

### **Brief summary of the project**

- The new highway 516-A starts from its junction with NH-516 near Gopalpur Port and terminates at its junction with NH-316 near Satpada in the State of Odisha. The second part of the new highway 316-A starts from its junction with NH-316 near Konark connecting Ratanpur, Satabhaya, Dhamra, Basudevpur, Talapada, Chandipur, Chandaneswar in state of Odisha and terminating at Digha in the State of West Bengal. The present project stretch starts at Gopalpur port in Ganjam district and passes through Satapada, Konark, Astarang, Naugaon, Paradwip Port and ends at Ratanpur. The length of the proposed alignment is approx. 240.122 km.
- The Land use pattern on 10 km on either side of the project road was analysed and is predominately agriculture followed by fallow, wastelands, wetlands, salt pans, estuaries, rivers, forest and few habitations. The proposed alignment is passing through Balukhanda Konark Wildlife Sanctuary in Puri district and it is also located at a distance of 6.0 km from the Draft ESZ boundary of Chilika (Nalaban) wildlife sanctuary and 7.0 km from boundary of Chilika (Nalaban) wildlife sanctuary.
- The proposed alignment is at an average distance of 1-10 kms from the Sea Coast and hence CRZ applicability is envisaged. The proposed alignment is crossing through CRZ I, II, III and CRZ IV areas at different chainages as measured through CRZ maps prepared by ORSAC Bhubaneswar.
- The proposed alignment passes through four districts of Odisha namely Gangam, Puri, Jagatsinghpur, Kendrapara and major settlements along the alignment are Brahmagiri, Puri, Konark and Paradip.
- The land acquisition for the proposed alignment is approximately 996.25 ha out of which 33.6 ha is forest land.
- The proposed RoW of the project is 45 m. The alignment comprises of green field (136 km) and expansion/upgradation (104.122 km) of existing MDR/ODR roads. Around 57% of the alignment is green field and 43% is expansion/upgradation.
- The proposed road will have the following structures for smooth flow of traffic, pedestrian movements and meeting the hydrologic requirements of the highway. The following structures are proposed namely 4 nos. ROBs, 29 nos. Major Bridges, 36 nos. Minor Bridges, 428 nos. Culverts, 5 nos. Vehicular underpass, 6 nos. LVUP, 1 Flyover, 10 major junctions & 108 minor junctions as Intersections.
- The proposed road shall be constructed as per IRC: SP: 73-2015, IRC: 37-2012, IRC: 58-2011, IRC:112-2011 "Manual of Specifications and Standards for Two laning of Highway with Paved shoulder" design standards.
- All safety measures will be provided on the alignment as per IRC:SP: 55 and other relevant notification of MoRTH, Government of India.

- A total number of 1410 structures are likely to be affected due to the proposed road. The NHAI shall compensate the affected title holders as per NHAI Act 1956.
- About 24596 trees are likely to be affected due to proposed RoW of 45 m. Efforts will be made to minimise the trees losses by restricting tree cutting within formation width. Avenue plantation shall be carried out as IRC:SP:21:2009 on available RoW apart from statutory requirements. The tree enumerations (inventories) of affected trees will be prepared along with forest department.
- The proposed alignment is passing through thirteen rivers and lakes namely Rushikulya river, Chilika lake, Kushabhadra river, Kadua river, Prachi Nadi, Baradia nadi, Borwan Nadi, Saunlia Nadi, Harhua Nadi, Gobari River, Nua Nai river, Devi river and Mahanadi river.
- Materials requirement for the project are Cement- 4675973 bags, Coarse Aggregate - 2015813 cum, Fine Aggregate -1102912 cum, Steel- 71627 tonne, Bitumen emulsion- 2401.22 tonne, Bitumen- 33198 tonne, Borrow Earth- 5631524 cum. Fly Ash- 625724 cum.
- Odisha Thermal Power Corporation Limited, Bhubaneshwar (54 km), IMFA Thermal Power Plant, Cuttack (74 km) and Talcher Thermal Power Station, Talcher, Angul district (154 km) are falling within 300 km of proposed project alignment and the fly ash will be used from these power plants in the project depending upon their availability as per fly ash notification 2016 of MoEF&CC.
- Total requirement of water for the construction is estimated at 3000 KLD which will be met through surface water sources and ground water proposed to be used only for camp site for transient period after obtaining the necessary from permissions from competent authority.
- The total estimated project civil cost is approx. 2196.49 Crores.