

**Community Health- and  
Safety Plan for opening the  
Beach during Summer  
Season 2018**

(Version 6)

***Coastal Protection Batumi***

*Contract No: P42414-SUTIP4-ICB-01-2016 and  
Amendment #2*

**20<sup>th</sup> of April 2018**

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## **1. Project Description**

Batumi is the capital of Autonomous Republic and one of the major cities on the Georgian Black Sea coast playing a significant role in economic, cultural and tourist development of the Country. Coastal improvement is one of the priorities among other infrastructural projects which will facilitate the future development of the City and region.

The detailed design of the revetment has been started on 2015 following the studies that have been necessary to carry on shifting from a “rigid” solution with groins to a flexible solution mainly based on beach nourishment. After a long process the solution has been approved on 2016. The detailed design was based on the bathymetry dated 2014 after checking that when the detailed design had started, not unexpected changes were occurred since that survey.

In the next two years the situation has changed sharply and with intensity that has been completely different from the experience of the last 15 years.

On May 2017, based on a specific order by MDF, Technital has presented a report on this extraordinary erosion trying to explain it and proposing the solution to adapt the revetment sections.

The Environmental Category of the proposed Batumi Coastal Protection Project is B (ADB's Safeguard Policy Statement, 2009); infrastructures under category B are foreseen not having significant irreversible or permanent negative environmental impacts during or after construction.

The main objective of the proposed project is to protect the Batumi coast against erosion. The coastline southwest of Batumi is affected by erosion over a length of about 5 km. along this section a number of houses and cultivated land has been lost already in the past. Without adequate protection measures coastal erosion will continue at the airport area and might even affect the beaches and the coastline of Batumi. The evaluation of the alternatives to protect the coast against the erosion affecting the southern section of the littoral has shown that a soft intervention, featuring recirculation of the sediment between the northern section of the littoral (where it accumulates due to natural transport pattern) and the southern portion (from where it is removed due to erosion), is the most efficient way to protect and restore the beach.

To execute these coastal protection measures the Municipal Development Fund (MDF) has contracted the Struijk Group Georgia Branch (Struijk). The construction contract between MDF and Struijk was signed on November the 15<sup>th</sup>, 2016 and has an estimated duration of 20 up to 34 months. Project is already started on February 2017.

Project participants are: Client is “Municipal Development Fund” of Georgia – (MDF), Consulting, Engineering and Design is “Technital” & “Saunders Group” (Engineers) and Contractor is “Struijk Group Georgia Branch”.

## **2. Introduction**

During the projects implementation several issues, related to the environmental and social safeguards and disputes on entitlement processes, might be occur due to the Projects activities. For example, intensive schedule of construction activities, inappropriate timing of construction vehicle flow, waste, noise and air pollution from construction activities, ecological disturbances, cultural conflicts between migrant workers, are some of the environmental and social safeguard issues that are likely to be raised from the Project activities.

In order to provide a direct channel to the affected persons for approaching project authorities and have their grievance recorded and redressed in an appropriate time frame, Grievance Redress Mechanism was established with efforts of MDF within the project.

Complaints’ registration journal is created and available at construction site. The copy of journal with mobile numbers of relevant persons Grievance Focal Pointes - Social Manager of SC Maia Khandurdieva and Kakhaber Beridze (local resident) is placed at local Municipality as well. Complaints’ from the people, regarding the environmental safeguard issues in case of their disturbance and inconvenience, because of improper or inadequate implementation of SSEMP, can be accepted in both places. In case of having Complaints’, they will be registered in database system, assigning compliant number with date of receipt. Complaints’ will be investigated and complainant will be informed about time frame in which the corrective action will be undertaken, in case if the raised problem is realistic.

In some cases resolution of grievances that fall under direct responsibility of Contractor (CC) can be effectively addressed at level of CC and Supervision Consultant (SC), without involvement of MDF or latterly the ADB.

Grievances to be handled at the level of CC or SC include:

- Social concerns related to contractor activity;
- Environmental management;
- Community safety.

MDF, as EA, facilitates the grievance resolution by implementing a project-specific Grievance Redress Process (GRP). It will deliver grievances to relevant authorities, in case if such grievances are sent to MDF. The official administrative bodies are obliged to respond to the grievances that have been received from population or other interested parties in accordance with the requirements of the Administrative Code of Georgia.

According to the existing legal and administrative system in Georgia, there are several entities responsible for addressing environmental complaints of population and interested parties. The administrative bodies directly responsible for environmental protection within the projects area are: MoE, municipal offices (Gangeoba) and Batumi City Hall. The affected population and stakeholders may send their grievances, related to the project-induced environmental impacts directly to the mentioned administrative bodies responsible for environmental protection.

For effective implementation of grievance redress mechanism (GRM), every month Stakeholders Engagement Meetings are held at project area with participation of GFPs and CC and SC staff. During the meetings several different issues are being discussed and considered by participants; Particular interest was expressed from local residents about the project activities during the summer season. They have emphasized the importance to have beach access open during the summer season.

ADB mission requested CC in coordination with PIU/MDF to develop a method statement and community health and safety plan to deal with construction works during the summer months.

### **3. Scope**

The purpose of this plan is to provide the information and method by which community and tourists health and safety will be ensured, during an open beach section in summer; Also, plan will provide information regarding the existing risks and measures which should be taken to deal with those risks and take all the necessary precautions to provide a safe opened section.

#### 4. Risk analysis during preparation activities and summer season

Activities	Identification of risk	Risk level	Measures taken	Responsible person
Walking on the beach	Fall hazards due to the unsafe access to the beach	Medium	To eliminate trip and fall hazards proper access will be provided to the beach. Slope will be gradual to enable locals or tourists to reach to the beach safely	Site Manager
Violation of site boundaries	The risk to come to close to the equipment or actual working activities area which is dangerous	High	Sloped sides of the access to the beach will be barricaded by fences to separate access to the beach from the site territory; The side fences will be provided with appropriate warning and prohibition signs to inform locals and tourists regarding the existing risks and prohibited actions or regarding any hazardous information; Regular monitoring for site boundaries will be done by Health and Safety Manager to ensure that tourists or locals from the opened section will not cross the site boundaries and prevent them from entering the site where actual working activities takes place. Also, the boulevard police will be appointed at the site boundaries to ensure that nobody cross the boundaries	Site Manager Health and Safety Manager Boulevard Police
Walking on the damaged boulevard concrete	Fall through the demolished boulevard concrete	Medium	To eliminate fall through hazards from demolished concrete the area will be cleaned from the remaining of demolished concrete and concrete will be disposed at designated landfill	Site Manager
Walking on the site where concrete with sharp iron exist	Being injured due to the sharp irons which may exist on the territory due to the demolished concrete	Low	To avoid injuries which may cause the sharp irons from the demolished concrete the area will be cleaned from the concrete debris which may have sharp irons	Site Manager
Walking at excavation with unprotected edge	Fall from unprotected edge of the excavation or pit	Medium	To avoid any accidents related to fall from unprotected edge of excavation or uncovered pit proper barricading will be provided for the excavation or uncovered pit to highlight the hazard or provide physical barrier between the hazard and people	Health and Safety Manager
Walking near the entrance where pedestrian and truck routes cross each other	Risk of collision with locals or tourists by trucks at the second entrance of the site at Ch.1030, where trucks have to bring material and where the pedestrian and cycling path crosses each other	Very High	To avoid struck by trucks with pedestrians at the pedestrian crossing point and cycling path at the second entrance, site flagmen/stewards will be appointed to control the traffic directions; road safety cones, safety tapes and other safety signs will also be provided to provide safety information, warn any specific hazard or prohibit any unsafe action, highlight any hazard or provide physical barrier between	Flagmen/stewards Truck Drivers Operators

			person and danger;  Please see Fig.2. below for interference between the circulating vehicles and lorries and the activities on the beach	
Excavation works for opening beach preparation	Risk of electrocution due to the contact with cables if any; also risk of damaging any underground utilities with excavator or any other equipment while excavating the area	Low	Local municipality provided detailed underground situational map for the area and there are no any underground utilities at the area (see Fig.1.); Also, the area was checked and there is no presence of air cables	Environmental Manager
Swimming near the edge of the opened section boundaries	Risk of going to the site from the opened section where actual works take place through the sea by swimmers as site boundaries may be overlooked during swimming	Medium	Marker Buoys will be provided in the sea at the edges of the opened section lines to mark the opened area in the sea to indicate the permissible area which can be used for swimming in consultation with the Hydrographic Service of Georgia	Site Manager  Health and Safety Manager
Excavation works for opening beach preparation	Risk of disturbance of local population and tourists by the noise from the equipment and activities on site	Medium	During preparation activities for opening section normal noise monitoring level will be controlled and appropriate tests will be conducted to avoid disturbing people on the beach according to the Georgian legislation ( <i>Resolution No 398 of the Government of Georgia, August 15, 2017; Technical Regulations – „On the norms of acoustic noise in the premises of buildings and areas of the residential houses and social/public establishments”</i> )	Environmental Manager
Excavation works for opening beach preparation	Risk of possibility of pollution of the beach due to the failure of heavy equipment or work activities	Low	Contractor uses only equipment which is checked and is in good working order; provide oil spill response equipment (pads and booms) on the site and for the heavy equipment as well. Also, Heavy Equipment Inspection Checklist will be done on daily basis; all employees are trained in any environmental emergency situation	Environmental Manager
Working during summer season	Rising concerns regarding the touristic business from local population during summer season due to the lack of information and interference of the work activities and their business	Medium	Before the opening of the beach section, Public Consultation will be conducted in Batumi City Hall for stakeholders and local residents to held presentation, regarding Environmental, Social and Health and Safety issues during Summer period	Health and Safety Manager  Environmental Manager



Fig.1. Traffic route map including interference between circulating vehicles and activities on the beach



Fig.2. Traffic route map including interference between circulating vehicles and activities on the beach



## **5. Operative Prescription for Contractor and Municipality**

Contractor is responsible for the preparation works for the opening beach, namely cleaning the area from the demolished concrete and sharp irons, providing proper slope for the beach, making proper marking of opening section boundaries with fences and buoys in the sea, installing safety signs on the side fences, appointing flagmen to arrange traffic management at sections where trucks and pedestrian crossing point cross each other, providing buffer zone between the opened section and site where actual works takes place, etc. Contractor will prepare Power Point Presentation for public review and discussion for local municipality and stakeholders. Contractor is responsible to prepare Community Health and Safety plan and submit the document to Client (MDF). Contractor is only responsible for the activities which takes place in the Working Area and which may have impact on the safety of the people on the opened beach.

The local municipality will be responsible for the safe management of the opened area (as in general at other beach areas along the costal line) during the summer season, as opened project section during that time will be functioning as a beach under the responsibility of the local municipality.

Batumi Cleaning Service will be responsible for sanitary surveillance to ensure that any waste produced at the opening section will be disposed to the municipal landfill according to Georgian legislation.

## 6. Locations and duration:

Period from 15/06/2018 until 30/09/2018	From Channel:	To Channel:
Beach opening area	Ch.-0.000	Ch.-0.350
Project Area. No work activities	Ch.-0.350	Ch.-0.730
Beach opening	Ch.- 0.730	Ch.-0.980
Buffer zone	Ch.-0.980	Ch.-1.030
Project area. Work activities in this area	Ch.-1.030	Ch.-2.000

### - Beach Opening Areas:

These areas are available for public.

### - Project Area. No Work activities

This area is still a project area. Activities will be conducted before- and after beach opening.

### - Buffer Zone:

This area belongs to the project area. We will create this area to ensure a safe area between the beach opening area and the working area.

### - Project Area. Work activities in this Area:

The activities from Chapter 7 will be conducted in this Area.

## **7. Work activities**

In the working area, the following activities will be conducted:

- Excavation of the beach for the construction of the revetment;
- Demolishing the broken and ruined boulevard;
- Construction of a stone revetment;
- Construction of the crown wall at the top of the revetment;
- Placement of Sheet Piles;
- Construction of the beach accesses and Outfalls along the shoreline with interruption of the revetment;
- Construction of drainage system and Boulevard pavement.

For the opening of the beach there is no quantitative extension of the contract work activities and has no influence on Contractor's time schedule.

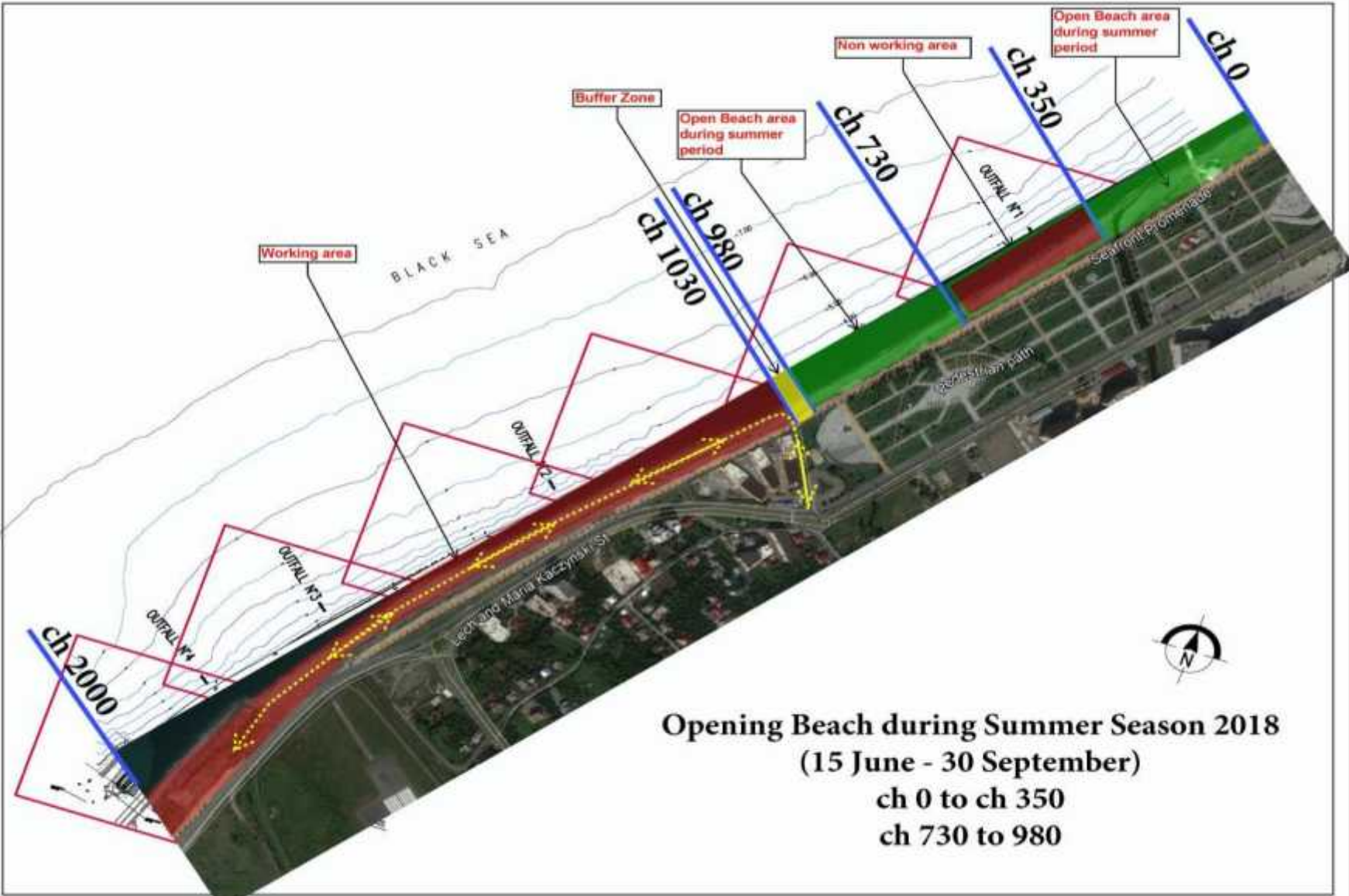
## 8. Workforce

Position	Quantity
Site Manager	1
Health and Safety Manager	1
Environmental Manager	1
Social Manager	1
Surveyors	2
Excavator Operators/ Crawler Operators	5
Wheel Loader Operator	1
Truck Drivers	20
Craftsmen	18
Flagmen	3
<b>Total</b>	<b>53</b>

## 9. Equipment resources in the working area

#	Description of technical resources/equipment:	Type, Description:	Units Amount:
1	Excavator(s)	40 tons -60 tons	2
2	Excavator(s) with bucket and/or hydraulic demolishing hammer	25 tons - 40 tons	5
3	Bulldozer	Cat D6 or Cat D7 or similar	2
4	Tipper truck	15 m <sup>3</sup> – 20 m <sup>3</sup>	20
5	Wheel loader	Cat 966 or Cat 980 or similar	2
6	Crawler crane with hydraulic vibrator	ICE or similar	1
9	Telescopic crane	60 tons	
10	Generator set	20 kVa	3
11	Concrete mixer	6~9 m <sup>3</sup>	3
12	Concrete Pump	20 m <sup>3</sup> per hour	1
13	Containers	20 feet	5
14	Office containers	20 feet	5
15	Transport Vehicles	Toyota Hi-Lux	3
16	Bathymetry Survey Equipment	V-OFF170010	1
17	GPS system for survey	Trimble SPS985L	1
18	Boat for survey		1
19	Drone – quad copter		1

10.Sketches



**Opening Beach during Summer Season 2018**  
**(15 June - 30 September)**  
**ch 0 to ch 350**  
**ch 730 to 980**

