

**ROAD DEPARTMENT OF GEORGIAN MINISTRY OF REGIONAL  
DEVELOPMENT AND INFRASTRUCTURE**



**Environmental and Social Management Plan**

**REHABILITATION OF SECONDARY**

**S-94 Tsalendjikha-Jvari-Jvarzeni**

**Road Section km 8-km 12, 5**

**Tbilisi, Georgia**

**2018**

## PART I: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE																																											
Country	Georgia																																										
Project title	Rehabilitation of secondary Road S-94, Tsalendjikha-Jvari-Jvarzeni, section km 8-km 12, 5																																										
Scope of project and activity	<p>The asphalt-concrete layer of the proposed road section is damaged. The thickness of the road varies between 5-8cm. In some sections, previous repair works are observed. In some sections, asphalt/concrete layer is fragmental and traffic flows on gravel layer.</p> <p>On the road proposed for rehabilitation, there are 11 culverts with different diameters and cross-section. The culverts should be replaced, cleaned or rehabilitated during the proposed rehabilitation works.</p> <p>There are no guardrails along the proposed road section. Only fragments of old damaged guardrails are observed in some subsections. Due to the landscape installation of the new guardrails will be required during the rehabilitation of the proposed road section.</p> <p>There are no traffic signs at the proposed road section, the new signs will be installed during the rehabilitation of the proposed road section.</p> <p>There are number of residential buildings and private/private used land plots along the proposed rehabilitation road section, the pavement will be installed to insure entrances to existing gates. The culverts (Diam. =0.5 m) will be arranged at the proposed road section in order to pass through drainage water. The similar works will be done with road junctions and if necessary culverts will be arranged (Diam.=0.5 m)</p> <p>Design Decision Table</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Classification</th> <th>Design Result</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Rehabilitation Length (km)</td> <td>5.385 Km</td> </tr> <tr> <td>2</td> <td>Design Speed (km/hrs)</td> <td>40.0 Km/h</td> </tr> <tr> <td>3</td> <td>Carriageway Width (m)</td> <td>6.0 m</td> </tr> <tr> <td>4</td> <td>Shoulder Width (m)</td> <td>1.0 m</td> </tr> <tr> <td>5</td> <td>Cross-section (%)</td> <td>2.5 %</td> </tr> <tr> <td>6</td> <td>Pavement Thickness (cm)</td> <td> <p><b>Type-1</b> Surface course: 4 cm base course: 6 cm</p> <p><b>Type-2</b> Surface course: 5 cm Leveling layer of asphalt: 3 cm Base course of existing asphalt: 6 cm</p> </td> </tr> <tr> <td>7</td> <td>Culverts (Unit)</td> <td>15 units</td> </tr> <tr> <td>8</td> <td>Bus Stop (Unit)</td> <td>1 unit</td> </tr> <tr> <td>9</td> <td>Junctions (Unit)</td> <td>16 units</td> </tr> <tr> <td>10</td> <td>Yard Entrance (Unit)</td> <td>89 units</td> </tr> <tr> <td>11</td> <td>Construction period (Month)</td> <td>6 months</td> </tr> <tr> <td>12</td> <td>Sidewalks</td> <td>With total length 2276m Pk35+20-53+85 Pk40+19-41+05 Pk41+90-46+65</td> </tr> </tbody> </table>				No.	Classification	Design Result	1	Rehabilitation Length (km)	5.385 Km	2	Design Speed (km/hrs)	40.0 Km/h	3	Carriageway Width (m)	6.0 m	4	Shoulder Width (m)	1.0 m	5	Cross-section (%)	2.5 %	6	Pavement Thickness (cm)	<p><b>Type-1</b> Surface course: 4 cm base course: 6 cm</p> <p><b>Type-2</b> Surface course: 5 cm Leveling layer of asphalt: 3 cm Base course of existing asphalt: 6 cm</p>	7	Culverts (Unit)	15 units	8	Bus Stop (Unit)	1 unit	9	Junctions (Unit)	16 units	10	Yard Entrance (Unit)	89 units	11	Construction period (Month)	6 months	12	Sidewalks	With total length 2276m Pk35+20-53+85 Pk40+19-41+05 Pk41+90-46+65
No.	Classification	Design Result																																									
1	Rehabilitation Length (km)	5.385 Km																																									
2	Design Speed (km/hrs)	40.0 Km/h																																									
3	Carriageway Width (m)	6.0 m																																									
4	Shoulder Width (m)	1.0 m																																									
5	Cross-section (%)	2.5 %																																									
6	Pavement Thickness (cm)	<p><b>Type-1</b> Surface course: 4 cm base course: 6 cm</p> <p><b>Type-2</b> Surface course: 5 cm Leveling layer of asphalt: 3 cm Base course of existing asphalt: 6 cm</p>																																									
7	Culverts (Unit)	15 units																																									
8	Bus Stop (Unit)	1 unit																																									
9	Junctions (Unit)	16 units																																									
10	Yard Entrance (Unit)	89 units																																									
11	Construction period (Month)	6 months																																									
12	Sidewalks	With total length 2276m Pk35+20-53+85 Pk40+19-41+05 Pk41+90-46+65																																									
Supervision arrangements (Name and position)	WB (Project Team Leader) <b>Natalya Stankevich</b>	Project Management <b>Giorgi Tsereteli</b>	Local Counterpart and/or Recipient Tsalemjikha Municipality																																								
Implementation	WB	Local Counterpart	Local Inspectorate	Contractor																																							

arrangements (Name and position)	Safeguard Supervision <b>Darejan Kapanadze</b> Environment <b>David Jijelava,</b> Social	Supervision Not selected	Supervision -	Not selected
-------------------------------------	--	-----------------------------	------------------	--------------

## SITE DESCRIPTION

Name of site	S-94, Tsalendjikha-Jvari-Jvarzeni, Secondary Road section km 8-km 12, 5																				
Describe site location	The proposed road passes through mountainous and in flat areas. According to the visual observation there are not geo-dynamic processes occur. There are several rivers passing the proposed road section. The Enguri is the main river with its most important tributaries Chkhina, Vitsi, Olori (right), Khuberi and Magana (left). The river Chanistskali is located in the southern part of the study region. The tributaries of the river are Intsra, Skurdile and others. The rivers Jumi and Ochkhomuri are also located in the study region.																				
Who owns the land?	(i) The existing ROW is owned by Tsalenjikha municipality; (ii) State Forest Fund under the LEPL National Forest Agency of the Ministry of Environment Protection and Agriculture of Georgia (1,260 m <sup>2</sup> ). The territory had been de-listed from the State Forest Fund; (iii) The investment will not conduct any widening or realignment that may cause impact on private lands or assets.																				
Description of geographic, physical, biological, geological, hydrographic and socio-economic context	<p><b>Location:</b> The project road is located in Samegrelo Zemo Svaneti region, in Tsalenjixa Municipality, Georgia.</p> <p><b>Air-</b> Air quality in the subproject area is good due to low traffic levels and the absence of industrial facilities.</p> <p><b>Water and Soil</b> – No pollution is reported.</p> <p><b>Flora</b>– On the above-mentioned territory following tree species are registered.</p> <table border="1"> <thead> <tr> <th colspan="2">Species</th> <th rowspan="2">number of trees</th> </tr> <tr> <th>English name</th> <th>Latin</th> </tr> </thead> <tbody> <tr> <td>wild cherry</td> <td><i>Cerasus avium</i></td> <td>10</td> </tr> <tr> <td>Caucasian Hornbeam</td> <td><i>Carpinus caucasica</i></td> <td>4</td> </tr> <tr> <td>Alder</td> <td><i>Alnus Barbata</i></td> <td>69</td> </tr> <tr> <td>chesnut</td> <td><i>Castanea sativa</i></td> <td>2</td> </tr> <tr> <td>princesstree</td> <td><i>Paulownia Tomentosa</i></td> <td>27</td> </tr> </tbody> </table> <p>These species had been de-listed from the LEPL National Forest Agency of the Ministry of Environment Protection and Agriculture of Georgia. The Red Listed species do not occur.</p> <p><b>Fauna</b> - The road section passes through the degraded territory and accordingly the fauna is not reach. Mostly fauna is presented by the species which does not need any special protecting measures. Due to the small area of the project the impact on the fauna will be minimal.</p> <p><b>Noise</b> - The current noise level is low due to low traffic levels and a lack of industrial facilities.</p> <p>Construction activities will have modest impact on those people who reside in existing villages (immediately along the road) and this impact will be limited to the rehabilitation phase.</p> <p><b>Social</b> – Total number of subproject beneficiaries in a 2 km buffer zone of the section is 5 villages with a total of 4637 population. Population density for the project is 843.</p>	Species		number of trees	English name	Latin	wild cherry	<i>Cerasus avium</i>	10	Caucasian Hornbeam	<i>Carpinus caucasica</i>	4	Alder	<i>Alnus Barbata</i>	69	chesnut	<i>Castanea sativa</i>	2	princesstree	<i>Paulownia Tomentosa</i>	27
Species		number of trees																			
English name	Latin																				
wild cherry	<i>Cerasus avium</i>	10																			
Caucasian Hornbeam	<i>Carpinus caucasica</i>	4																			
Alder	<i>Alnus Barbata</i>	69																			
chesnut	<i>Castanea sativa</i>	2																			
princesstree	<i>Paulownia Tomentosa</i>	27																			
Locations and distance for material sourcing, especially inert aggregates, water, stones	Contractor may choose to operate quarry located in Tsalendjikha municipality, Jvari, 4 km away.																				

LEGISLATION	
Identify national & local legislation & permits that apply to project activity	<p>The project triggers World Bank OP/BP 4.01 - Environmental Assessment and, according to its principles, has been classified as environmental Category B. The present ESMP has been prepared to meet requirements of OP/BP 4.01.</p> <p>Georgian legislation does not require any type of environmental review, approval, or permitting for the project. Though according to the national regulatory system,</p> <ul style="list-style-type: none"> <li>(i) Contractor company must be licensed,</li> <li>(ii) Construction materials must be obtained from licensed providers,</li> <li>(iii) Once contractor wishes to open quarries, then the contractor must obtain respective license.</li> <li>(iv) If, in time of rehabilitation, contractor wishes to operate own asphalt or concrete (Or both) plants, he should have permission regarding specified limited level of pollutant substances in exhaust.</li> <li>(v) Disposal of the construction waste and excess ground generated in the course of earth works shall be placed in selected locations agreed and approved by local governing bodies in written.</li> <li>(vi) Land plots along the road required for undertaking of planned works were subject to de-listing from the Territory of the State Forest Fund and transfer to the Road Department. The process finished.</li> </ul>
GRIEVANCE REDRESS MECHANISM	
	<p>A grievance redress mechanism will be available to allow an AP appealing any decision on which they disagree; The APs should be informed about the available GRM. This could be achieved through distributing brochures and relevant information provided and announced.</p> <p>APs will be fully informed of their rights and of the procedures for addressing complaints whether verbally or in writing during pre-contraction, construction and operation periods. Care will always be taken to prevent grievances rather than going through a redress process.</p> <p>Tsalenjikha Municipality have assigned a responsible person:  <b>Dzemaal Kvaraxelia T: 599 857140 tsalenjikhaskrebulo@gmail.com</b></p> <p>The Contact Person collects and records the grievances in special log.</p> <p>If the grievance will not be unsolved at the local level, it will be lodged to the RDMRDI.</p> <p>Grievance Redress Commission (GRCN) is formed by the order of the Head of RDMRDI as a permanently functional informal structure, engaging personnel of RDMRDI from all departments. This includes top management, Safeguards, Legal Departments, PR department and other relevant departments (depending on specific structure of the IA).</p> <p>If the RDMRDI decision fails to satisfy the aggrieved APs, they can pursue further action by submitting their case to the appropriate court of law (Rayon Court) without any reprisal.</p>
PUBLIC CONSULTATION	
Identify when / where the public consultation process shall take place	<p>Environmental Management Framework for the Secondary and Local Roads Project III was disclosed through the RDMRDI web page and a stakeholder consultation meeting was held on 11/04/2014.</p> <p><a href="http://www.georoad.ge/uploads/files/SLRP_III_ESMF_April%203_WBcomments47.pdf">http://www.georoad.ge/uploads/files/SLRP_III_ESMF_April%203_WBcomments47.pdf</a></p> <p>Present draft ESMP was posted on the RDMRDI website and its printed versions was provided to Tsalenjikha Municipality. Public consultation on the draft ESMP was held in Jvari municipality July 25, 2018. The Minutes of public consultation are attached to this document</p>
ATTACHMENTS	
<p>Attachment 1: Site map;</p> <p>Attachment 2: Minutes of public consultation on the draft ESMP</p> <p>Attachment 3: Waste disposal agreement (<u>to be provided by contractor</u>);</p> <p>Attachment 4: Borrowing license (<u>as applicable, to be provided by contractor</u>);</p> <p>Attachment 5: Asphalt plant operation agreement (<u>as applicable, to be provided by contractor</u>);</p> <p>Attachment 6: Other (<u>as applicable</u>)</p>	

**PART II: SAFEGUARDS SCREENING AND TRIGGERS**

---

ENVIRONMENTAL /SOCIAL SCREENING FOR SAFEGUARDS TRIGGERS			
	Activity/Issue	Status	Triggered Actions
Will the site activity include/involve any of the following?	1. Roads rehabilitation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section A
	2. New construction of small traffic infrastructure	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section A
	3. Impacts on surface drainage system	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section B
	4. Historic building(s) and districts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section C
	5. Acquisition of land <sup>1</sup>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section D
	6. Hazardous or toxic materials <sup>2</sup>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section E
	7. Impacts on forests and/or protected areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section F
	8. Risk of unexploded ordinance (UXO)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section G
	9. Traffic and Pedestrian Safety	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section H
	10. Impacts on land property and use	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If “Yes”, see Section H
	11. Social risk	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section I

-----  
<sup>1</sup> Land acquisition includes displacement of residents, change the way of life, this is concerning with land which was purchased/handed over and impact on persons living and/or unlawfully exist and or/performing business activities (Booths) on the land already purchased.

<sup>2</sup> Hazardous or toxic materials contain, but is not limited to: asbestos, toxic paints, hazardous dissolvent materials, removal of lead containing materials and etc.

## PART III: MITIGATION MEASURES

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
0. General Conditions	Notification and Worker Safety	<ul style="list-style-type: none"> <li>a) The local construction and environment inspectorates and communities have been notified of upcoming activities</li> <li>b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)</li> <li>c) All legally required permits have been acquired for construction and/or rehabilitation</li> <li>d) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.</li> <li>e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</li> </ul>
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> <li>a) During excavation works dust control measures shall be employed, e.g. by spraying and moistening the ground</li> <li>b) Demolition debris, excavated soil and aggregates shall be kept in controlled area and sprayed with water mist to reduce debris dust</li> <li>c) During pneumatic drilling or breaking of pavement and foundations dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site</li> <li>d) The surrounding environment (sidewalks, roads) shall be kept free of soil and debris to minimize dust</li> <li>e) There will be no open burning of construction / waste material at the site</li> <li>f) All machinery will fit emission originating regulations, well maintained and serviced and there will be no excessive idling of construction vehicles at sites</li> </ul>
	Noise	<ul style="list-style-type: none"> <li>a) Construction noise will be limited to restricted times agreed to in the permit</li> <li>b) During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible</li> </ul>
	Water Quality	<ul style="list-style-type: none"> <li>a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in canalization and nearby streams and rivers</li> </ul>
	Waste management	<ul style="list-style-type: none"> <li>a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from excavation, demolition and construction activities.</li> <li>b) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</li> <li>c) Construction waste will be collected and disposed by licensed company</li> <li>d) In order to control waste disposal accuracy and compliance, waste disposal reports shall be done</li> <li>e) Whenever feasible Contractor will reuse and recycle appropriate and viable materials (except when containing asbestos)</li> </ul>
B. Impacts on surface	Water Quality	<ul style="list-style-type: none"> <li>a) There will be no unregulated extraction of groundwater, nor uncontrolled discharge of process waters, cement slurries, or any other</li> </ul>

drainage system		<p>contaminated waters into the ground or adjacent streams or rivers; contractor should obtain all necessary licenses and permits for water extraction and for further pouring out of used water in state current water system</p> <p>b) There will be proper storm water drainage systems installed and care taken not to silt, pollute, block or otherwise negatively impact natural streams, rivers, ponds and lakes by construction activities.</p> <p>c) There will be procedures for prevention of and response to accidental spills of fuels, lubricants and other toxic or noxious substances.</p> <p>d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.</p>
C. Historic building (s)	Cultural Heritage	<p>a) If construction works takes place to a designated historic structures or are located in a designated historic district, notification shall be made and approval/permits be obtained from local authorities and all construction activities planned and carried out in line with local and national regulation</p> <p>b) It shall be ensured, that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted and registered, responsible officials contacted and work activities delayed or account for such finds</p>
D. Acquisition of land	Land Acquisition Plan/Framework	<p>a) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank's Task Team Leader shall be immediately consulted.</p> <p>b) The approved Land Acquisition Plan/Framework (if required by the project) will be implemented</p>
E. Toxic materials	Asbestos management	<p>a) If asbestos is located on the project site, it shall be marked clearly as hazardous material</p> <p>b) When possible of asbestos will be appropriately contained and sealed to minimize exposure</p> <p>c) Asbestos prior to removal (If necessary) will be treated with a wetting agent to minimize asbestos dust</p> <p>d) Asbestos will be handed and disposed by skilled &amp; experienced professionals</p> <p>e) If asbestos material is stored temporarily, the waste should be securely enclosed inside closed container and marked appropriately. Security measures will be taken against unauthorized removal from the site.</p> <p>f) Removal of asbestos will not be reused</p>
	Toxic / hazardous waste management	<p>a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information</p> <p>b) Containers of hazardous substances shall be placed in a leak-proof container to prevent spillage</p> <p>c) Waste shall be transported by specially licensed carriers and disposed in licensed facility</p> <p>d) Paints with toxic ingredients or solvents or lead-based paints will not be used</p>
F. Affected forests, wetlands and/or protected areas	Ecosystem protection	<p>a) Works within the territory of the State Forest Fund are disallowed prior to completion of de-listing and user right transfer to this territory from the National Forest Agency to the RD</p> <p>b) Tree cutting must be held down to minimum by adjusting alignment of access roads, using small machinery or manual labor in individual locations, etc.</p> <p>c) All trees that have to be extracted must be marked and their removal must be entered into tree-cutting ledger on daily basis</p>
G. Risk of unexploded ordinance (UXO)	Hazard to human health and safety	<p>a) Before to start any excavation activities, Contractor shall verify that the construction area has been checked and cleared regarding UXO by appropriate authorities</p>

H. Traffic and pedestrian safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>In compliance with national regulations, ensure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Use signposting, warning signs, barriers and traffic diversions so that the work site is clearly visible and the public warned of all potential hazards</li> <li>• Apply traffic management system and train staff, especially for site access and near-site heavy traffic; provide safe passages and crossings for pedestrians where construction traffic interferes.</li> <li>• Adjust working hours to local traffic patterns, e.g. avoid major transport activities during rush hours or times of livestock movement</li> <li>• If required, undertake active traffic management by trained and visible staff at the site for safe passage for the public</li> <li>• If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours</li> <li>• Ensure safe and continuous access to all adjacent office facilities, shops and residences during construction</li> </ul>
I. Social Risk Management	Public relationship management	<ul style="list-style-type: none"> <li>• Assign local liaison person within Contractor's team to be in charge of communication with and receiving requests/ complaints from local population</li> <li>• Consult local communities to identify and proactively manage potential conflicts between an external workforce and local people</li> <li>• Raise local community awareness about sexually transmitted disease risks associated with the presence of an external workforce and include local communities in awareness activities.</li> <li>• Inform the population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.</li> <li>• Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.</li> <li>• At least five days in advance of any service interruption (including water, electricity, telephone, bus routes), advice community through postings at the work site, at bus stops, and in affected homes/businesses.</li> <li>• Address concerns raised through Grievance Redress Mechanism established by the Employer within the designated timeline within the scope of Contractor's liability</li> <li>• To the extent possible, work camps should not be located in close proximity to local communities</li> <li>• Siting and operation of worker camps should be undertaken in consultation with neighboring communities</li> </ul>
	Labor management	<ul style="list-style-type: none"> <li>• The Contractor will recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, worker skills training, should be provided to enhance participation of local people.</li> <li>• The Contractor will provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices. A temporary septic tank system should be established for any residential labor camp and without causing pollution of nearby watercourses</li> <li>• The Contractor will raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale</li> </ul>

**PART IV: MONITORING PLAN**

**Construction Phase**

<b>Activity</b>	<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Who</b> (Is responsible for monitoring?)
Supply of construction materials	Purchase of the construction materials from licensed providers	Offices and warehouses of material suppliers, and borrowing sites	Checking documents; Inspection of material quality	In the process of signing the agreements for material provision	Ensure technical quality of construction; Protect human health and environment	Roads Department (RD)
Works in the forested territory	No physical activity takes place in the territory of the State Forest Fund until de-listing and user right transfer procedures are complete; Movement of construction vehicles and machinery, storage, or other activities do not damage and cause cutting of trees unless tree extraction is required for arranging road surface and shoulders; Trees that must be extracted are labeled prior to removal and each extracted tree is entered into the tree cutting ledger (species and diameter identified)	Work site within forested territory  Construction contractor's office	Checking documents  Visual observation	Prior and in the course of works within the forested territory	Ensure compliance with the national legislation;  Minimize impact on forested area;  Facilitate procedure of hand over of logs generated through tree cutting	RD  LEPL National Forest Agency of the Ministry of Environment Protection and Agriculture
Transportation of construction materials and waste  Movement of construction equipment	Technical condition of construction vehicles and machinery; Adequacy of the loading trucks for transported types of cargo, and canopy coverage of cargo transported in open trucks; Movement of construction vehicles and	Routes for transportation of construction materials and construction wastes	Inspection of roads adjacent to the construction site and included in the agreed-upon routes of transportation	Unannounced checks during the working hours	Avoid air and road pollution with dust and solid matter;  Reduce traffic disruption	RD; Traffic Police

	machinery along pre-defined routes.					
Operation of Construction machinery on site	<p>Proper technical condition of construction machinery:</p> <ul style="list-style-type: none"> <li>• no excessive exhaust,</li> <li>• no fuel leakage,</li> <li>• respect of working hours</li> <li>• no damage to trees and other vegetation what does not need to be created for the purposes for road construction</li> </ul>	Construction site	Inspection	Within and off working hours	<p>Reduce air and soil pollution caused by equipment operation;</p> <p>Reduce noise and dust nuisance to local population</p>	RD
Servicing of construction machinery	<p>Washing vehicles and machinery off-site of in the location sufficiently distant from water bodies;</p> <p>Servicing vehicles and machinery with oils and lubricants off-site or in an especially arranged location on-site;</p> <p>technical adequacy of the servicing location:</p> <ul style="list-style-type: none"> <li>•solid, insulating floor or adsorbent layer (sand, gravel, membrane),</li> <li>•containment barriers allowing enough sapce for holding fuel over the maximum amount expected on the location at a time,</li> <li>•emergency fire-fighting kit,</li> <li>•sedimentation pool at car wash area.</li> </ul>	Construction site and construction base (if applicable)	Inspection	Entire period of machinery operation	<p>Avoid land and water pollution with oil products due to servicing of vehicles and machinery;</p> <p>Be ready for fire emergency action to promptly localize fire source and minimize material damage</p>	RD
Extraction of natural construction	Purchase of natural construction material from the existing providers if possible;	Borrow areas	Checking documents	The period of material extraction	Reduce slope erosion and damage to the ecosystem and landscape;	RD; LEPL National Agency of Mines of the

material	<p>Obtaining license for extraction of material by the Contractor and strict adherence to the terms of such license;</p> <p>Terrace processing of the borrow pits, backfilling of excess material, and harmonization with landscape;</p> <p>River bed gravel extraction away from water flow, arrangement of gravel barriers for isolating extraction area from water flow, prevention of water flow entry by vehicles and machinery;</p> <p>Demarcation of borrow areas with warning signs</p>		Inspection of activities		<p>Reduce river bank erosion, water pollution with suspended particles, and impact on the aquatic life;</p> <p>Protection of animals and people from accidents</p>	Ministry of Economy and Sustainable Development of Georgia
Generation of construction waste	<p>Temporary storage of inert and hazardous wastes separately at the designated locations;</p> <p>Timely disposal of waste to the formally designated landfills;</p> <p>Hand-over of hazardous wastes to licensed deactivating and processing companies.</p>	<p>Construction site and base (if applicable);</p> <p>Locations designated for waste disposal</p>	<p>Checking documents;</p> <p>Visual observation</p>	Entire period of construction	Avoid pollution of the environment	RD; Tsalenjikha Municipality
Accumulation of household waste	<p>Provision of waste containers on-site;</p> <p>Agreement with local municipality for regular out-transporting of waste</p>	Construction site and base (if applicable)	Visual inspection	Entire period of construction	Avoid pollution of soil and water with household waste	RD; Tsalenjikha Municipality
Generation of liquid waste	<p>Arrangement and operation of toilets compliant with sanitary norms on-site;</p> <p>Arrangement of drainage system for storm water collection and periodic cleaning of the system from silt;</p> <p>Arrangement of sedimentation pool for</p>	Construction site and base (if applicable)	Visual inspection	<p>Entire period of construction</p> <p>Increased frequency of inspection in periods of high precipitation</p>	<p>Avoid flooding of construction site and base;</p> <p>Reduce pollution of surface and ground water</p>	RD

	waste water collection on-site					
Operation of asphalt-concrete plant	Obtaining permit for impacting environment by Contractor and strict adherence to its terms;  Placement of plant in the location permissive for minimal disturbance of local population;  Arranging sedimentation pool for capturing of liquid discharges from plant	Construction site and base (if applicable)	Checking documents  Inspection	Before establishment of plant and during entire period of its operation	Reduce inconvenience for local population due to plant operation;  Reduce air and surface water pollution from emissions and discharges from plant	RD;  LEPL National Environment Agency of the Ministry of Environment Protection and Agriculture
Safety of labor	Provision of uniforms and personal protective gear to workers and enforcement of their use;  Consistency with the rules of exploitation of the construction equipment and machinery	Construction site	Inspection of the activities	Entire period of construction	Reduce the probability of accidents	RD
Works near privately-owned land, buildings and other assets	Precaution measures to avoid trespassing or incidentally damaging of private property (using small-size machinery or manual labor near walls and fences; stockpiling of construction material and waste away from private property; etc.)	Works near privately-owned land, buildings and other assets	Monitoring and inspection	Entire period of construction	Reduce the probability of damages on private and any kind of property	RD
Involuntary resettlement	If the project implementation requires any form of involuntary resettlement, prepare, clear with the World Bank and implemented Resettlement Action Plan	Within the RoW	Permanent monitoring of impacts on the privately-owned land or other assets	Entire period of construction	To avoid any impact on private lands or assets	RD

## Operation Phase

<b>Activity</b>	<b>What</b> (Is the parameter to be monitored?)	<b>Where</b> (Is the parameter to be monitored?)	<b>How</b> (Is the parameter to be monitored?)	<b>When</b> (Define the frequency / or continuous?)	<b>Why</b> (Is the parameter being monitored?)	<b>Who</b> (Is responsible for monitoring?)
Cleaning road surface and shoulders from waste	Trash deposited from moving vehicles timely collected and removed;  Bodies of animals overrun by vehicles timely collected and removed	Carriageway and shoulders of the road section	Inspection	Quarterly	Prevent road littering;  Road safety	Tsalenjikha Municipality
Keeping road drainage system operational	Periodic cleaning of drainageditches from silt and trash	Drainage system long the road section	Inspection	Quarterly	Maintaining drainage system capacity for preventing road flooding and water damage	Tsalenjikha Municipality
Confinement of accidental spills and clean-up	Timely confinement, deactivation, and removal of liquid or powder spills of cargo in case of road accidents	On the road and its immediate surroundings	Inspection	Upon occurrence of accidents, as required	Prevent pollution of soil and water	Traffic Police;  Tsalenjikha Municipality
Disposal of waste from regular road maintenance works	Collection and timely disposal of waste from maintenance works to the designated landfill	On the road and its immediate surroundings	Inspection	Towards completion of scheduled maintenance works	Prevent environment pollution	Tsalenjikha Municipality



Attachment 2:

MINUTES

Of public consultation meeting on  
Environmental and Social Management plan for  
Rehabilitation of Secondary (S-94) Tsalenjikha-Jvari-Jvarzeni Road Section KM8-KM12.5

25.07.2018

Jvari Municipality

*Chairman of meeting* – Gia Sopadze, Head of the Environmental Division of the Roads Department of Georgia

*Speakers:* Gia Sopadze

*Attendees of the Meeting:* See attachment 1

The goal of the public discussion was to inform the local communities about the purpose of the upcoming works, their timeline; temporary inconvenience expected from the construction works; and planned measures for mitigating the expected negative environmental impact. Local stakeholders had possibility to ask questions and express their opinion during the public discussion, so that their comments could have been considered in the final version of the Environmental and Social Management Plan.

Mr. Gia Sopadze, Head of the Environment Protection Division was representative of the Roads Department of Georgia.

Mr. Gia Sopadze opened the meeting and informed attendees about meaning of Secondary and Local Roads Project for Georgian economic development, also presented the Environmental and Social Management Plan of Rehabilitation works under Secondary and Local Roads Project. He covered the scope of planned works, their possible impact on the natural environment and human health. Also it was overviewed proposed mitigation measures to reduce negative environmental impacts of the project in the construction and operation phases.

Nº	Questions	Answers
1.	When will the rehabilitation works of the road start?	The rehabilitation works will start as soon as the tender will be announced and the winner

		will be contracted
2.	Does the noise disturb the local population during the rehabilitation works?	<p>The Roads Department will implement mitigation measures to prevent the noise and vibration disturbance during the rehabilitation works;</p> <p>In addition, it is required to follow the restrictions of the working activities during the non-working hours. The contractor will work during the daytime (from 07:00 am to 07:00 pm), which will be monitored by the supervisor and the Roads Department.</p>
3.	How the dust problem be reduced during the rehabilitation works?	The company who will be implementing the rehabilitation works will be obliged to water the site to prevent dust prevention

Representatives of Roads Department of Georgia:

Gia Sopadze



(signed)


შიდასახელმწიფოებრივი მნიშვნელობის შ-94 წაღწევა - ჯვარი - ჯვარზენი საავტომობილო გზის კმ 8 - კმ 12.5 მონაკვეთის სარეაბილიტაციო სამუშაოების ბუნებრივ და სოციალურ გარემოს მართვის გეგმის საჯარო განხილვა

№	სახელი და გვარი	საკონტაქტო ინფორმაცია	ხელმოწერა
	სალომე შაბაძე	568 93 62 11	ქ. შაბაძე
	ახილანა ბიძინაძე		ბ. ბიძინაძე
	გიორგი ბერძენი	597-84-48-46	გ. ბერძენი
	დავით ზუბურაძე	568 93 08 08	დ. ზუბურაძე
	გიორგი ბერიძე	555 23 20 22	გ. ბერიძე
	საბურთაძე ივანე	555-64-98-23	ს. საბურთაძე
	საბურთაძე თეოდორე	568-96-40-29	ს. საბურთაძე
	საბურთაძე თეოდორე	597-85-72-01	ს. საბურთაძე
	გიორგი ბერიძე		გ. ბერიძე
	საბურთაძე ივანე	555 14 29 56	ს. საბურთაძე

შიდასახელმწიფოებრივი მნიშვნელობის შ-94 წაღენჯისა - ჯვარი - ჯვარზენი საავტომობილო გზის კმ 8 - კმ 12.5 მონაკვეთის სარეაბილიტაციო სამუშაოების ბუნებრივ და სოციალურ გარემოს მართვის გეგმის საჯარო განხილვა

№	სახელი და გვარი	საკონტაქტო ინფორმაცია	ხელმოწერა
21	ბაღა სლო-	599-85-71-18	ვ. სლო
	ჭიჭი, ლიძონ		ა. ჭიჭი
	გახია გუჩია		გ. გახია
	შაივა შაი		შ. შაი
	სახლია ვაჟა სუბო		ს. სახლია
	საგა ვეცხია		ს. საგა
	სახლია ნინო		ს. სახლია
	ვაჟა ვაჟა		ვ. ვაჟა
	შენი შიქო		შ. შიქო
	ნინო ვაჟა		ნ. ვაჟა

შიდასახელმწიფოებრივი მნიშვნელობის შ-94 წაღენჯისა - ჯვარი - ჯვარზენი საავტომობილო გზის კმ 8 - კმ 12.5 მონაკვეთის  
სარეაბილიტაციო სამუშაოების ბუნებრივ და სოციალურ გარემოს მართვის გეგმის საჯარო განხილვა

№	სახელი და გვარი	საკონტაქტო ინფორმაცია	ხელმოწერა
	თაძის სერო	594 95-96-69	თ. სერო
	გიორგი შხაიას	577-389-365	გ. შხაიას
	ვახა ფიფია	592 -59-04-92	გ. ფიფია
	ქებაშვილ შხაიას	595 50-83-62	ქ. შხაიას
	მთაწარ ფიფია	557-61-54-83.	მ. ფიფია
	ანტონი ფიფია		ან. ფიფია
	ვიკტორ ვიფია	555-36-68-16	გ. ვიფია
	გიორგი ტყეშელაშვილი	5-99-87-66-88	
	დავით ჯორჯაძე	514 550-550.	დავ. ჯორჯაძე

(ნინო აბულაძე  
სახელმწიფო  
ინფორმაცია)