

## **PROJECT NOTE**

MSRDC is a corporation established and fully owned by the Government of Maharashtra through a resolution on 9<sup>th</sup> July, 1996 and has been incorporated as a limited company under the Companies Act 1956 on 2<sup>nd</sup> August 1996.

MSRDC mainly deals with the properties and assets comprising movables and immovable including land, road projects, flyover projects, toll collection rights and works under construction which vested with the State Government and were under the control of the Public Works Department. These have been subsequently transferred to MSRDC.

The Versova Bandra Sea link is proposed to be developed from Versova to Bandra in the suburbs of Mumbai. The length of the sea link is 9.890 km with dispersal points at Juhu Koliwada and Otta's Club. The sea link will have 4+ 4 lanes on both the sides.

Government of Maharashtra launched the project in December 2009. Since then various studies have been conducted by MSRDC to ascertain the feasibility and the most economic route.

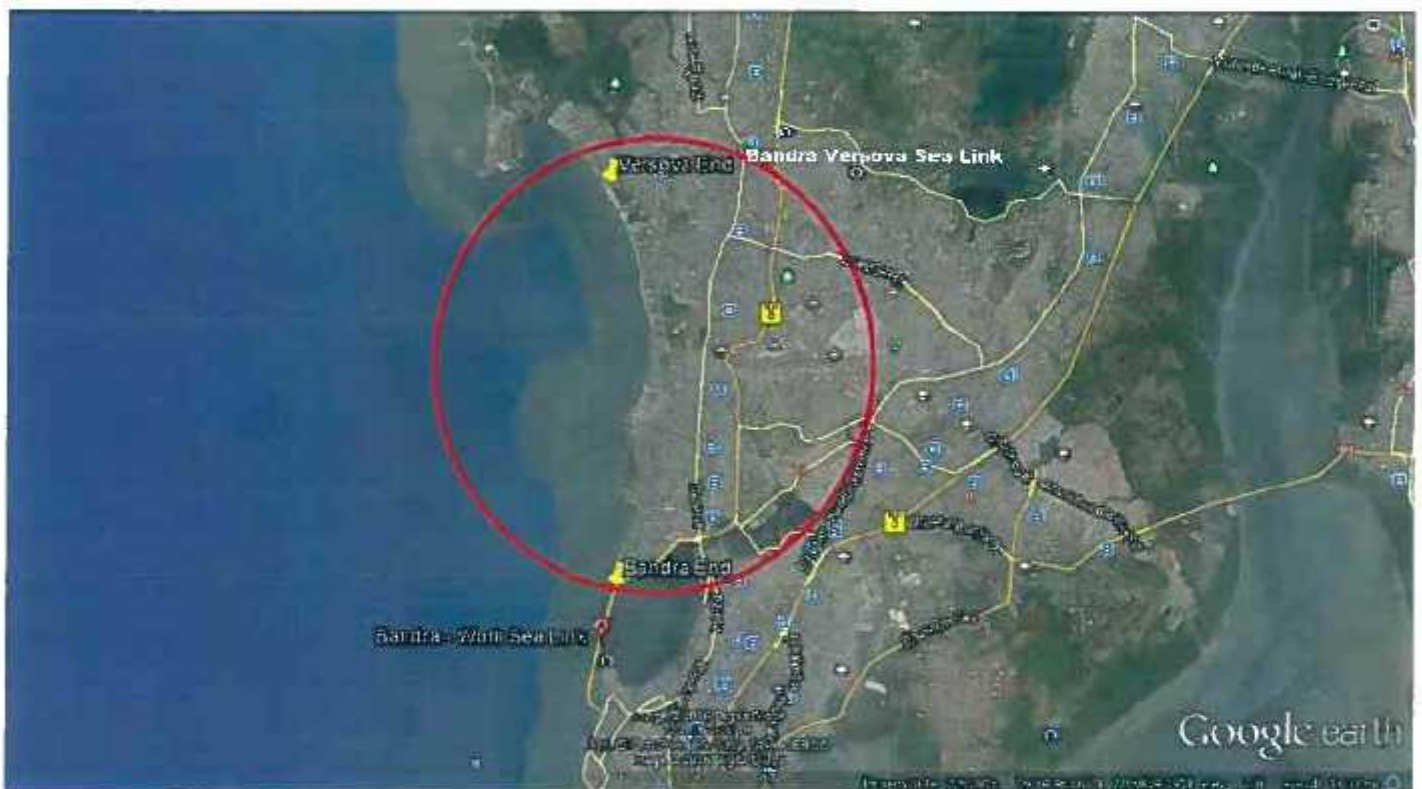
### **➤ NEED OF THE PROJECT**

Mumbai is the financial capital of the country. The population of Mumbai is expanding at a great pace and is estimated to reach around 24 million by 2021. Western suburban of Mumbai is fast developing in terms of Commercial establishment and housing schemes to accommodate the large population. The commuters travelling to the south Mumbai at present use the available S.V. road route and the Western Express Highway. Both these roads have already reached the saturation level. There is no open space available for the expansion of these roads. The heavy congestion on these roads leads to indefinite delay in travel time increasing air pollution in City. Therefore there is a need to find an alternative to the congested roads and The only solution to prevent the existing conditions from worsening further is to extend BWSL from Bandra upto Versova in north-south direction to relieve the congestion As there is no land available for expansion the best alternative is the sea link as Mumbai has a long coast.

➤ **PROJECT LOCATION**

The project is located from Versova to Bandra in the western suburbs of Mumbai. Apart from Bandra and Versova the sea link is proposed to have dispersal points at JuhuKoliwada and Otter's Club making it more suitable for the commuters in Western Suburbs. Thus it will reduce traffic along S.V. Road & Western Express Highway

**Google Image**



**Project Location**



### ➤ Major Traffic Points along Versova - Bandra Section

The main traffic points have been identified including the end traffic (terminal) points after examination of Development Plan proposals and making Reconnaissance survey regarding existing widths and proposed ROW, land uses, linkages etc. Possible traffic control points/connectors to the proposed link have been identified as i) Master Vinayak Road (i.e. Perry Road), ii) Juhu Road, iii) Vaikunthlal Metha Road, and iv) Jayprakash Road. These roads have onward connection with all major North South Corridors i.e. S V Road, Western Express Highway, Linking Road and Relief Road for dispersal of traffic in to the secondary road network.

### ➤ Alternative Alignments of VBSL

The Five alternative alignments have been studied for VBSL. The Five alternative alignments are presented below and comparison and evaluation of the alternatives as to their length, construction cost, geometric comparisons, traffic service and impact on the social and physical environment to recommend the best alignment for VBSL have been studied.





**Alternatives considered for the project are:**

- ❖ **Alternative 1A: Coastal Road along the Coast (on Reclamation)**  
(with Cut & Cover Tunnel at Juhu Beach)
- ❖ **Alternative 1B: Coastal Road along the Coast (on Stilt)**  
(with Cut & Cover Tunnel at Juhu Beach)
- ❖ **Alternative 2: Coastal Road partly away from the Coast at 200m & partly along the Coast**  
(with Cut & Cover Tunnel at Juhu Beach)
- ❖ **Alternative 3: Sea Link Entirely in Sea (approx. at 900m away from Coast) – Preferred Alignment**
- ❖ **Alternative 4: Coastal Road on Reclamation (till Galaxy Apt. / Band Stand) and Sea Link till Versova End (approx. at 900m away from Coast)**
- **Start Point :** Bandra Worli Sea Link at Bandra
- **End Point :** Versova End near Nana Nani Park
- **Intermediate Dispersal Locations:** 1. Otta's Club    2. Juhu Koliwada

Considering all the environmental aspects, Alternate 3 is finalised as the proposed site for construction of Versova Bandra Sea Link. (It has been approved by Cabinet Committee on Infrastructure on meeting dated 3<sup>rd</sup> Aug 2011)

**On below counts, the preferred alignment scores highest points.**

- No objection by NGO's and Local People
- Fishermen not affected
- No Cut & Cover Tunnel
- Mangroves least affected
- Aesthetically beautiful
- Sea View not obstructed
- Least impact on Environment

➤ **Versova Bandra Sea Link (VBSL): Impact/Advantage of the project**

MSRDC has in-depth studied alignment of VBSL by studying various alternatives. The final alignment has been selected on a basis of various direct & indirect impacts and advantages for the city of Mumbai.

- Master mode of transportation.
- Today with the relation of Versova Bandra Sea Link to Worli Bandra sea link will be additional means of transportation for the city of Mumbai. The approx. distance of worli to Versova cutting across western part of city is of 20 km and requires minimum Two and half an hour depends upon various other factors , in the monsoon it takes additional one hour.
- The main advantage of this alignment of the project is, will be reducing the distance from Worli to Versova from 45 to 60 minutes. It avoids 14 nos of major signals and also various pedestrian crossings etc. This is one of the foremost advantages of project that benefit to the environment, to the drivers, to commuters and so on.

➤ **Due to reduction in time by avoiding nos. of signals it have following major impact/advantages:**

- No idling at a signal
- Lesser or minimum of air emission at these junction and along the signals areas where

there are residential areas which will minimise their health hazardous due to heavy traffic pollution.

- Reduction in fuel consumption due to no idling vehicles thereby causing less air pollution.
- Heavy reduction in noise pollution because of above reason which is also causing threat health hazard. It will ease out local internal vehicular traffic which will easily cater to the inbound resident traffic.
- It will reduce rate mental fatigue of the driver which is also health hazard ,which will be easily eliminated
- With the view of above impact/advantage the traffic congestion will be easily avoidable and there will be great relief to the city of commuters.

#### Alignments cost details

Sr. No.	Alignments	Length (km)	Block Estimate including (INR) Considered in a year 2011-2012	Block Estimate including (INR) Considered in a year 2015-2016
1A	Alternative 1A: Coastal Road along the Coast (on Reclamation) (with Cut & Cover Tunnel at Juhu Beach)	10.232	Rs. 3369 Cr.	4594 Cr.
1B	Alternative 1B: Coastal Road along the Coast (on Stilt) (with Cut & Cover Tunnel at Juhu Beach)	10.232	Rs. 3743 Cr.	5104 Cr.
2	Alternative 2: Coastal Road partly away from the Coast at 200m & partly along the Coast (with Cut & Cover Tunnel at Juhu Beach)	10.072	Rs. 3748 Cr.	5111 Cr.
3	Alternative 3: Coastal Bridge (approx. at 900m away from Coast)	9.890	Rs. 4045 Cr.	5516 Cr.
4	Alternative 4: Coastal Road along the Coast (on Reclamation) & Sea Link till Versova End(approx. at 900m away from Coast)	10.150	Rs. 3665 Cr.	4998 Cr.

- The total cost of the project is 5516 Cr. (2015-16) which has been principally approved by Maharashtra State Road Development Corporation . The said project is construction of bridge of length 9.890 Km. The total area required for the project is 47.3884 Ha. among which 2.9907 Ha. falls in Protected / Mangrove Forest area for which forest clearance under Conservation Act 1980 is required. Precaution has been take to destruct minimum loss of mangroves during construction of the project. If possible in mangroves area only road on stilt shall be constructed.

The alignment has been done in such a way to utilize minimum mangrove area and is one of the feasible & suitable alignment proposed.



(Authorized signatory)  
SEAL

Maharashtra State Road Development Corporation Limited  
Executive Engineer.

**(R. K. Sarote)**  
**Executive Engineer,**  
**MSRDC Mumbai**