s badly potholed state reportedly made facilitation and transportation of medical personnel, supplies and equipment very difficult especially during the recent Ebola outbreak as this was critical in accessing the badly affected Potoru areas south of Bo-Bandajuma road. The road project will also facilitate communities in its vicinity easily connect to Bo and up to Freetown for better referral medical services.
Along the Bo-Bandajuma road there is evidence of mining activities for gold and diamonds. Already, iron ore, gold and diamond mining is undertaken east of Pujehun and rehabilitation of this road will also facilitate the transportation of mining equipment as well as minerals to the Ports of Nitti for export thereby boosting the mining sector which contributes to the economic development of Sierra Leone.

Regarding tourism, the road will improve access to the Tiwai forest tourist destination close to Potoru thereby boosting the tourism sector. The road project will also involve rehabilitation of drainage facilities across wetlands and low lying areas as well as general rehabilitation will improve the road aesthetics thereby present better road environment especially in most sections where tourists have created local by-passes to dodge the potholes.

4. Description of the Project Environment

*Physical Environment:*

**Topography**

The project area has rolling heights between 100-200m above sea level and its environs with its East areas to Tonkolili with heights between 370-400m above sea level. The topography of the area is very undulating with most areas being at fairly high elevation while others being in poorly drained inland valley swamps. The swamps are increasingly being used for growing paddy rice.

**Geology and Soils**

The road itself is within granite and acid gneiss of cambrian origin, consisting of the vast majority of the country’s central and eastern sectors. Much of the landscape is of undulating hills and bottom wetlands mainly of metamorphic layers of igneous formations. Lower gradients tend to induce more deposits of eroded materials towards the wetlands, while tributaries of the Waanje and Sewa River basins provide ample space for swamp rice cultivation. Erosive activities have resulted in a landscape of uplands and relatively wide bottom wetlands. There are various isolated outcrops of Gabbro to be found in the project areas but the bedrock is usually not deeper than a few meters.

**Climate**

The region’s climate is distinctly tropical with two seasons: a rainy season from May–November and a dry season from December–May. The average temperature is around 26°C and varies from around 16°-36 °C during the year. Its tropical location, relative closeness to the Atlantic ocean, effects of drainage of Waanje and Sewa river basins and relative flatness of the landscape provide longer periods of rainfall (up to 8 months), and year round soil moisture retention in most of its wetlands. Abundant rainfall and predominantly wetland surfaces promote vegetal luxuriance and evergreen vegetation all year round.

**General Surface Hydrology**

Generally, Sierra Leone has a dense drainage network consisting of nine major rivers. For the project area, the flow of the Waanje and the Sewa rivers is of primary interest. The river basins are relatively small compared with the major basins in the continent. The Sewa basin is large with a catchment area of 14,160km². The overall flow trends of the rivers are from the
northwest where they enter the Atlantic Ocean. Most of the rivers have a marked westward swing as they leave the interior plateau for the plains, and in this vicinity rapids and waterfalls are common. Furthermore, the upper reaches of many rivers are directly aligned with the lower reaches of neighboring rivers. It seems probable that those changes result from processes of river capture consequent upon a period of uplift or emergence. Later emergence has caused incision of rivers into their bed, assisting in the formation of sand bars across the mouth of many rivers, especially in the south. Seasonal rainfall is responsible for considerable fluctuation in seasonal flows. The upper courses of rivers in the plateau region are affected by a vital range of 2-4m and experience much flooding. Little is known about the volume of flow of rivers in Sierra Leone as gauge readings and data on discharges is negligible.

**Biological Environment:**

**Vegetation**

The dominant vegetation in the uplands is mainly of tropical rain forest with combinations of soft and hard woods. The bottom wetlands are the home of varieties swamp raffia palms, ferns and broad leaf trees. Swamp rice cultivation is common in the wetlands and along streams. Forest products consist of spices, bitter kola, and plantations of coffee, cacao, rubber, kola nuts and oil palms. Farming and harvesting of forest products have resulted in some modification of vegetal regimes as secondary forests (plagio-climax varieties) are on the increase. This has been mainly due to intensive harvests for building materials, fuel wood, charcoal, oil palms, spices and bitter kola all of which have a ready market in Bo city. The wetlands provide weaving, roofing and household furniture from the raffia palms. Broad leaf trees provide for packaging kola nuts often exported to neighboring countries. Varieties of fish, crabs and shrimps are harvested from the wetlands.

**Wildlife**

From the community consultations during the ESIA, the main animal groups in the areas of the project comprise largely monkeys and common birds. No animal groups are reported to be rare, endemic, or vulnerable. There are also no national parks or protected areas in the project area.

**5. Social and Socio-Economic Environment**

**Population**

The population of Sierra Leone is estimated at 5.7 million people. Based on the National Population 2014 estimates, the population of the project area is estimated to be 700,000 and broken down as follows: Bo Township (300,000), Gandama 52,000 (Tikonko, Bo District), Koribondo (Jaiama Bongor Chiefdom, Bo District), and Bandajuma Sowa in Sowa Chiefdom, Pujehum District) with an estimated 18,300.

**Other household characteristics**

The project area is mostly within the Bo district bordering the Pujehun district and is covered by 3 chiefdoms, being: Gandama (Tikonko chiefdom, Bo District) Koribondo (Jaiama Bongor Chiefdom, Bo District) and Bandajuma Sowa (Sowa Chiefdom, Pujehun District). The main ethnic groups are Mende, Vai, Temne and Sherbro. The main economic activities include diamond mining, fishing, coffee and cacao plantations. The female population is estimated to retain a slight 1.5 edge of 1.95% over males. This population growth
tends to favor movement of people towards the chiefdom headquarter towns that have more basic service locations than elsewhere. The household structure in the settlements areas consist largely of multiple households, with most houses reporting more than one household head. The study is typical of most households in the country, which are largely headed by men. The extended family, consisting of several household members spanning many generations is the basic household unit in these settlements. Multiple households residing within the same house is also a typical residential arrangement in these settlements. Overall, the settlements have a large household size with a mean of 8 persons.

**Health status of the population**

Sierra Leone has some of the poorest health indicators in the world, with life expectancy of 47 years. The majority of the causes of illness and death in Sierra Leone are preventable and the most common ones include; pneumonia, anemia, malaria, tuberculosis and HIV/AIDS. Last year the country witnessed the worst death due to Ebola Virus Disease. According to Sierra Leone Demographic Household Survey 2013, more than 85% of the pregnant mothers attended ante-natal care services at least once in their most recent pregnancy, but only 42% actually delivered in a health facility. In 2013, 21% of children under age 5 were found to be underweight or too thin for their age while 36% were stunted or too short for their age and 10% were wasted or too thin for their height.

**Safe water coverage**

The bulk of the water supply for rural inhabitants generally comes from rivers, streams, swamps and wells. The quality of water from these sources is usually low with pH ranging from about 5.2 to over 6.0 suspended sediment concentration could be high especially in the major rivers and particularly during the rainy season within the project area. These surface water bodies are mostly used for almost domestic purposes including drinking except where wells are present and they form the potable water. Many people living along and near the alignment live below the poverty line and cannot afford pipe borne water as such, the use of spring/well water will continue to be an important resource to the local people.

**Sanitation facilities**

Inadequate sanitation facilities coupled with unsafe water sources increases the risk of water-borne diseases such as diarrhea, typhoid, dysentery and cholera. Prior to the war in 1991, every settlement had improved pit latrines as wells as ordinary pit latrines owned by individual households. Today, it is estimated that the study area has 12 % coverage for sanitation compared to a national average of 15%. These are mostly traditional open pit latrines (73%) which are in desperate need of repair and therefore causing health hazards.

**HIV/AIDS prevalence**

The 2014 Sierra Leone Demographic and Household Survey reported that, 1.5% of adults aged between 15-49 years are infected with HIV. Among women in the age bracket of 15-49 years, the HIV prevalence rate is 1.7%, while among men aged 15-49 years the HIV prevalence rate is 1.3%. For women, HIV prevalence is highest among women age 35-39 (2.6%). For men, HIV prevalence increases with age and peaks at 2.9% among men age group of 30-34 years, thereafter declining to 1.1% among men aged 40-49 years. It is also reported that, the adults HIV prevalence has virtually remained constant between the 2008 and the 2013 at 1.5%. HIV prevalence in urban areas (Bo areas for instance) is twice that in rural areas.
Land tenure

Land exploitation largely depends on traditional forms of ownership based on original settlement of ethnic and land owning families through oversight responsibilities of the chieftaincy and operating land laws. Through customary laws, ownership of land is vested in the chiefdoms and the communities as established under the Chiefdoms Councils Act as well as in Section 28 (d) of the Local Government Act of 1994 and amended in 2004. Principally, the customary land tenure system is based on family tenure, which is equally on lineage or clan and unites all descendants of a particular ancestor or group of ancestors. It is important to note that, under the customary land tenure system, the Paramount Chief is the overall custodian of the land in the entire chiefdom and all land related disputes are arbitrated by him.

Economic activities

The majority of the people in the areas traversed by the road project are engaged in farming, bee keeping, small scale animal production, mining and business for their livelihood. These districts have been very productive agriculturally in both food and cash crops and accounts and it accounts for 95% of the people’s sources of livelihoods. On average, area cultivated over a year is estimated between 0.5-2.0 ha. Rice is the main crop grown during the rainy season as well as sweet potatoes and cassava. In most of the villages, between 10-20% of the population keep livestock. For men, illegal mining also plays an important role in their livelihoods.

Impact of Ebola Virus Disease

The gains in household income at rural areas in Sierra Leone in particular over the past one and a half decades were virtually destroyed by Ebola Virus Disease (UNDP, 2014). Sierra Leone has consistently experienced an improved level of per capita income since 2001, averaging an annual growth rate of 13.50%. However, during the outbreak of Ebola Virus Disease (EVD), in just six months, it had led to severe loss in household incomes averaging 29.67% in Sierra Leone. The shocks to income have made people more vulnerable and could reverse the gains made in poverty reduction in the country. In the project areas, loss in household income has been put to 30% while prices of food items e.g. a sack of imported rice has gone up by 30%. Overall inflation is reported to be now at 6.39 % with nearly 4,000 jobs that have been lost during 2014. The impact of loss in per capita income varies from one income group to another; the most severe burden is on people in the lowest quintile a majority being in the rural areas of the road project.

6. Analysis of Alternatives

The plan to rehabilitate Bo-Bandajuma road is an integral part of the Sierra Leone’s Roads National Transport Strategy Investment Plan (NTSIP) taking into account its centrality to attain international connection with the neighbouring Liberia and generally support export trade in the country. This implies that, the rehabilitation of this road will improve connectivity between the cities of Bo and Freetown to the southern parts of the country. Therefore, the Analysis of the Alternatives has focused on the implementation modalities of the road project taking into account, a combination of factors such as environmental, social and economic dimensions. In addition, it is important to note that this is already an existing paved road which only requires rehabilitation. Based on the above, the following Alternatives were considered during the ESIA:

Alternative 01: Zero/Do Nothing Option.
Alternative 02: Routine Maintenance Option.
Alternative 03: Paving with Asphalt by use of Asphalt Concrete (AC 50mm).
The Do Nothing Scenario: this Scenario implies that, the Bo-Bandajuma road would remain without any rehabilitation or maintenance interventions which will leave the road in worse condition with continued deterioration characterized with many potholes as well as further deterioration of its drainage infrastructures with attendant continued loss of road safety furniture thereby making it risky for public use. On the basis of these, the Do Nothing Option was dropped from further consideration as it is not within Government of Sierra Leone National Transport Investment Plan.

The Routine Maintenance Option: this considered the annual maintenance costs computed based on an “ideal” maintenance schedule rather than a “minimum” or “absolute minimum” schedule which presumes that, the road will always be maintained in a good condition. However, from the Feasibility Study, it is concluded that, the road pavement surface has greatly deteriorated and is generally weaker which merits major rehabilitation involving strengthening of some sections. Against this, the feasibility study findings alongside SLRA position all concur that, maintenance is not a technically and economically viable option for Bo-Bandajuma road hence; this Option was equally dropped from further consideration.

Paving with Asphalt: this Option considered the rehabilitation intervention of the road to Asphalt Concrete (AC) standard which gives the road a lifespan of 20-25 years with minimal maintenance regimes. In addition, it is GoSL policy that, all its trunk roads should be of AC type. It is therefore proposed to rehabilitate the road using an asphalt concrete overlay of depth varying between 50-120 mm (as a function of the encountered deflections). Therefore, the Bo-Bandajuma road link will be a continuum of the AC standard and this Option was taken as most viable for the implementation of this road project.

7. Potential Impacts and Mitigation/Enhancement Measures

Positive Impacts:

The major positive environmental and social impacts anticipated as a result of the project are: Enhanced Economic Activity, once improved, the road will lead to improved access to markets and also open up business opportunities for the local people in its vicinity hence, better livelihoods at household levels. It will also create employment opportunities, and it is estimated that, about 500-800 persons mostly within the communities will be employed on the project. It also envisaged that, the road would lead to reduced road accidents, due to installation of road furniture and speed calming infrastructures across trading centers and urban areas as well improved shoulders which will serve as pedestrian walkways. Improved transport services between Bo-Bandajuma especially during the rainy season, some sections of the road are virtually impassable due to poor drainage and huge potholes in the carriageway while in the dry season the road is dusty. It will also improve regional connectivity, as the road forms part of a major highway linking Sierra Leone to Liberia through MRU areas and improve trade. Furthermore, the road will lead to enhanced agricultural production in the areas of Koribondo, Buuma and Mamboima which are main producers of export crops such as coffee, rubber, kola nuts, spices and palm oil. It will provide improve transportation of such produce to the markets and to the sea for export. Cassava is also produced in these areas and is processed to garri though locally consumed, some is exported to neighboring Guinea and Liberia hence, the Bo-Bandajuma road is important link for both internal and export trade in Sierra Leone. The road passes through areas where mining of gold and diamonds is undertaken therefore, the road will also facilitate easy transportation of mining equipment as well as minerals to the ports of Nitti for export thereby boosting the mining sector and contributing to the economic development of Sierra Leone. The road will improve access to Tiwai forest tourist destination close to Potoru.
tourism site hence, boosting tourism. The road project will also involve rehabilitation of drainage facilities across wetlands and low lying areas as well as general rehabilitation will improve the road aesthetics thereby present better road environment.

**Negative Impacts:**

It’s anticipated potential project negative impacts include: *impacts relating to surveying and mapping* of the route which will likely cause anxiety and speculation amongst the communities. This is to be mitigated through community sensitization programmes as outlined in the RAP. *Risks of potential slope failures* in hilly areas of can be a challenge to road use during operations. This is to be mitigated through grass planting, use of gabion boxes, stone pitching and good engineering measures to establish stable slope. *Disruption of roadside activities* involving relocation of roadside makeshift kiosks in Gondama areas which will be mitigated through advance notification for project affected persons to relocate. In addition, there will be adequate, fair, and prompt compensation and resettlement for such PAPs as provided in the RAP (Summary attached in Annex). *The impacts on public water sources* are likely to be affected by the project works and to be mitigated through the notification and sensitization of the communities about the road project as well as protection of water sources in some of the affected communities. *Dust and air emissions* from earthworks and operating plant and equipment and it is to be managed through routine sprinkling water on cut and open surfaces during earthworks. Impacts on land will include *erosion and soil loss, degradation through, loss of land and changes in land use, due to surface runoff* and general loss of vegetation. A potential influx in the population to the area for various jobs in the area can be associated with risky behaviors among the people with increased risk of STDs/STIs including HIV/AIDS on both the workers and the communities. There are also likely potential risks of Ebola whose impact is of long term nature. All these are to be mitigated through a private HIV/AIDS service provider to supply condoms, sensitize the communities and the workers on both HIV/AIDS and Ebola risks. Members of the local communities will be given priority during recruitment so as to minimize importation of laborers that are likely to increase risks of STIs/STDs and other categories of health risks. There are potential impacts relating to management and disposal of asphalt removed from the carriageway during rehabilitation works. It is proposed that, such material be pulverized and used as sub-base purposes on the road.

Construction works will likely have implications on the health and the safety of the workers. The workers should be provided with Personal Protection Equipment-PPEs. *Issues of borrow pits,* establishment of access routes and subsequent opening of borrow pits represent large negative impacts of the project. Before exploitation of the borrow pits is undertaken, the contractor will secure lease from the landlords for borrow areas. Stock pile and cut to spoil materials from the borrow pits should be kept in the vicinity of the pits and with the approval of the Resident Engineer (RE) such materials could be used in their restoration at the end of the project. On the *management of cut to spoil,* the setting out of the road works and its general civil works is not expected to generate volumes of cut to spoil materials. The supervising consultant should approve disposal sites for cut to spoil materials and not to dispose it on the road reserve, forests or wetlands along the road. In order to address *gender concerns* in the project, there should a specialist to conduct sensitization campaigns to create awareness on gender mainstreaming in the project. For *Road Safety campaigns,* Sierra Leone Road Transport Corporation should take a lead to sensitize the public on the safety aspects on the road during and after construction so as to minimize accidents.

8. **Mitigations Enhancement Measures**
In order to enhance the effective implementation of the mitigation measures, it is important that both the contractor and the supervising consultant have in their teams Environmental/Social Specialists whose roles will be to guide the implementation of the mitigation measures proposed in the ESIA. For the contractor, the Environmental/Social Specialist ought to be a full time employee on the project. In addition, these Specialists should be attending project monthly site meetings and ensure that environmental issues are adequately discussed in such meetings. Secondly, the BoQs as well as the contract documents should integrate environmental and mitigation measures as outlined in the ESIA as well as provisions/condition in EPA’s approval licence for the road project. One of the measures to verify compliance of works will be to conduct an Environmental Audit of the Project and this should be in accordance to environmental audit requirements of EPA and laws governing it alongside for AfDB. The audit will be able to bring to light some of the emerging environmental issues during its implementation and proposed compliance interventions for such concerns. In addition, there will be scheduled Bank Supervision missions which among others, will be checking compliance of the project works with the Loan Agreement environmental commitments and the Bank’s Integrated Safeguards System of 2013. Environmental and social issues raised by the Bank Missions will be taken up by SLRA Environmental Unit in their routine follow supervision of the project. Furthermore, there will be monthly site progress meetings to discuss matters and progress of the project. In those meetings, environmental and social compliance of the project will be reported by the staff of SLRA Environmental Unit. Salient aspects of compliance will be reported and corrective actions will be discussed and agreed upon.

9. Complementary Initiatives

The project could undertake the following as a way of further improving its environmental and social performance. One of the key interventions should be protection of some water supply sources for the communities where they are heavily reliant on open surface water for their domestic uses. In addition, there are a number of roadside businesses operated by the women under open sun conditions. It is proposed that, the project consultatively and in a participatory manner undertakes to construct some market stalls for the women along the roadsides but outside the road reserves to help empower them in their trade and livelihoods.

10. Environmental Hazard Management

Some road rehabilitation activities will likely involve handling, storage and use of some hazardous materials which can have adverse health and safety impacts to the communities and the wider environment. Potential hazardous materials will likely include: used vehicle and plant equipment accessories (car batteries, tyres, oil filters); medical waste from the field clinic (sharps, swabs, expired drugs etc); laboratory test reagents; road construction materials such as soil stabilizers; asphalt plant and its processes; oils and lubricants including diesel pump; and explosives for rock blasting.

In order to manage such risks and associated hazards on this road project, the following measures are proposed and are to be put in place by the contractor: measures for handling hazardous material through a licensed hander and having in place an emergency response plan in case of fires, accidents and general rescue strategy for the workers on the project; the project must exercise a code of conduct that helps in the control and minimization of risks on the site for instance unnecessary carrying of naked flames and unrestricted cigarette smoking should be checked in all premises of the project; the ambulance services contacts should be known to all key staff of the project; the police emergency 24 hour response numbers should be available and known by all workers; there should be First Aid Kits in the work areas of the project; and
the clinic should be modestly equipped and stocked with basic medicines. The emergency response program ought to provide for the training of employees on emergency response and disaster preparedness in case of an accident on the site.

11. Environmental and Social Monitoring Program

The monitoring programme for the project will be undertaken principally to check whether the proposed mitigation and benefit enhancement measures have been implemented and the project’s environmental compliance in line with EPA. These activities will be fully integrated with other construction supervision and monitoring activities carried out by the construction supervision consultant. Primary responsibility for ensuring adequate level of environmental compliance on the project will lie with the Supervising Consultant/Resident Engineer (RE). Daily site inspections will be conducted with emphasis on early identification of any environmental problems and the initiation of suitable remedial action. Monthly reports which will be prepared by the RE and will have sections dedicated to environmental matters, which summarizes the results of site monitoring, remedial actions, which have been initiated, and whether or not the resultant action is having the desired result. Some of the key indicators to be monitored in the project include: soil erosion and sedimentation control measures put in place; number of rehabilitated and graded sites at quarries, borrow pits; gender mainstreaming; HIV/AIDS and Ebola sensitization programme put in place and how they are implemented; traffic control measures; noise and dust control measures put in place and PPE and their usage by the workers. Some of socio-economic aspects that need to be monitored and managed after construction include, miter drains and the wider, impacts on economic activities as well as the tendency for traders to conduct their business close to the road thereby increasing risks of accidents.

12. Public Consultation and Public Disclosure

Public Consultations:

The key stakeholders consulted during the ESIA included: district technical officials in Bandajuma, Bo and Freetown. There were also consultations with some NGOs operating in the project area and these included; Action Aid in Gondama, Watsan Project in Sembehun at Buuma, Africare in Bendu, Medicines Sans Frontiers in Bellor and World Vision in Bontiwo. In addition, consultations were held with the various chiefdom heads in Koribondo in Jaima Bingor Chiefdom in Bo District, Gondama in Tikondo Chiefdom, Bo District and at Bandajuma Sowa in Sowa Chiefdom, in Pujehun District. The ESIA team also had meetings with EPA as well as the Environmental Unit in SLRA. Representatives of transport operators such as drivers of long distance trucks and the Okadas (motorbike riders) were also met. Attempts were made to meet women and youth groups amongst others along sections of the road. Some of the main issues raised during the consultative meetings included: the need for speed control measures in the built-up/trading centers and schools to reduce accidents; issues of compensation and resettlement; respect and cooperation between the contractor and the communities; communities should be consulted with regard to identification and access to construction materials and the road workers should be sensitized on the need to refrain from luring school girls and married women to sex relations as this brews conflict between the project and the communities. Some of these issues have been integrated into the project design. The consultant provided explanation during the meetings on a number of these issues through local languages such as creole and temne.

Public Disclosure:
SLAR will submit the ESIA report to the EPA for circulation to its Board members and professional bodies for review and comments. SLRA will then disclose the ESIA report through publication of the summary in the newspapers; it will make announcements over the media in the local languages regarding the project and the ESIA report. In addition, the EPA will place the ESIA report in specific public places accessible to the general public to enable the affected and interested persons make comments on the impacts of project and such comments will be sent directly to the EPA. To validate the ESIA, the staff of the EPA will visit the project site before issuing approval license. When the ESIA is approved, it will be subject to the terms and conditions that will be stipulated by the EPA Board in the project license. Licenses are normally issued for a twelve-month period or a time specified by the Director. Once the license is issued, the EPA is responsible for oversight monitoring of the project to verify compliance.

13. Institutional arrangements and capacity building requirements

As stated, the EPA will be responsible for review and approval of the ESIA report and it will also issue an Approval Letter, with conditions. EPA will play a key role in the monitoring of project compliance in liaison with the district environment officers in Bo and Bandajuma. The Ministry of Works, Housing and Infrastructure who is responsible for all quarry operations in the country will oversee the quarry operations in the road project. In addition, SLRA Environmental Unit will assume the responsibility of ensuring that, the project facilities comply with the environmental and social requirements as shall be detailed in the contract documents. Furthermore, Road Maintenance Fund Administration is to provide funds for timely and efficient maintenance of the Bo-Bandajuma road after its rehabilitation. On the other hand, SLRTC will be instrumental in monitoring road safety aspects during the implementation and operation of the road. The Contractor on his part will be responsible for planning, implementing and reporting on mitigation measures during the execution of the project works. The District Environment Officers in Bo and Bandajuma will ensure that, in their areas, the project is implemented in accordance with the EPA license conditions. They will also be attending the monthly site meetings for the project and will be reporting environmental issues of which they come across during their routine monitoring and supervision of the project in line with their mandate.

By and large, chiefdom heads, local leaders and the communities need to be sensitized about the project on a number of fronts including possible job opportunities, need to support the contractors in accessing construction material as well as risks of HIV/AIDS and Ebola. In addition, the District Environment officers as well as SLRA Environment Unit will all require support in terms of equipment and facilitation. Therefore, a modest budget is provided for awareness sensitization and mobilization of communities on the project.

14. Costs of Environmental Mitigation and Monitoring Plan

Cost relating ESMP implementation is estimated to be USD 300,000 as summarized below.

<table>
<thead>
<tr>
<th>No.</th>
<th>Environmental and cost mitigation areas</th>
<th>Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Sensitization and mobilization campaigns for the communities and leaders</td>
<td>10,000</td>
</tr>
<tr>
<td>02.</td>
<td>Road safety campaigns</td>
<td>15,000</td>
</tr>
<tr>
<td>03.</td>
<td>HIV/AIDS and Ebola campaigns</td>
<td>25,000</td>
</tr>
<tr>
<td>04.</td>
<td>Gender mainstreaming and monitoring</td>
<td>15,000</td>
</tr>
<tr>
<td>05.</td>
<td>Complementary Initiatives (e.g. protection of water sources in Sewa areas,</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>construction of some market stalls for the women etc.)</td>
<td></td>
</tr>
<tr>
<td>06.</td>
<td>ESIA implementation monitoring costs</td>
<td>55,000</td>
</tr>
<tr>
<td>07.</td>
<td>Capacity Building for institutions i.e. DEOs and SLRA Environmental Unit</td>
<td>30,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>300,000</td>
</tr>
</tbody>
</table>
15. Conclusion
a. The planned rehabilitation of the Bo-Bandajuma road is of importance to Government of Sierra Leone as part of its main highway linking the country with neighboring Liberia to the southeast. In view of its regional connectivity, it is important that, the road is in good all-weather motorable condition;
b. The road will contribute to improved access to social services such as health and education not only for the population located immediately along the road, but also for those within its larger area of influence; and
c. The road works will be limited to overlay of concrete asphalt within the existing carriageway within the existing alignment. However, due to heavy encroachment on its carriageway, resettlement and compensation is envisaged and the process should be open, transparent, done timely and payments being adequate in accordance with GoSL laws.
ANNEX

FULL RESETTLEMENT ACTION PLAN SUMMARY

**Project Title:** Rehabilitation of Bo – Bandajuma Road Section  
**Project Number:** P-SL-DB0-010  
**Country:** Sierra Leone  
**Department:** Transport and ICT (OICT)  
**Division:** Transport Division West and Central Regions (OITC.1)

**Project Category:** 1

1. **Description of the project, project area and area of influence:** The Government of Sierra Leone, through the Sierra Leone Roads Authority is seeking the rehabilitation of a 46km section of the Bo-Bandajuma Road, in the southeastern region of the country. The proposed section is of significant importance as it forms part of the Trans-West African Coastal Highway (TAH7), connecting Sierra Leone to neighboring Guinea and Liberia. Overall population in the project area; Bo-Bandajuma - is estimated at 112km². The project’s main components are: 1) Infrastructure improvements – 46 kms; 2) Project Management; 3) Cross cutting and Complementary Components; 4) Other components including studies.

2. **Potential impacts**

   Main impacts will result from **Component 1 – Infrastructure Improvements**, along 46 km. The technical intervention will follow the existing alignment causing demolition of structures within the 15.5m ROW. Almost all the settlements along the Bo-Bandajuma Road alignment have structures or crops in the SLRA Right – Of – Way. In some settlements, community structures such as water wells, mosques and court barrays are currently in the ROW and will need to be relocated elsewhere. All together 295 structures are affected of which 233 are dwelling houses. Some 29 structures used as both dwellings and business locations will also be demolished as will 33 community structures currently used as schools, mosques, courts, markets, drying floors or water wells. In addition to physical structures, hectares of farmland will be affected leading to loss of livelihoods. Three thousand and thirty three (3,033) economic fruit trees: (bananas 1,118; mango 664) will be removed in the widening of the road. Overall, the Project is expected to cause permanent economic displacement of farming activities, loss of businesses or shelter for a total of 2,807 members of the communities along the alignment.

3. **Socio-economic Profile**

   Sierra Leone’s population is estimated at 6.02 million (World Bank 2014). Rural population accounts for 80%. The national poverty data indicates that 80% of the rural population is below the poverty line, compared to 54% in urban areas and 15% in the capital, Freetown. Bo and Pujehun districts, close to the project area, account for a population of 463,668 and 228,392 respectively. The overall population density of the Bo - Bandajuma project area is estimated at 112 per Km².

   **Characteristics:** The majority of residents along the alignment are encroachers on the ROW. PAPs earn their incomes mainly from agricultural activities, small scale trading or in transportation as bicycle riders or car/truck drivers. Critical areas of poverty include: insufficient availability of food; poor housing; lack of access to health care; lack of access to...
potable water; and inadequate access to education. A majority of PAPs are illiterate; a few stopped at primary level of education and ten (10) in Bo, have a secondary education.

**Households:** There are 295 households out of which 136 are headed by women (but providing for husbands) and 159 by men. A household size ranges between 1-10 individuals. Of the 2,807 dependents (between age 1-80 years) 1,171 are males and 1,065, females. The total number of children present in the project area is 1,133; out of which 972 are in school while 161 are at the non-school going age: under 4 years. Most of the affected household heads are married (82%); 16% are single; while 2% are widowed. The PAPs’ average household income is SSL 20,000.00 (Equivalent to US $4).

The most common disease in the area is Malaria while HIV/AIDS and other STDs are also prevalent.

**Vulnerable people:** No disabled persons were identified as being directly affected, and the elderly, including those with reduced mobility are taken care of by family. However there are 1133 children depending on the 295 households. In view of the modest household income this category of PAPs is considered vulnerable.

4. **Organizational responsibility**

(a) The main implementer of the FRAP is the Sierra Leone Roads Authority (SLRA). The agency will also coordinate the functioning of the Grievance Redress Mechanism (b) Ministry of Finance and Economic Development (MOFED), mandated to coordinate Donor funds nationwide would be responsible for provision and monitoring of disbursement of funds to ensure timely compensation of PAPs. (c) Ministry of Works and Infrastructure (MoWHi) through which payments for compensation must be channeled will provide oversight and monitoring role during the payment process.

(d) Environmental Protection Agency will monitor implementation of FRAP, ensuring adherence to national environmental policies and, (e) other major stakeholders including Anti-Corruption Commission; Civil Society; Auditor General and; community leaders/ elders. Selected members of the Civil Society and community leaders will form an integral part of the committee setup to address grievances during the implementation of the FRAP.

5. **Community Participation**

Consultations with communities were held through participatory approaches, between the period 2013 and July 2015. Information on the Project was provided and PAPs opinions were solicited in open discussions. Exchanges with participants took place despite EVD challenges. Meetings involved Paramount Chiefs, tribal heads, farmers’ associations, traders, transport and bike riders associations, PAPs representatives and community members including women and youth.

**Community members’ perceptions:** Communities welcome the Project. Residents are aware of their status as encroachers of the ROW. Concerns raised include: (1) compensation payment method; PAPs wishing (a) cash compensation (b) direct payment of funds to PAPs and not through local representatives; (2) potential loss of employment opportunities to non-locals due to lack of skills (3) children’s and livestock safety in view of increased traffic due to improved roads; (4) insufficient monetary compensation to allow construction in concrete, of new community structures such as mosques, court barrays, water wells and drying floors.

For compensation, the majority of PAPs expressed preference for cash rather than relocation away from their established social network between households or neighboring communities.
Cash compensation would allow many to develop land elsewhere and thereby improve income streams.

*Communal services:* There was expressed willingness by Paramount Chiefs and leaders to avail land for replacement of community structures that will be removed from the ROW in order to continue providing services in the area. Community members will be engaged in providing labor and avail local building materials as necessary.

6. **Integration with host communities**

Relocation of PAPs in groups to new host communities is not envisaged. Majority of PAPs indicated preference to remain in the neighborhood of their current communities.

7. **Property Acquisition Survey**

A property acquisition and valuation exercise was conducted in June 2015 and a **cut-off date** made effective as of 25th July 2015. The survey was undertaken by SLRA through consultant services and supported with the presence local authorities in communities.

*Valuation:* In order to allocate a monetary value, compensation was calculated on the basis of current market prices in Sierra Leone, and took into account different parameters favorable to a new acquisition plus cost for damages and inconvenience. Valuation of economic trees follows Ministry of Agriculture’s established rates for the project area (District). SLRA will base compensation on the value applicable on the date of receipt of the notification letter by PAPs. Compensation will be paid out soon after loan approval and should be completed in each section of the road before contractors take over site. Funds will be part of the project cost but paid for by Government as part of its financial contribution to the project.

8. **Eligibility**

According to SLRA, all persons affected by relocation or subjected to loss of property or shelter as a result of a road project are entitled to compensation or some form of assistance. Eligibility covers all affected people irrespective of status (whether title holders, legal or non-legal rights). In the project area, many structures are a result of encroachment into the ROW, however some sort of assistance will be provided to the owners as long as these were identified before the cut-off date: 25 July 2015.

Table 1. Summary of Detailed Verification Property Acquisition

*Structures*

<table>
<thead>
<tr>
<th>Property Description</th>
<th>Total Number</th>
<th>Total Amount (LE)</th>
<th>Equivalent Amount USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dwelling Houses</td>
<td>233</td>
<td>3,653,804,700.00</td>
<td>811,956.60</td>
</tr>
<tr>
<td>2 Community Structures</td>
<td>33</td>
<td>908,778,000.00</td>
<td>201,950.67</td>
</tr>
<tr>
<td>3 Dwelling Houses with Shop</td>
<td>29</td>
<td>832,987,300.00</td>
<td>185,108.29</td>
</tr>
<tr>
<td>Total Number</td>
<td><strong>295</strong></td>
<td><strong>5,395,570,000.00</strong></td>
<td><strong>1,199,015.56</strong></td>
</tr>
</tbody>
</table>

Total Exchange Rate, SLL 4,500 = USD 1* June 2015
Table 2. Summary of Detailed Verification of Property Acquisition

**Economic Trees**

<table>
<thead>
<tr>
<th>TREE DESCRIPTION</th>
<th>TOTAL QUANTITY (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm</td>
<td>238</td>
</tr>
<tr>
<td>Mango</td>
<td>664</td>
</tr>
<tr>
<td>Guava</td>
<td>47</td>
</tr>
<tr>
<td>Orange</td>
<td>181</td>
</tr>
<tr>
<td>Cashew Nut</td>
<td>2</td>
</tr>
<tr>
<td>Pear</td>
<td>54</td>
</tr>
<tr>
<td>Banana</td>
<td>1,118</td>
</tr>
<tr>
<td>Kola</td>
<td>2</td>
</tr>
<tr>
<td>Sweet Sharp</td>
<td>70</td>
</tr>
<tr>
<td>Pawpaw</td>
<td>103</td>
</tr>
<tr>
<td>Tombie</td>
<td>68</td>
</tr>
<tr>
<td>Lime</td>
<td>42</td>
</tr>
<tr>
<td>Other</td>
<td>140</td>
</tr>
<tr>
<td><strong>Total number of Economic Trees</strong></td>
<td><strong>3,099</strong></td>
</tr>
</tbody>
</table>

Total Cost (Exchange Rate: SLL 4,500 = USD 1.00)

USD Equivalent: USD 60,518.73 (*June 2015)

9. Legal framework

The Land National Policy, (2004) is the key source of guidance for implementation of the FRAP. The Policy provides the framework for administration and management of land including equity in access to land and security of tenure. The Project will therefore be required to adhere to provisions regarding fair and adequate compensation for land and property likely to be taken up. Sierra Leone Road Authority Act, 2010- which appropriates land for roads to the Authority. The FRAP will take into account the African Development Bank’s guiding principles and the Involuntary Resettlement Policy (OS 2).
10. Grievance mechanism:

Grievance committees will be established to receive complaints during compensation payment and any other matters arising during implementation of the project. Local grievance committees will include members of the affected villages, village elders, PAP representatives, Chiefs, representatives of Anti-corruption if present the project area. Composition of local grievance committees within the project-affected areas will be finalized when project funds are secured. In the absence of a local grievance committee in a village, PAPs are required to inform the SLRA who in turn, attempts to attain a peaceful and satisfactory outcome for the concerned parties. All agreement reached is communicated to MoFED for appropriate action. However, if a resolution is not achieved between the Authority (SLRA) and the PAPs, the complainant is free to contact the Law Officer’s Department who is responsible for litigation cases. A complaints book will be provided in the main towns of Gondama, Koribono and Bandajuma to record complaints from the community concerning the project and especially compensations of PAPs. Local authorities will keep the book and contents will be discussed with council representatives or ward members on the Grievance Mechanism committee.

11. Monitoring and Evaluation

SLRA is responsible for internal monitoring and evaluation of the FRAP. External monitoring and evaluation will be carried out by local authorities, selected members of the community and by Government Ministries: Ministry of Works and Infrastructure; Environment Protection Agency; Auditor General, Anti-Corruption Commission and Civilia Society (NGO) if present in the region. SLRA together with civil society, local authorities and PAP representatives will be responsible for defining the monitoring indicators. An Environmental and Social Monitoring report, including progress of FRAP implementation will be produced periodically by the Head of Environment Division (SLRA).

12. Implementation Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Completion Date</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAP Consultation and Sensitization</td>
<td>7 January 2015</td>
<td>SLRA</td>
</tr>
<tr>
<td>Compensation payment to PAPs.</td>
<td>March 2016, April 2016</td>
<td>SLRA, MoFED, Audit services-SL, Monitored by Anti-corruption, Civil Society, Local Council EPA-SL &amp; Media</td>
</tr>
<tr>
<td>Phase 1: Bo to Koribondo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 2. Koribondo to Bandajuma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Date</td>
<td>Responsible Party</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Submission of Interim FRAP report to AfDB</td>
<td>April 2016</td>
<td>SLRA</td>
</tr>
<tr>
<td>Notification letters to PAPs (to demolish structures ensuring salvage of any useful building</td>
<td>May 2016</td>
<td>SLRA</td>
</tr>
<tr>
<td>materials).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultation and implementation of ROW clearance schedule</td>
<td>June 2016</td>
<td>SLRA</td>
</tr>
<tr>
<td>(i) Ensure PAPS given deadline for clearance after which contractor will demolish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) Ensure community infrastructure is improved e.g. mud mosque replaced with concrete one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit final FRAP completion report to AfDB.</td>
<td>August 2016</td>
<td>SLRA</td>
</tr>
</tbody>
</table>
### 13. Costs and Budgets

**Table 3: Costs and budget**

<table>
<thead>
<tr>
<th>ITEM No.</th>
<th>DESCRIPTION of Item</th>
<th>TOTAL QUANTITY (No.)</th>
<th>TOTAL AMOUNT (SSL Le)</th>
<th>EQUIVALENT AMOUNT (USD $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dwelling houses</td>
<td>233</td>
<td>3,653,804,700.00</td>
<td>811,956.60</td>
</tr>
<tr>
<td>2</td>
<td>Community Structures</td>
<td>33</td>
<td>908,778,000.00</td>
<td>201,950.67</td>
</tr>
<tr>
<td>3</td>
<td>Dwelling houses with shop</td>
<td>29</td>
<td>832,987,300.00</td>
<td>185,108.29</td>
</tr>
<tr>
<td>4</td>
<td>Crops</td>
<td>3,099</td>
<td>272,334,280.00</td>
<td>60,518.73</td>
</tr>
<tr>
<td>5</td>
<td>Borrow Pits + Camp Sites</td>
<td></td>
<td>550,875,000.00</td>
<td>122,416.67</td>
</tr>
<tr>
<td>6</td>
<td>Total</td>
<td></td>
<td>2,570,711.00</td>
<td>1,381,950.95</td>
</tr>
<tr>
<td>7</td>
<td>Administrative cost (5%)</td>
<td></td>
<td>310,938,964.00</td>
<td>69,097.55</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td></td>
<td><strong>6,529,718,244.00</strong></td>
<td><strong>1,451,048.50</strong></td>
</tr>
</tbody>
</table>