

Environmental Impact Assessment

Project Number: 53178-001
May 2019

GEO: East–West Highway (Shorapani–Argveta
Section) Improvement Project

Part G (Section A. Ó)

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Section F: Description of the Environment – This section of the report discusses the regional and local environmental baseline conditions. This section is divided into subsections relating to:

- (i) Physical: geology; topography; soils; climate; air quality; noise; surface water; groundwater; seismicity and natural hazards.
- (ii) Biological: flora and fauna; rare and/or endangered species (Red List species); critical habitats and ecosystems; protected areas. Particular attention shall be given to the presence of land plots registered as the State Forest Fund.
- (iii) Human: population; communities; demographics; employment and socio-economics; land use; infrastructure (including local access roads); transport; public health; cultural heritage; archaeology; waste management; tourism.

Surveys have been conducted to address important gaps in the existing data and to collect up-to-date information on topics and areas where significant negative impacts are expected, specifically, flora, fauna, noise, air quality and water quality.

Section G: Environmental Impacts and Mitigation Measures – Section G outlines the potential environmental impacts and proposes mitigation measures to manage the impacts. This has included numerical modeling of noise, vibration and air quality to assist in predicting impacts and planning mitigation in these fields.

Section H: Environmental Management Plan – This section comprises an Environmental Mitigation Plan and an Environmental Monitoring Plan.

The Environmental Mitigation Plan:

- (i) Clearly identifies what specific potential impacts various types of works may have on the sensitive receptors;
- (ii) Provides concrete actions prescribed for managing these impacts, including location and timing of these actions;
- (iii) Provides cost estimates for the main discrete mitigation measures (those that are unlikely to be part of a construction company' corporate policy and will not necessarily be included into general pricing of the contract); and
- (iv) Specifies responsibility for the implementation of each mitigation activity.

The Environmental Monitoring Plan:

- (i) Lists all prescribed mitigation measures by types of construction activities;
- (ii) Provides selected criteria of monitoring implementation of mitigation measures;
- (iii) Specifies methods for measuring outcomes of applied mitigation measures (visual, instrumental, survey, etc.);
- (iv) Identifies location and timing/frequency of monitoring mitigation measures by the prescribed criteria;
- (v) Gives cost estimates of monitoring mitigation measures by the prescribed criteria; and
- (vi) Specifies responsibility for tracking each monitoring criterion.

154. **Section I: Public Consultation, Information Disclosure & Grievance Mechanism** – Section I provides a summary of all of the stakeholder consultation activities undertaken. The section also describes the grievance redress mechanism, setting out the mechanisms for resolving complaints about environmental performance.

155. **Section J: Conclusions and Recommendations** – The final section of the report provides the report conclusions and recommendations, including a description of any residual impacts.

B. Project Description

B.1 Section Layout

156. This section of the EIA provides the Project description. More specifically it provides;
- a) Summary of the type and location of the Project, including detailed site location maps,
 - b) Road standards and profiles,
 - c) Description of various Project components, including bridges, tunnels, interchanges, etc.,
 - d) Summary of the construction process and the sources of materials,
 - e) An overview of construction facilities, and
 - f) Summary of traffic safety measures.

B.2 Type and Location of project

157. The Project is a road construction project located in Imereti Region of central Georgia. The Project road comprises Section F4 (Shorapani – Argveta) of the Khevi-Ubisa-Shorapani-Argveta Road (E-60).

158. The alignment passes hilly-mountainous relief from KM 0.0 to KM 1.3, on the left side of the existing road both as exposed road and through two tunnels. The alignment runs in the gorge of the river Dzirula from KM 1.3 to KM 3.0, crosses the river Dzirula several times. The alignment runs on the left side of the existing road, crosses the river Borimela, enters the tunnel and joins the existing road in Shorapani from KM 3.0 to KM 4.3. The alignment follows the existing road from KM 4.3 to KM 5.6. Widening of the road takes place at the expense of cutting into the slope on the left, then the alignment turns to the right, crosses the river Kvirila and the railway twice, then the alignment turns northward of Zestaphoni through three tunnels. From KM 9.6 to the end of the route design road bypasses Zestaphoni, joins the interchange under construction at km KM 14.7 at the village Argveta located on Zestaphoni-Kutaisi motorway.

159. The length of Project road is:
- Right lane (**TA**)² - 14.778 km;
 - Left lane (**AT**) - 14.726 km.

160. **Figure 3** indicates the location of the Project within the context of Georgia and **Figure 4** illustrates the location in a local context. **Figure 5** to **Figure 14** provide a set of twelve detailed maps of the site including locations of tunnels and bridges.

B.3 Environmental Setting

163. **Figure 15** provides an overview of the F4 Section environmental setting.

² TA meaning Tbilisi – Argveta direction, AT meaning Argveta – Tbilisi direction.

Figure 3: Road Location Map



Figure 4: Project Road

