HONNAVAR PORT PVT. LTD.

Date: 10.May.2012

To,

Secretary

State Expert Appraisal Committee (SEAC)

Karnataka

Clarification enclosed on file

10/05/12

Sir,

Sub: Industrial Project: "Development of Barge/Vessel loading facility from 4.9 MTPA of cargo volume" at Kasarkod Tonka Village, Honnavar Taluk, Uttar Kannada District of M/s Honnavar Port Private Ltd. (HPPL). (SEIAA 22 IND 2011)

Ref: Proceedings of the 81st SEAC meeting held on 7th April 2012.

With reference to the above, M/s Honnavar Port (P) Ltd. project proposal was appraised in the 81st SEAC meeting held on 7th April 2012. As decided in the SEAC meeting we are herewith submitting all the clarifications /documents as required by the SEAC.

Thanking you,

Yours Sincerely,

G.Siva Shankar

Director

Honnavar Port Private Limited (HPPL)

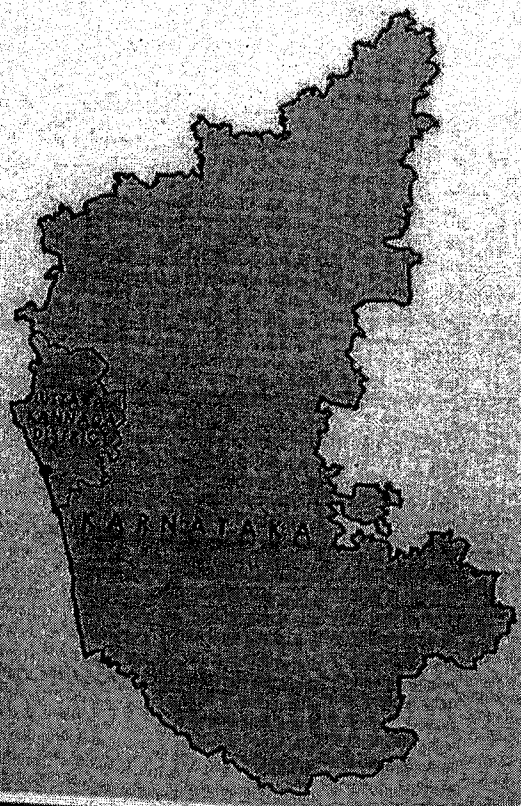
Honnavar Port Private Limited Bangalore

Encl.: As stated above

Corp. Off : # 8-2-276, 1st Floor, Pavani Estates, Road No. 2, Banjara Hills, Hyderabad - 500 034.
Ph : 040-6666 6694/ 95 Fax : 040- 6666 6801, 6666 6811

Regd. Off : #103, Lalehzar Apartments, 45/1-2, Palace Road, Bangalore - 560 001, Karnataka, India.
Ph : +91-80-2235 3670, 4149 4960 Fax : +91-80-2235 3671 Email : info@honnavarport.com

Development Barge/ Vessel loading facility Uttara Kanada District , Karnataka



Clarification to SEAC Observations on EIA for Honnavar Barge/ Vessel loading facility May-2012

PREPARED BY

RAMBOLL

L&T-RAMBOLL CONSULTING ENGINEERS LIMITED

SUBMITTED TO

HONNAVAR PORT PRIVATE LIMITED

No 103, Patenzar Apartments, 43/1-2 Palace Road, Bangalore – 560001, Karnataka, India

11 Impact studies for proposed Road and Railway Line on Local Environment needs to be undertaken.

11.1 Road Connectivity

In order to avoid the congestion to the existing road and to ensure quick traffic movement from/to the port, it is proposed to develop a dedicated road corridor with a Right of Way (RoW) of 25m. The total length of road corridor is about 4 km, which connects proposed barge/vessel loading facility and NH 17 near Kasarkod. The land requirement for the road corridor is 10 ha. Chainage marked in the google imagery is presented in the figure 11-1. The existing land use pattern of proposed road alignment is given in Table 11-1.

Table 11-1: Existing Land Use Pattern of Proposed Road

S No	Chainage (Km)	RHS	LHS
1.	0.2 to 1.0	Coastal sand	Coastal land
2.	1.2 to 3.2	Coastal sand	Vegetation
3.	3.4 to 4.0	Vegetation	Vegetation

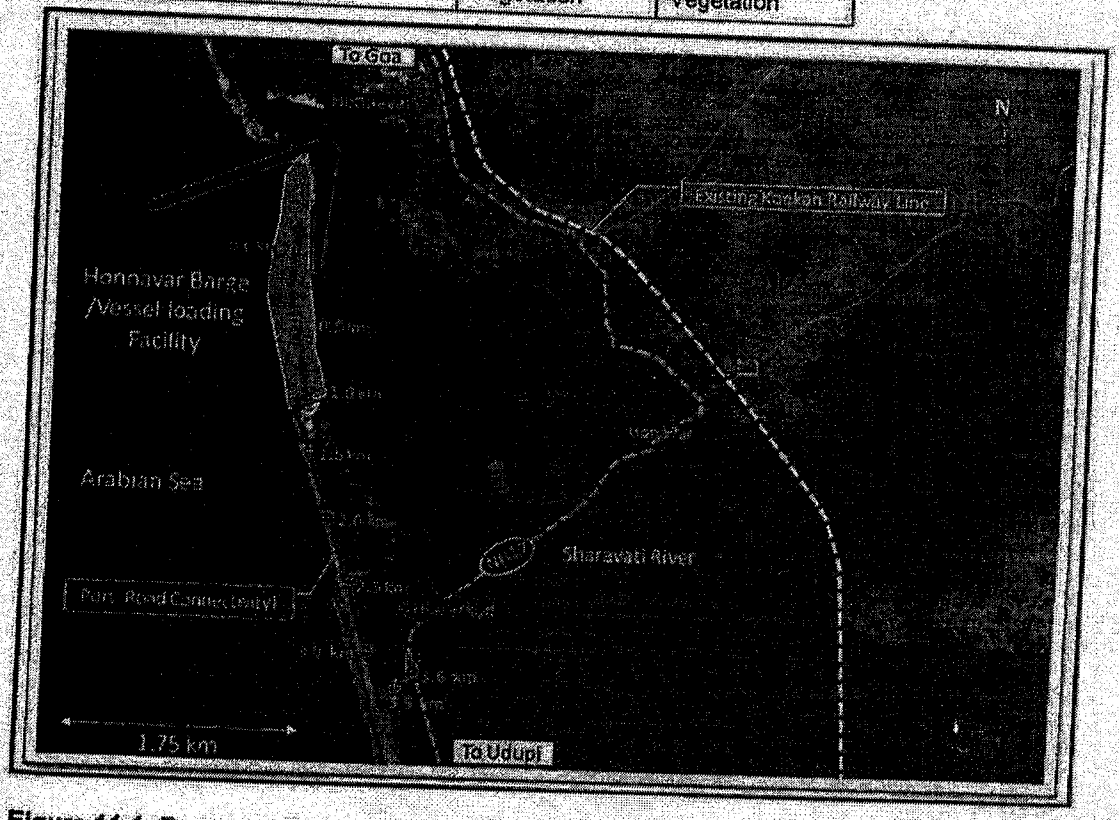


Figure 11-1: Proposed Road Connectivity with Chainage

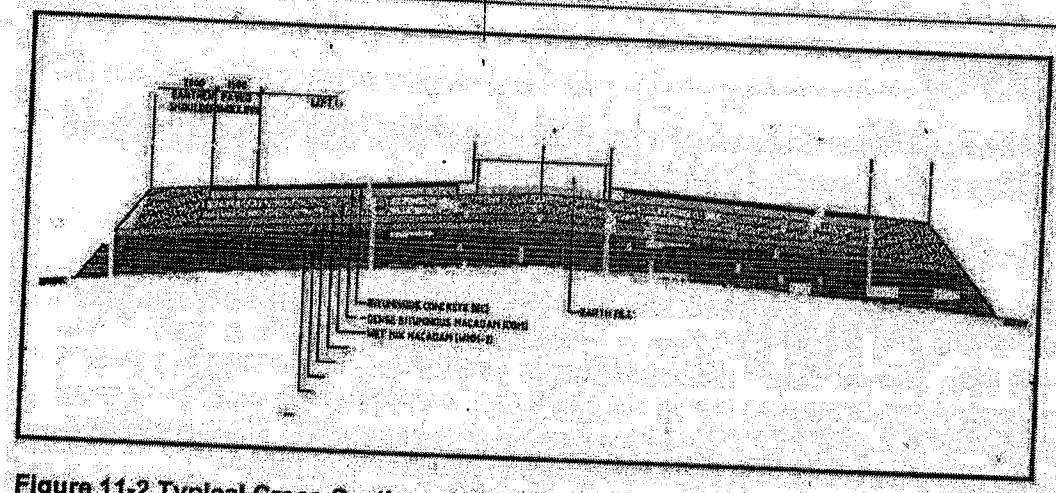


Figure 11-2 Typical Cross Section of Road Corridor

11.2 Rail connectivity

Total length of Rail connectivity is about 14.6 km which connects proposed barge/ vessel loading facility with Manki railway station will have 1 Broad Gauge (BG) railway tracks, Rail exchange yards.

Table 11-2: Existing Land Use Pattern of Proposed Rail Line

S No	Chainage (Km)	RHS	LHS
1.	0.2 to 1.0	Coastal sand	Coastal land
2.	1.2 to 3.2	Coastal sand	Vegetation
3.	3.4 to 4.0	Vegetation	Vegetation
4.	4.0 to 14.6	Vegetation/forest nursery	Vegetation/minor forest

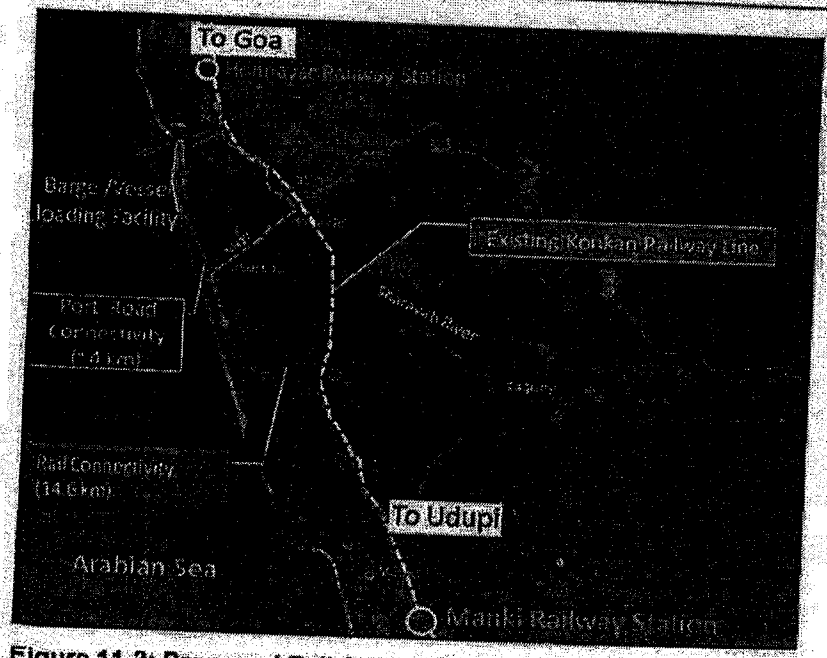


Figure 11-3: Proposed Rail Connectivity to Barge/Vessel Loading Facility

The land acquisition will be carried out by GoK and rail/road corridor route has been selected prudently so that no Resettlement and Rehabilitation is ensured.

11.2.1 Anticipated Potential Impacts due to Proposed Road/Rail Alignment and Mitigation Measures

11.2.1.1 Environmental Aspects

The proposed alignment passes through partly coastal sand and vegetation. Impacts due to the proposed alignment are discussed below

11.2.1.2 Ambient Air quality

The proposed alignment is a new link connecting proposed facility with NH 17 and Manki Railway station. The baseline ambient air quality is well within the prescribed NAAQ standards due to the less human activity and no industrial activity. During the construction phase ambient air quality in the adjacent villages along the Road/Rail Alignment will be disturbed due to the various construction related activities such as.

- Site Clearance and use of heavy vehicles and machinery
- Transport of raw materials, borrow and quarry material to construction site
- Earthworks
- Handling and Storage of aggregates
- Asphalt mixing plant operations

These activities mainly generate dust and emissions such as CO, SO_2, NO_x from construction machineries and also due to other vehicular movements during construction. During the operation phase the anticipated impacts to the Air quality is due to the movement of vehicles used for transportation of Cargo and transport of other materials.

Mitigation Measures

- The asphalt plants, crushers will be sited at least 1 km in the down wind direction of human settlement along the rail/road corridor.
- During and after compaction of the sub grade, water will be sprayed at regular interval in order to avoid fugitive dust generation
- Vehicles carrying fine and coarse aggregate shall be covered with tarpaulin in order to avoid the spills.
- Pollution Under Control (PUC) certified construction machinery and equipments will be used and checked at regular intervals.
- During the operation stage dust generation will be minimum, because most of surface will be covered by paved shoulder.
- Tree plantation along the Right of way also will act as a major sink of pollutant due to the plying vehicle through corridor
- Regular maintenance of the road, during the operation phase will reduce any negative impacts to an absolute minimum.
- Adequate vehicle maintenance and not to use adulterated fuels shall be confirmed with the contractors.
- Ambient air quality will be monitored at regular intervals during construction and operations phase of the rail/road corridor.

11.2.1.3 Ambient Noise Level

The baseline ambient Noise levels are well within the prescribed CPCB standards. During construction phase, there will be significant increase in the Ambient Noise Level due to the various construction activities and use of the large number of heavy machineries. However, these construction phase impacts are short term in nature, realised in the immediate vicinity and will cease upon completion of construction. This will be occurred along the construction corridor as well as in the secondary site includes construction camps, asphalt mixing plant etc. During the operation stage, incremental noise level is due to the increased traffic volume and Cargo movements.

Mitigation Measures

- During construction, noise levels will be maintained below threshold levels stipulated by Central Pollution Control Board (CPCB) by selecting appropriate equipment, machinery and using enclosures.
- Procurement of machinery / construction equipment will be done in accordance with specifications conforming to source noise levels less than 75 dB (A).
- Only well-maintained construction equipment, which meets the regulatory standards for source noise levels, will be used.
- Noise attenuation will be practised for noisy equipment by employing suitable techniques such as acoustic controls, insulation etc.
- Personnel exposed to noise levels beyond threshold limits will be provided with protective gear like earplugs, muffs, etc.
- During operation phase noise levels will be significantly less because of smooth paved shoulders and presence of trees along the Right of Way.
- Ambient noise levels will be monitored at regular intervals during construction and operations phases of the rail/road corridor

11.2.1.4 Water quality

During construction phase, anticipated impacts are due to spillage of construction materials such as cement, POL and Bitumen etc., falling into the nearby water bodies and drainage channels from workshops, construction camps etc. During construction phase the natural drainage system will get disturbed and reduction in the capacity of the natural stream. Extraction of the water for the construction activities and labour camp will disturb the local water supply in the contiguous village. Runoff from the construction sites and labour camp will increase the risk of pollution in the natural watercourse. During operation phase there will not be a chance of degradation of water quality during normal operations and spillages will impact the water quality during the accidents if any. Also the entry of vehicles to nearby water bodies for cleaning could be an impact during operation phase. Surface runoff will be expected due to paved surface.

Mitigation Measures

- Construction activity will not necessitate any major diversion of water body.
- Water will not be extracted from the local resources. Requirement of the water will be met from the ample resource.
- Construction site will not be sited nearer to the surface water or ground water resources.
- Control of the access of Vehicles to the water bodies will be ensured
- Road Safety will be strictly ensured to keep the accident quite low.
- Water Quality will be monitored at regular intervals during construction and operation phase of the project

11.2.1.5 Land Environment

The proposed road/rail alignment will traverse across the Coastal sand and vegetation. Land acquisition will lead to loss of vegetations. During the construction stage accidental spills of fossil fuel and other Hazardous material will increase the risk of soil pollution. Contamination of soil may takes place due to solid waste generated from labour camps. Soil compaction will take place due to the movement of Heavy vehicles and Other Vehicles. During operation phase there will not be degradation of soil quality during normal operations and spillages will impact the soil quality during the accidents, if any.

Mitigation Measures

- All the top soil up to 150 mm shall be blended with other barren land to convert in to arable land and will be utilized for land scaping along the corridor.
- Restriction of the plant moving vehicle and machineries in the Agricultural land
- During operational phase, the impacts would be minimum due to thick green vegetation
- Soil Quality will be monitored during construction and operation phase of rail/road corridor.

11.2.1.6 Flora and Fauna

The proposed alignment passes through partly Coastal sand and vegetation. The number of trees located in the proposed corridor is very less and the alignment is planned to be routed to minimise the removing of plantations and other trees.

- There is minor Forest and forest nursery adjacent to the proposed corridor.
- There are no Wild life' sanctuaries and National Parks located along the proposed rail/road corridor.
- The Impact on the Flora and Fauna due to this development is insignificant.

Green Belt Development along Road/Rail Corridor

Proposed plantation pattern along the rail/ road corridor will be as follows

- The first row will be of small to medium sized ornamental trees.
- Subsequent rows will comprise of shade bearing species of more height than those in the first row.
- Planting of dwarf shrubs in the median, provide glare free travel to the road user during night time
- Planting of herbaceous species as ground cover in the median, special landscape and the embankment slopes
- Turfing with grass in the median, special landscape and embankments

Following are the recommended species for roadside plantation

Table 11-3: Species Recommended for Plantation

S.no	Trees	S.no	Shrubs
	Scientific Name		Scientific Name
1	Albizzia procera	26	Aphlandra
2	Albizzia amara	27	Bougainvellia
3	Amhertia nobilis	28	Bauhinia alba
4	Bischofia javanica	29	Bauhinia acuminata
5	Colvella recemosa	30	Calliandra

S.no.	Trees	S.no	Shrubs
	Scientific Name		Scientific Name
6	Dalbergia latifolia	31	Crosandra
7	Delonx regia	32	Duranta
8	Mengifera india	33	Gardenia floria
9	Michelia champaka	34	Hibiscus sps.
10	Peltophorum pherugenium	35	Ixora
11	Polyalthea longifolia	36	Nerium oleander
12	Palms	37	Musanda
13	Saraca indica	38	Sanchezia
14	Santalum album	39	Thevetia nerifolia
15	Tamrindus india	40	Tecoma stans
16	Anacardium occidentale	41	Tecoma gaurichari
17	Cinamomum camphora	42	Tecoma capensis
18	Casuarina equistifolia	43	TMS single and double
19	Dalbergia latifolia	44	Hamelia
20	Mengifera indica	45	Magnolia sp.
21	Pterospermum acerifolium		
22	Swetenia mahogoni		
23	*Swetenia* macrophylla		
24	Tabubia spectibilis		
25	Tabubea rosea		

Development of Barge/ Vessel loading facility Uttara Kanada District , Karnataka

Second Clarification to SEAC Observations on EIA for Honnavar Barge/ Vessel loading facility June-2012

PREPARED BY:

RAMBØLL

L&T-RAMBØLL CONSULTING ENGINEERS LIMITED

SUBMITTED TO

HONNAVAR PORT PRIVATE LIMITED

104, Lalithas Apartments, 42, 1st 2, Palace Road, Bangalore - 560001, Karnataka, India

RAMBOLL

1 Copy of the Revenue Department Letter Regarding Survey Numbers

[illegible]

OFFICE OF THE TAHSILDAR, HONAVAR, UTTARA KANNADA DISTRICT - 581 334

Telephone: 08387 220262
08387 220262 (FAX)

[illegible]

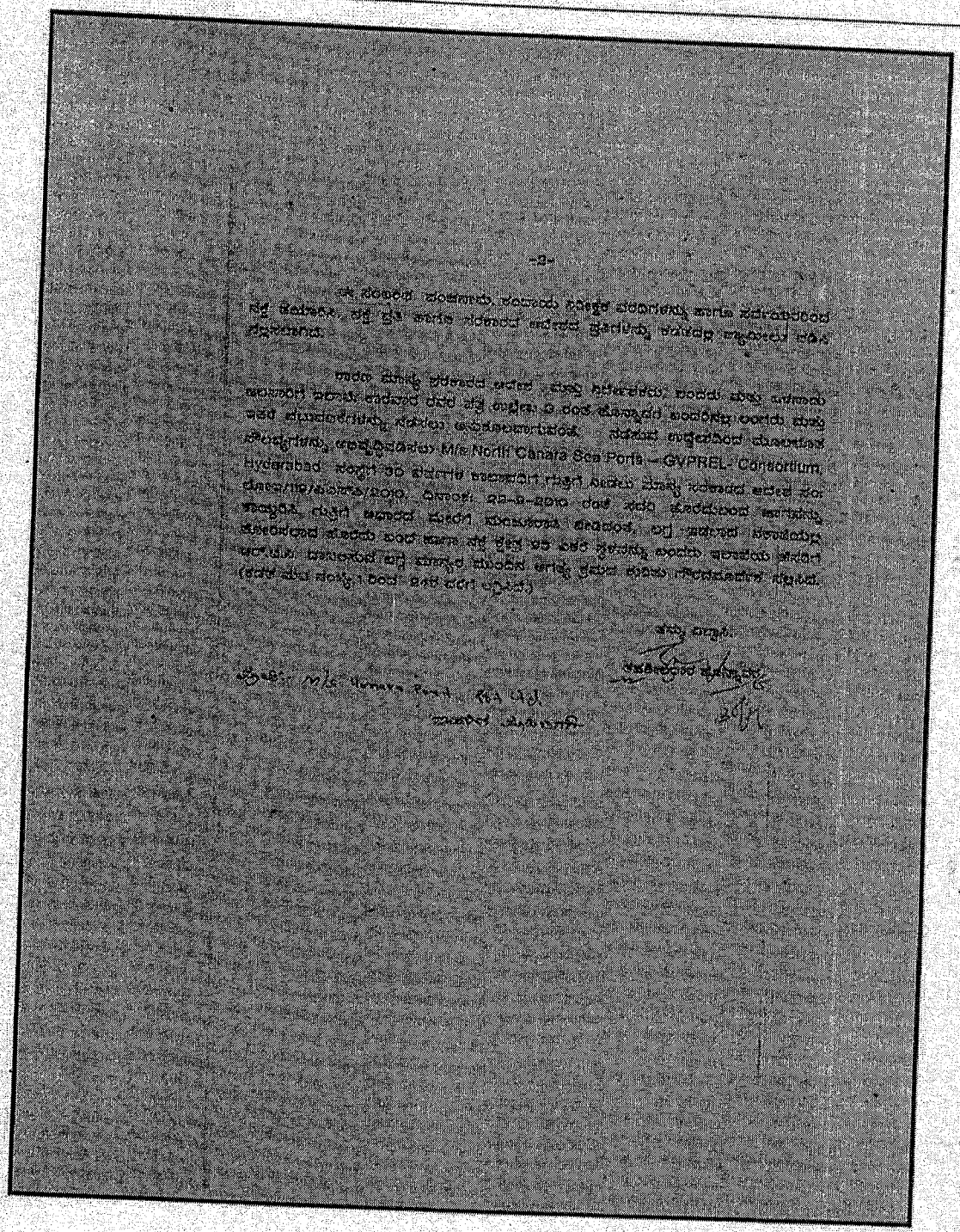
Date: 28-04-2012 [illegible]

[illegible]

M/s North Canara Sea Ports – GVPREL- Consortium, Hyderabad

[illegible]

RAMBOLL



RAMBOLL

OFFICE OF THE TAHSILDAR, HONAVAR, UTTARA KANNADA DIST.

Telephone :08387 220262

No.Bhoomi/VV/1/12-13 Dated 30.4.2012.

To

The Assistant Commissioner,
Bhatkal Sub-division,
Bhatkal.

Sir,

Sub: Allotment of Sy.No. to the 91 acres of alluvial land formed near Kasarkod(Tonka) Mallukurva village, in the possession of Honavar Port Department.

Ref: 1) Port Officer, Honnavar office Letter No.Bhoomi/CR 18/10-11 dated 2,1,2012,
2) Govt. Order No.PWD 119 PSP 2010 dt.22.9.2010.
3) Director, Ports & Inland Water Transport Department Letter No.PIWT/62/Bhoomi(2)2010 dt.16.7.2010.
4)Surveyor Report No.TS/VV/146/11 dt.18.4.2012.
5)Revenue Inspector, Manki Report dated 25.4.2012.

***

With reference to the above subject, Government of Karnataka has sanctioned about 91 acres of alluvial land formed at North side of Sy.No.282A and 282B of Kasarkod village of Honavar Taluk to M/s.North Canara Sea Ports – GVPREL Consortium, Hyderabad on lease for a period of 30 years for construction of a private port to carry out anchorage activities and thereby to develop 8,47,500 sqmts after obtaining approvals from other Departments, requested in reference (1) to issue RTC in the name of Ports Department.

The 95 acres of moved and settled alluvial soil formed at Sy.No.282A and 282B of Kasarkod village belonging to the said Department was surveyed and demarcated the area from A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q. R. S. to T. A B sheet is prepared from the sketch and certified the same.

.....2.

The Revenue Inspector, Manki after inspecting the area has reported that the said area is 95 acres, the said area is not used for habitation, housing or agriculture purposes. There are non-living kuchha huts used for drying of fish by fishermen. The scheduled area bounded by Sharavathi river on the East, Arabian Sea to the West, Sharavati River and Badagani sangam at the North and Sy.No.282A and 282B are at South of the said area. Since the area comes within CRZ area, requested for taking further action for its sanction.

Copies of the Panchanama, Revenue Inspector's Report and the Sketch prepared by the Surveyor and Govt. Order are placed in the file.

Therefore, as per the letter of the Director, Ports & Inland Water Transport, Karwar, to enable to carry out anchorage operations and other activities at Honavar Port, under reference (3), and want to develop infrastructure facilities, the said area is given on lease for 30 years to M/s.North Canara Sea Ports – GVPREL Consortium, Hyderabad given in Govt. Order No.PWD 119 PSP 2010 dated 22.9.2010, it is submitted for taking necessary action of entering the name of the Port Department in the RTC for the newly formed area of 95 acres as indicated in the enclosed sketch.

Yours faithfully,

Sd/-

Tahsildar, Honavar.

Copy to :

M/s. Honnavar Port Pvt. Ltd., for their information.

2 Traffic Impact on the Landward Side from the Project

2.1 Hinterland of Honnavar Barge/Vessel Loading Facility

The potential cargo zone or industrial zones within 150 km radius from Honnavar is considered as the primary hinterland. The secondary hinterland extends upto the north, north – eastern and central districts of Karnataka which includes Bidar, Gulburga, Raichur, Bejapur, Koppal, Bellary, Bagalkot, Gadag, and Belgavi. The region beyond this secondary hinterland is considered as the tertiary hinterland and includes southern districts of Karnataka, parts of Andra Pradesh, Maharashtra and Madhya Pradesh.

The identified primary, secondary and tertiary hinterlands for the Honnavar barge/vessel loading facility are as follows

- **Primary Hinterland**: Within a radius of 150km from Honnavar which includes Uttar Kannada, Haveri, Shimoga, parts of Udupi, Dharwad and Davangere.
- **Secondary Hinterland**: North, North-eastern and central districts of Karnataka which includes Bidar, Gulburga, Raichur, Bejapur, Koppal, Bellary, Bagalkot, Gadag, and Belgavi.
- **Tertiary Hinterland**: Southern districts of Karnataka, part of Andra Pradesh, Maharashtra and Madhya Pradesh.

Based on the hinterland potential analysis, the overall traffic figures for proposed barge/ vessel loading facility are provided in the Table 1.

Table 1: Cargo Throughput for Honnavar Barge/Vessel Loading Facility

S. No.	Commodity	Traffic (MTPA)
1.	Coal	2.70
2.	Iron Ore	1.00
	General Cargo	
3.	Granite	0.16
4.	Fertilizer	0.20
5.	Molasses with Agro Products	0.15
6.	Steel Products	0.40
7.	Sugar	0.29
8.	**Total**	**4.90**

2.2 Existing Hinterland Connections and Road/Rail Network

Good road and rail connectivity is an essential requirement for the efficient functioning of any barge/ vessel loading facility. As far as Honnavar barge/ vessel loading facility is concerned, the commodities proposed to be handled are coal, general cargo and iron ore. The state of Karnataka is endowed with a number of steel production units and cement plants whose coal requirement is increasing proportionally to their production. JSW steel, Bellary is the largest producer of steel in the hinterland. The main sources for imported coal in India are from Australia, China, Indonesia and South Africa. The iron ore handled at Honnavar is expected to come mainly from Hospet-Bellary belt of Karnataka state. At present, 30% of the iron ore exported from this belt is taken to the respective port by means of road and the rest 70% via rail. Similarly, the coal being imported at Honnavar is taken to the respective destinations, mostly power plants, through road and rail.

2.2.1 Road Connectivity

The site has good road connectivity. NH 17 passes through Honnavar towards East of project site at a distance of about 1 km. The site is connected to Bellary through NH 63 and NH 17. NH 17 meets NH 63 near Ankola at about 45 km from the site.

Presently the site can be approached from a single lane black topped road that runs in continuation to NH 17 and then lies parallel to shoreline. NH 206 is at a distance of 3.0 km at Honnavar from the project site.

2.2.2 Rail Connectivity

The site can be easily accessed through Konkan railway (Connecting Kerala with Mumbai). The barge/vessel loading facility proposed at Honnavar is at a distance of 5.0 km from Honnavar railway station and ~15 km from Manki railway station.

2.3 Proposed Connectivity

2.3.1 Road Connectivity

In order to avoid the congestion to the existing road and to ensure quick traffic movement from/to the port, it is proposed to develop a dedicated road corridor with a Right of Way (RoW) of 25m. The total length of road corridor is about 4 km, which connects proposed barge/vessel loading facility and NH 17 near Kasarkod.

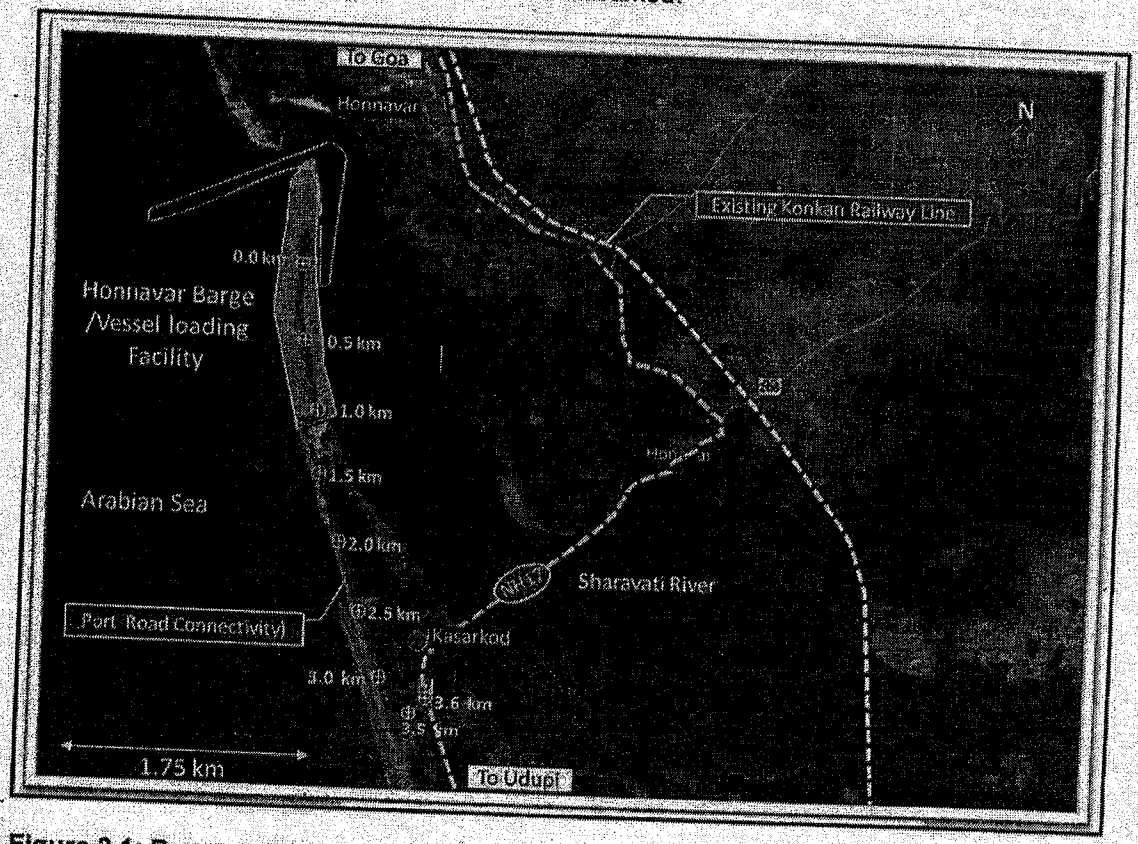


Figure 2-1: Proposed Road Connectivity

2.3.2 Rail connectivity

Total length of Rail connectivity is about 14.6 km which connects proposed barge/ vessel loading facility with Manki railway station will have 1 Broad Gauge (BG) railway tracks, Rail exchange yards.

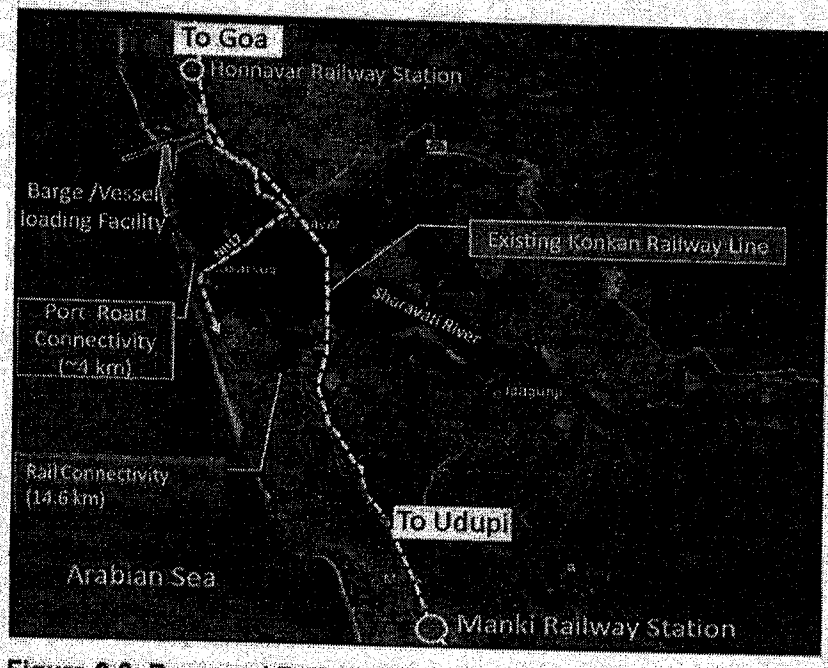


Figure 2-2: Proposed Rail Connectivity to Barge/Vessel Loading Facility

2.4 Existing Traffic Scenario on NH-17 & NH 206

NH-17 passing near the project site is a two-lane road undivided carriage way and existing traffic scenario of NH-17 (Kundapur to Surathkal) is given in the Table 2. NH 206 is a two lane undivided carriage way connecting Honnavar and Tumkur via Shimoga. Existing traffic details of the NH 206 is presented in Table 3.

Table 2: Existing and Projected Traffic at NH-17 near Honnavar

Year	Kundapur to Surathkal	Kundapur to Goa border
PCU (including all vehicles)		
2010	15743	14191
2011	16711	15064
2012	17678	15990
2013	18702	16972

(Source: Detailed Design Engineering study by Sheladia Inc for NH-17 submitted to NHAI & DFR study by Span Consultant for NH-17 submitted to NHAI)

Table 3: Existing Traffic at NH 206 (Honnavar to Tumkur)

Year	NH 206	
	Tumkur to Shimoga	Shimoga to Honnavar
	PCU (including all vehicles)	
2011	12960	4212

(Source: DPR study by URS Scott Wilson submitted to NHAI)

2.5 Projected Traffic at NH-17 and NH-206

Based on the above traffic data obtained for NH-17 and NH-206, an increase in 5% traffic/year is assumed for the next coming years

Table 4: Projected Traffic at NH-17 near Honnavar

Year	NH-17		NH-206	
	Kundapur to Mangalore	Kundapur to Goa border	Shimoga to Honnavar	Tumkur to Shimoga
	PCU (including all vehicles)			
2014	19637	17820	4876	15002
2015	20618	18711	5120	15752
2016	21648	19647	5376	16540
2017	22730	20629	5644	17367

2.6 Cumulative Traffic on NH with Barge/ Vessel Loading Facility Development

Expected PCU from the Barge/ Vessel loading facility and the addition of traffic on NH 17 and NH 206 is given in the below Table 5.

Table 5: Cumulative Traffic due to Proposed Facility

Year	Expected PCU from the Barge/ Vessel loading facility	Cumulative traffic (projected at NH + % of Project traffic)			
		NH 17		NH 206 (40%)	
		To Mangalore (30%)	To Goa (30%)	Shimoga (Section)	Tumkur (Section)
2014	2970	20528	18711	6064	16190
2015	2970	21509	19602	6308	16940
2016	2970	22539	20536	6564	17728
2017	2970	23621	21520	6832	18555

2.7 Carrying Capacity of NH-17 and NH-206

NHAI is widening the NH-17 (from two lane to four lane divided carriageway to increase the level of service) from Kundapur to Mangalore and widening to four lane from Kundapur to Goa border is in detailed engineering stage. Widening plan for NH 206 is given below Table 6

Table 6: Proposed Widening for NH 206

Lane Specification	Location /Chainage	
	from	To
Four lane with divided carriage way	Tumkur	Shimoga
Two lane with paved shoulder	Shimoga	Honnavar

As per the IRC standards 20000 PCU to 30000 PCU will be accommodated in the four lane divided carriage way. Traffic due to the proposed barge loading facility is estimated at 2970 PCUs which can be accommodated by proposed widening of NH-17 and NH-206.

2.8 Transportation of Cargo to the Hinterland

The cargo transportation from the barge loading facility to the hinterland will be through proposed road and rail connectivity to NH-17 and Konkan railway. It is assumed that the 30% of cargo will be evacuated via rail and 70% of cargo will be evacuated by road.

2.8.1 Anticipated impacts

- Increase of traffic flows due to the transportation of cargo from the proposed facility to hinterland.
- Generation of fugitive dust due to the transportation of dry bulk cargo such as coal and iron ore to near by industries.
- During the accidental spillage of cargo in the nearby water bodies and land.
- Incremental noise level is due to the increased traffic volume and Cargo movements

2.8.2 Mitigation measure

- The baseline ambient air quality is well within the prescribed NAAQ standards due to the less human activity and no industrial activity.
- The increase in traffic volume due to the proposed facility is estimated at 2970 PCU. Proposed NH 17 widening could cater the mentioned traffic easily with out affecting the existing level of service. Already the Kundapur to Surathkal is in completion stage. NHAI is planning to develop the entire NH 17 in to four lane divided carriage in various stages.
- All the vehicles carrying cargo will be covered with tarpaulin to avoid the fugitive dust generation
- Ambient air quality, Noise levels and water quality will be monitored at regular intervals during construction and operations phases in the study area.

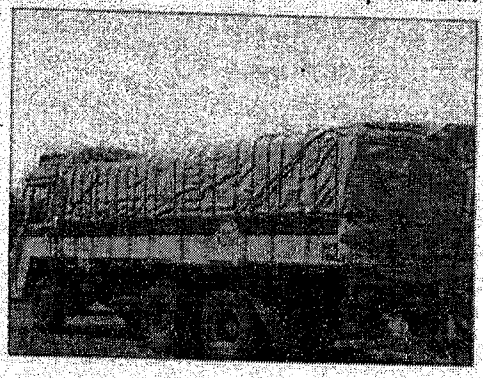


Figure 2-3Typical MAV with Tarpaulin cover

2.9 Ambient Air quality Model Study

In order to study the impact on ambient air quality due to the proposed increase in traffic volume, air quality modelling study has been carried out to predict the incremental concentration in the study area covering all emissions due to storage area, road and rail.

The study results reveals that the "*The resultant concentrations of PM_{10}, $PM_{2.5}$, NO_x, and SO_2 at all monitoring stations are found to be well within the National Ambient Air Quality Standards (NAAQS). From the predicted GLCs and the corresponding resultant concentrations, it can be concluded that there is no significant increase over the baseline levels due to the movement of vehicles.*