

**Minutes of the 6th Meeting of West Bengal State Coastal Zone Management Authority (WBSCZMA) held on 28<sup>th</sup> July, 2020 in the Department of Environment, Govt. of W.B.**

The following members of WBSCZMA / officials attended the meeting-

1. Mr Vivek Kumar, Principal Secretary, Environment Department – Chairman
2. Mr Niraj Singhal, Chief Environment Officer, Environment Department - Member Secretary
3. Mr KJS Cheema, Principal Secretary, Sundarban Affairs Department - Member
4. Mr Sandip Chatterjee, Ex-Engineer-in-Chief, Dept. of Public Health Engineering – Member (attended online)
5. Dr Parthasarathi Chakraborty – Former Chief Scientist, Geoinformatics & RS Cell, Department of Science and Technology- Member (attended online)
6. Mr. Rajeev Sharma, Sr. Environment Officer – Special Invitee
7. Md Abdul Gani, Special Secretary, Sundarban Affairs Department - Special Invitee
8. Dr Sugata Hazra, Former Director, School of Oceanographic Studies, Jadavpur University – Special Invitee (attended online)
9. Mr S. Mardi, Environmental Engineer, WBPCB - Special invitee
10. Mr Arindam Mani, Additional Director of Survey - Special invitee (attended online)

The following were present on behalf of the Project Proponent -

1. Mr Apurba Bhowmik – Superintending Engineer , PW (Roads) Directorate
2. Mr Debabrata Dhal, Executive Engineer, South 24 Parganas Division, PW (Roads) Directorate
3. Mr Debasish Sengupta, Ultratech Environmental Consultancy & Laboratory (environmental consultant)
4. Mr Bappaditya Nath, Ultratech Environmental Consultancy & Laboratory (environmental consultant)

The Principal Secretary, Environment Department and Chairman, WBSCZMA chaired the meeting and welcomed all the participants. After a brief round of introductions, the Project Proponent was requested to make a presentation on their proposal – “Construction of Bridge over Bidya river connecting Godkhali and Gosaba Bazar in the district of South 24 Parganas, West Bengal”. The project was presented in detail by the Project Proponent through a presentation along with maps.

The salient points of the discussion can be summarized as follows:

- i. It was stated that out of the total project area 2.853 % of area lies in CRZ-IA, 1.466 % in CRZ-IB, 4.564 % in NDZ, 25.877 % in CRZ-IV B and 65.228% is in non-CRZ area. The project proponent was asked to state the total length of the bridge, length of bridge over the river, total number of piers proposed in the river and the diameter of each pier. The schematic diagram of piers (with dimensions) across the river should be provided.
- ii. As the area is vulnerable to natural hazards like cyclones and the river water is saline, the project proponent was asked to highlight seismic safety features of the proposed bridge as per the latest report of Geological Survey of India keeping in mind the possibility that the intensity of natural disasters including cyclonic storms and tidal surge hazards may increase in future. Protective measures against salinity too need to

be informed so that salinity of sea water does not corrode the engineering structures of the bridge. For this purpose, the latest soil salinity figures also need to be incorporated.

- iii. One of the experts pointed out that entire Sunderban Biosphere Reserve has been taken out of CRZ-I by MoEFCC which needs to be verified & incorporated accordingly.
- iv. Highest inundation level in the area and the height of the proposed bridge need to be mentioned.
- v. Since the bridge would require construction of piers on the river and the silt load of rivers in Sunderban area is very high, there will be possibility of accumulation of sand because of obstruction of flow at the piers. In order to protect the ecological health of river, the expert members advised the Project Proponent to take the help of River Research Institute to properly plan the width and spacing of the piers minimising the impact on river flow and also to take adequate bank protection measures.
- vi. The Project Proponent will submit the supporting documents to establish that the present alternative has minimum adverse ecological impact in the area.
- vii. For the ground water table, authenticated data from SWID is to be used in the proposal by the Project Proponent.
- viii. The Project Proponent was asked to clearly state that no mangrove trees would be felled. It was stated by project proponent that the compensatory plantation for the project has already been completed based on which the felling permission for trees in non-mangrove areas has also been obtained from the Forest Department of the State Government.

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The project proponent is advised to make a revised submission accordingly.

The meeting ended with thanks to and from the Chair.



Principal Secretary  
Department of Environment  
&  
Chairman, WBSCZMA



Memo. No. 689 / W – 263A

Dated, 15.09.2020.

To,

✓ The Member Secretary

West Bengal Coastal Zone Management Authority  
Department of Environment, Govt. of West Bengal  
5<sup>th</sup> Floor, Pranisampad Bhawan, Block LB-2, Sector III  
Salt Lake, Kolkata 700106

**Subject:** Regarding clarification of salient points raised in the 6<sup>th</sup> meeting of WBSCZMA held on 28<sup>th</sup> July, 2020 for CRZ Clearance for the Proposed Construction of Bridge over river Bidya connecting Gadkhali to Gosaba Bazar, under South 24 Parganas Highway Division in the district of South 24 Parganas, West Bengal.

**Ref.:** Minutes of the 6<sup>th</sup> Meeting of West Bengal State Coastal Zone Management Authority (WBSCZMA) held on 28<sup>th</sup> July, 2020 in the Department of Environment, Govt. of WB.

Dear Sir,

With reference to the above mentioned meeting of WBSCZMA on 28.07.2020, we are submitting the revised EIA report along with the clarifications for the salient points raised as in the following table:

S.N	Salient Points raised	Clarification/Compliance
i.	<p>It was stated that out of the total project area 2.853% of area lies in CRZ-IA, 1.466% in CRZ-IB, 4.564% in NDZ, 25.877% in CRZ-IV B and 65.228% is in non-CRZ area.</p> <p>The project proponent was asked to state the total length of the bridge, length of bridge over the river, total number of piers proposed in the river and the diameter of each pier. The schematic diagram of piers (with dimensions) across the river should be provided.</p>	<p>Total length of the bridge over river = 1082 m Total length of the bridge including Viaduct = 1892.91 m (Excluding Approach Road) Total length of the bridge including Approach Road = 3058.27m Total number of piers proposed in the river = 10 Diameter of each pier above water level = 8.5 m</p> <p>The approved GAD (General Arrangement Drawing) is enclosed as Annexure – I.</p>
ii.	<p>As the area is vulnerable to natural hazards like cyclones and the river water is saline, the project proponent was asked to highlight seismic safety features of the proposed bridge as per the latest report of Geological Survey of India keeping in mind the possibility that the intensity of natural disasters including cyclonic storms and tidal surge hazards may increase in future.</p> <p>Protective measures against salinity too need to be informed so that salinity of sea water does not corrode the engineering structures of the bridge. For this purpose,</p>	<p>Design has been prepared and construction of the bridges are to be done complying specification for severe environment/exposure condition (such as salinity, cyclone, tidal surge &amp; other natural hazards) to be extreme as per provisions of IRC Code &amp; MoRTH's guidelines, which has been specifically let down in the "Schedule-B" of the contract document. The "Schedule-B" of the contract document is given as Annexure-II.</p> <p>In respect of seismicity, it has been mentioned the project area falls within the Seismic zone – IV as per IS: 1893 (Part1): 2002, accordingly the design has been as per IRC-06.</p>

	the latest soil salinity figures also need to be incorporated.	<p>Moreover Considering the exposure condition of salinity, it has also been mentioned that the following type of structure will not be acceptable:</p> <ol style="list-style-type: none"> <li>1. Scheme with steel bridges or steel concrete composite type structure.</li> <li>2. Superstructure scheme with halved joints. (articulation)</li> </ol> <p>During the baseline monitoring period, the maximum salinity found in surface water is 23.1 ppt.</p>
iii.	One of the experts pointed out that entire Sunderban Biosphere Reserve has been taken out of CRZ-I by MoEFCC which needs to be verified & incorporated accordingly.	<p>According to the Minutes of 39<sup>th</sup> meeting dated 13.01.2020 of National Coastal Zone Management Authority (NCZMA), it had been decided in 37<sup>th</sup> meeting that the categorization of CRZ classification in the Sundarban Biosphere Reserve (SBR) shall be done in consonance with delineation of HTL and CRZ boundaries as per CRZ Notification 2011 and shall not cover the entire SBR in view of practical difficulty. The NCZMA therefore decided that, whereas, CRZ boundaries and CRZ classification shall be demarcated and determined in SBR as per CRZ notification 2011, the restrictions imposed under the notification for SBR shall be followed.</p> <p>In the 39<sup>th</sup> meeting the NCZMA further decided in view of the conflict between the order for declaration of SBR and the CRZ regulation and practicality, necessary amendment in the CRZ notification related to the classification of entire Sunderban as CRZ-IA, shall be taken up by MOEFCC and the CRZ classification may be carried out as per provisions of the notification.</p> <p>So as on date entire Sunderban cannot be considered as CRZ-IA until the amendment in the CRZ notification comes from MOEFCC.</p> <p>However this is to mention that as per the CRZ Notification, 2011 Para-8 and Section (ii), Sub-section (b) state that "construction of dispensaries, schools, public rain shelter, community toilets, <b>bridges</b>, roads, jetties, water supply, drainage, sewerage which are required for traditional inhabitants living <b>within the biosphere reserves after obtaining approval from concerned CZMA</b>"</p>
iv.	Highest inundation level in the area and the height of the proposed bridge need to be mentioned.	As per the General Arrangement Drawing (GAD), HHTL is (+)5.25m G.T.S and Height of the proposed Bridge is 20 to 25m from River bed which is vetted by Irrigation & Waterways Dept. So the minimum vertical clearance of soffit of superstructure is 15.0m for central 75% of each span. The copy of the GAD is attached as <b>Annexure I</b> .
v.	Since the bridge would require construction of piers on the river and the silt load of sand because of obstruction of flow at the piers. In order to protect the ecological health of river, the expert members advised the Project Proponent to take the help of River Research Institute to properly plan the width and spacing of the piers minimizing the impact on river flow and also to take adequate bank protection measures.	<p>The width of the Bridge proper is 11.05 m and there will be 10 nos. of piers within the river bed.</p> <p>Considering the discharge &amp; velocity of flow, IWAI has given NOC for construction of the proposed bridge with minimum horizontal clearance of 100 m.</p> <p>As per the GAD the span between two piers in the river is 106 m, which more than the minimum horizontal clearance directed by IWAI. The copy of the NOC from IWAI is attached as <b>Annexure-III</b>.</p>

	The project proponent will submit the supporting documents to establish that the present alternative e has minimum adverse ecological impact in the area.	Based on the field study, three different alternative alignments has been framed considering relevant engineering parameter and ground reality shown in the satellite image. A comparative study of these alignments is attached as <b>Annexure IV</b> .
vii.	For the ground water table, authenticated data from SWID is to be used in the proposal by the Project Proponent.	The authenticated data from SWID regarding the ground water table at Basanti Block (Godkhali Side) is attached as <b>Annexure V</b> . Although the Ground water table data of Gosaba side is not available with SWID
viii.	The project Proponent was asked to clearly state that no mangrove trees would be felled. It was stated by project proponent that the compensatory plantation for the project has already been completed base on which the felling permission for trees in non-mangrove areas has also been obtained from the Forest Department of the State Government.	As per the CRZ report and map prepared by IESWM, the project area isn't falling within the CRZ-I area. Only a small portion of the proposed alignment is falling with Mangrove buffer area and existence of a small patch of mangrove has been observed as of Nov 2010 satellite image. However it has been confirmed by IESWM that at present, there is no mangrove present in that zone. Total 53 numbers of trees will be cut on the Gadkhali side. Compensatory plantation of 265 nos. of trees i.e. five times of loss has already been conducted in consultation with West Bengal Forest Department and permission for cutting of trees has been obtained. On the Gosaba side, 222 nos of trees will be cut for which permission has been obtained from the Office of the Chief Conservator of Forests and Field Director, Sundarban Tiger Reserve after complying with the condition of compensatory plantation of 1110 nos. of trees. Permission letter for felling of trees of the both side of the proposed project i.e. Gosaba and Godkhali along with the compliance of conditions of compensatory plantation is attached as <b>Annexure VI</b> .

I hope the above information/clarifications satisfy your concerns regarding this matter.

Thanking you.

Yours faithfully,



Executive Engineer

South 24 Parganas Highway Division

Dated, 15.09.2020

**Memo No. 689 / 1 / W -263A**

Copy Forwarded for kind information to:

The Special Secretary, Department of Sundarban Affairs, Mayukh Bhawan, Gr. Floor, DF-Block, Salt Lake City, Kolkata – 700 091.

**Sd/- D. DHAL**

Executive Engineer

South 24 Parganas Highway Division

Dated, 15.09.2020

**Memo No. 689 / 2 (3) / W -263A**

Copy Forwarded to:

1. The Chief Engineer, HQ / South Zone, P. W. (Roads) Dte. for kind information please,
2. The Superintending Engineer, Southern Highway Circle, P. W. (Roads) Dte., for kind information please,

**Sd/- D. DHAL**

Executive Engineer

South 24 Parganas Highway Division