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General Consultant for Mumbai Trans Harbour Link Project

Ref No: MTHL/GC/MMRDA/LT/ENV-3007/2022

26th July 2022

To, **Engineer-in-Chief** Engineering Division Mumbai Metropolitan Regional Development Authority (MMRDA) 2nd Floor, New MMRDA Building, Plot No R-06 & R-12, 'E' Block Bandra Kurla Complex, Bandra (E), Mumbai, Maharashtra, India 400051.

Sub: General Consultancy services for Mumbai Trans Harbour Link (MTHL) project -Submission of Half Yearly Report No. 13 from January to June 2022

Dear Sir,

We are hereby attaching the Half Yearly Report No. 13 from January to June 2022. You may please forward the same to the concerned departments for their record.

Thanking you, Yours faithfully,

m kan 26 July 2022

Dr. S H Robin Sham, CBE (BSc, PhD, DIC, FCGI, FRSA, CEng, FICE, FIStructE, FHKIE) The Engineer **General Consultant (MTHL)**

Encl: Half Yearly Report No. 13 from January to June 2022

CC: Superintending Engineer – MMRDA - Mr. Purushottam Nimje Executive Engineer – MMRDA – Mr. Arjun Korgaonkar By Email Superintending Engineer – MMRDA - Mr. Yatin Sakhalkar Executive Engineer – MMRDA – Mr. Abhijit Bhisikar Executive Engineer – MMRDA – Mr. M. P. Singh

HALF YEARLY REPORT FOR MUMBAIJANUARY TOTRANS HARBOUR LINKJUNE 2022



<u>Submitted to</u> Maharashtra Pollution Control Board (MPCB)

Submitted by



Information of Project officer and Nodal officer

1.	Name of Project officer	Executive Engineer,		
1.	Email	MTHL- Project Implementation Unit 2 nd & 5 th floor, New Administrative building, MMRDA Engineering Division, Mumbai Metropolitan Region		
		Development Authority (MMRDA), E-Block, Bandra Kurla Complex, Bandra East, Mumbai, Maharashtra 400051		
	Phone /Fax Number	Phone No.: 022-26594034		
2.	Name of Nodal officers	Engineer In Chief,		
		MTHL Project Implementation Unit		
		2 nd floor, New Administrative building, MMRDA,		
		Engineering Division, Mumbai Metropolitan Region		
	Email	Development Authority (MMRDA), E-Block, BKC, Bandra		
		Kurla Complex, Bandra East, Mumbai, Maharashtra 400051		
	Phone /Fax Number	Email:		
		engineerinchief@mailmmrda.maharashtra.gov.in		
		Phone No.: 022-26594032		

Photographs showing present progress of work

Please refer to the Quarterly Progress Report No. 19 (October to December 2021) and 20 (Jan to March 2022) for the photographs of the progress

Monitoring the Implementation of Environmental Safeguards

Ministry of environmental & Forest Western Region, Regional Office, Bhopal Monitoring Report PART – I DATA SHEET

No.	Particular		Information
1.	Project type: River Valley / Mining / Industry / Thermal / Nuclear / Others (specify)	:	Infrastructure
2.	Name of the Project	:	Mumbai Trans Harbour Link Project
3.	Clearance letter (s) / OM No. and date	:	F. No. 11-65/2012-IA.III on 25 th January, 2016
4.	Location		Start point: Sewri in Mumbai City
	a) District (s)	:	End Point: Chirle in Raigad District
	b) State (s)	:	Maharashtra
	c) Location latitude / longitude	:	Start: Latitude: 18°59'48.57"N Longitude: 72°51'20.67"E
			End: Latitude: 18°56'18.33"N Longitude: 73° 1'52.92"E
5.	 Address for Correspondence a) Address of the Concerned Project Chief Engineer (with Pin code & Telephone / Telex / Fax Numbers) b) Address of the Concerned Project Chief Engineer (with Pin code & Telephone / Telex / Fax Numbers) 	:	Engineer In Chief, MTHL Project Implementation Unit 2 nd floor, New Administrative building, MMRDA, Engineering Division, Mumbai Metropolitan Region Development Authority (MMRDA), E-Block, BKC, Bandra Kurla Complex, Bandra East, Mumbai, Maharashtra 400051 Phone No.: 022-26594034
6.	Salient features a) of the Project	:	The proposed Mumbai Trans Harbour Link ('MTHL') is proposed to facilitate decongestion of the island city by improving connectivity between Island city and main land (Navi Mumbai) and development of Navi Mumbai Region.

No.	Particular		Information
			Mumbai Trans Harbour Link Project is 22 km long 6- lane bridge across the Mumbai Bay connecting Sewri on Mumbai side to Chirle on Navi Mumbai side.
			 Benefits: Saving in travel time, Vehicle Operating Cost and Fuel Savings Accelerated growth of Navi Mumbai Decongestion of island city of Mumbai Connectivity to MbPT and JNPT Ports Faster access to Navi Mumbai International Airport Connectivity to Pune Expressway and to South India
	b) of the Environmental Management Plans		Various measures stipulated in the Environmental Management Plan mentioned in the CRZ clearance are being complied.
7.	Breakup of the Project Area	:	Total Area of Right of Way: 120.228 Ha
	a) Submergence area: forest & non forest		Forest area: 47.417 Ha Non-Forest area: 72.811 Ha
	b) Others		
8.	Breakup of the project affected population with the enumeration of those losing Houses / Dwelling units only, Agricultural Land & Landless Laborers / Artisans:	:	Project affected population: Please refer to the Quarterly Progress Report No. 19 and 20 for the project affected population attached as Annexure-VI
	 a) SC, ST / Adivasi b) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details & year of survey) 		MMRDA has approved eligibility of 6645 fisher folks as project affected so far. Accordingly, fisheries department, Gov. of Maharashtra has paid compensation to eligible fisher-folk as per approved Fisherman Compensation Policy
9 a)	Financial Details: Project cost as originally planned and subsequent revised estimates and the year of price reference	:	The total cost of the project is Rs. 17,843 Crore Year of reference: 2016

No.	Particular		Information
	environmental management plans with item wise and year wise breakup		implementation of Environment Management Plan for the MTHL project.The item-wise cost breakup of the EMP is attached as Annexure-II.
c)	Benefit cost ratio/Internal rate of Return and the year of assessment	:	-
d)	Whether (c)includes the cost of environmental management as shown in the above	:	-
e)	Actual expenditure incurred on the project so far	:	Rs. 13192.91 Crore
f)	Actual expenditure incurred on the environmental management plans so far	:	Please refer Annexure-VII for actual expenditure incurred on the environmental management plans so far.
10	Forest Land Requirement		
a)	The status of approval for diversion of forest land for non-forestry use	:	Stage – I clearance approval for diversion of forest land for non-forestry use has been received from MoEF & CC on 22 nd January 2016 vide letter F.No.8-89/2013-FC.
b)	The status of clearing felling	:	NOC from Hon. High Court for cutting of mangroves is received on 28 th November 2016. Working Permission from Forest Department received on 22 May 2017.
c)	The status of compensatory afforestation, if any Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	:	Rs. 91.42 crores have been transferred to Mangrove cell of Mangroves & Marine Biodiversity Foundation, setup under Maharashtra State Forest Department for Compensatory Afforestation (CA). Mangrove cell, Mumbai submitted updated status report of plantation (Attached as Annexure-VIII)
11	The status of clear felling in non-forest areas (such as submergence area or reservoir, approach roads.), if	:	Commencement Letters have been issued to the Contractors of Package-1, Package-2 and Package-3 on 23 March 2018. Permission for cutting/transplantation in non-forest
	any with quantitative information required.		area of Navi Mumbai side has been granted by CIDCO. Copy of permission letter is attached herewith as

No.	Particular		Information
			Annexure-IX.
			However, felling in non-forest area has not started yet
12	Status of construction (Actual&/or planned)		Commencement Letters have been issued to the Contractors of Package-1, Package-2 and Package-3 on 23 March 2018. Please refer to the Quarterly Progress Report No. 19 and 20 attached with this report as Annexure-VI .
a)	Date of commencement (Actual & / or planned)	:	Commencement Letters have been issued to the Contractors of Package-1, Package-2 and Package-3 on 23 March 2018.
b)	Date of completion (Actual &/or planned)	:	Date of completion planned of Package 1 & 2 is 21-09- 2022 and for Package 3 is 21-09-2021. Extension of Time (EoT) has been granted to the contractors is below: Package 1: 30-09-2023 Package 2: 27-09-2023 Package 3: 03-03-2023
13	Reasons for the delay if the project is yet to start	:	Due to Covid 19 pandemic situation and Land Acquisition issues a project was delayed and Extension of Time (EoT) has been granted up to September 2023. Annexure – XI.
14	Dates of Site Visits		
a)	The dates on which the project was monitored by the Regional Office on previous occasions, if any	:	
b)	Date of site visits for this monitoring report	:	

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Name: - Shri. S. A. Wandhekar

Engineer In Chief, MTHL Project Implementation Unit

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ENGINEER-IN-CHIE

New Administrative building, MMRDA, 2nd floor, Engineering Department, Mumbai Metropolitan Region Development Authority (MMRDA), E-Block, BKC, Bandra Kurla Complex, Bandra East, Mumbai, Maharashtra 400051 Phone No.: 022-26594034

Signature:

Stamp:

1.	Project Type	•••	Infrastructure
2.	Name of the Project	:	Mumbai Trans Harbour Link (MTHL) Project
3.	Clearance letter and date	:	F. No. 11-65/2012-IA.III on 25 th January, 2016
4.	Location	:	
	a. District	:	Start point: Sewri in Mumbai City
			End Point: Chirle in Raigad District
	b. State	:	Maharashtra
	c. Latitude/Longitude	:	Start:
			Latitude: 18°59'48.57"N
			Longitude: 72°51'20.67"E
			End:
			Latitude: 18°56'18.33"N
			Longitude: 73° 1'52.92"E
5.	Address of correspondence		
6.	a. Address of concerned	:	Chief Engineer / Engineer in Chief,
	project Head		
			MTHL Project Implementation Unit
			2 nd floor, New Administrative building, MMRDA,
			Engineering Division, Mumbai Metropolitan Region
			Development Authority (MMRDA), E-Block, Bandra
			Kurla Complex, Bandra East, Mumbai, Maharashtra
			400051
			Phone No.: 022-26594034

HALF YEARLY COMPLIANCE REPORT

S. No.	Condition of 2013 clearance	Compliance
7. Speci	ific Conditions	
(i)	As per the CRZ Notification 2011, at least five times the number of mangroves destroyed/cut during the construction process shall be replanted. Mangrove plantation in an area of 30 ha shall be carried out as committed against loss of 0.1776 ha mudflats/mangroves. Permission from the High Court of Bombay shall be obtained with respect to mangrove cutting.	Noted, about 25 Crores have been contributed by MMRDA to Mangroves Fund, as an initiative by Govt. of Maharashtra for Conservation and Protection of Mangroves in Coastal areas. The amount is used for Survey & Demarcation of Notified areas. Purchase of vehicles and equipment for anti- Encroachment drives, etc. Permission copy of High court for mangrove cutting attached as Annexure-I
(ii)	Proponent shall provide lighting in consulting with the Bombay Natural History Society (BNHS) so as to minimize the likely impacts to the migratory birds.	Noted and being complied (embedded lighting, to be finalized in consultation by BNHS)
(iii)	All the construction equipment's shall be provided with exhaust silencers as committed.	Noted, all the construction equipment used by contractors are provided with exhaust silencers to reduce noise. Photographic evidence of same attached as Annexure-III
(iv)	Noise containment barriers shall be provided on both sides of the bridge in mudflat areas (CRZ-IA) so as to minimize the likely impacts to the migratory birds as committed	Noise containment barriers have to be provided by the Package-I and Package-II on both sides of the bridges to minimize the likely impact to the migratory birds. Till date 1.14 crore have been spent by packages on the temporary barriers.
(v)	There shall be no dredging and reclamation for the project	The proposed project is for the construction of 6 lane road bridge across the Mumbai Harbour between Sewari in MbPT area and Chirle in Navi Mumbai to improve connectivity and facilitate traffic decongestion and hence does not involve dredging and reclamation works
(vi)	Pre-stressed super structure shall be used in the mud flat area for construction as committed	Noted and is being proposed in the mudflat area
(vii)	The muck materials shall be analyses	Noted and is being complied. Muck

Compliance to the Conditions Recommended in CRZ Clearance-2013

S. No.	Condition of 2013 clearance	Compliance
	prior to dumping/disposal in the identified locations with the approval of the competent authority to ensure that it do not cause any impact to the environment.	materials are collected and analyzed prior to dumping/disposal at identified locations. Muck analysis report from Package-I & II
		attached as Annexure-IV
(viii)	Proponent informed that there is no fishing activity in the area since it is a navigation channel for the nearby ports. However, navigational channel is provided with 25 m from ships and 9.1 m from fishing boats.	Noted and being complied
(ix)	All the recommendations of the MCZMA shall be strictly complied with.	Noted and being scrupulously complied
(x)	There shall be no building construction beyond 20,000 sqm.	The proposed project is for the construction of 6 lane road bridge across the Mumbai Harbour between Sewari in MbPT area and Chirle in Navi Mumbai to improve connectivity and does not involve construction of buildings. However, during construction phase of the project temporary site offices and work camps will be constructed which will be well within 20,000 sqm area
(xi)	There shall be no water drawal in CRZ area.	The proposed project does not involve abstraction of the ground water in CRZ area. The water demand for the proposed project is being met through tanker water
(xii)	There shall be no disposal of solid or liquid waste on coastal area. Solid waste management shall be as per Municipal Solid (Management and Handling) Rules, 2000.	The project strictly complies with the new SWM rules 2016 and subsequent amendments and the solid and liquid waste and segregated at source, collected and disposed as per the abovesaid rules. Biodegradable waste is being used for composting at site and non-biodegradable waste will be handed over to authorized agencies for disposal.
(xiii)	Sewage shall be treated and Treatment Facility shall be provided in accordance with the Coastal Regulation Zone	Noted and will be complied

S. No.	Condition of 2013 clearance	Compliance
	Notifications 2011, The disposal of treated water shall conform to the regulation of the State Pollution Control Board.	
(xiv)	The project proponent shall set up a separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of senior executive	Noted and complied, An Environmental Management Cell has been set up and the structure of the committee comprise experts from National Institute of Oceanography; Representative of BNHS; renowned expert in Ornithology; Director, Fisheries Institute, Versova, Andheri; Head of Coastal Engineering, IIT, Mumbai and Representative of Environment Department and Maharashtra Pollution Control Board. The officer of MMRDA is acting as a Member Secretary to coordinate the quarterly meetings of the committee.
(xv)	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purpose.	already commenced till date. Noted, Total fund allocated for the environmental management is 335 crores and till date 282.51 Cr has been spent as a part of environmental management out of which 252.41 Cr has been contributed by the MMRDA. EMP expenditure details attached as Annexure-V.
8. Gene	ral Conditions	
(i)	Full support shall be extended to the officers of the Ministry/Regional Office of Bhopal by the project proponent during inspection of the project for monitoring purpose by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities	Noted and being complied

S. No.	Condition of 2013 clearance	Compliance
(ii)	A six-monthly monitoring report shall need to be submitted by the project proponent to the regional office of this ministry at Bhopal regarding the implementation of the stipulated conditions	Noted and is being complied
(iii)	Ministry of Environment and Forest or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of environment and same shall be complied with	Noted and will be adhered
(iv)	The Ministry reserve the right to revoke this clearance if any of the conditions stipulated are not complied with to the satisfaction of the Ministry	Noted and will be adhered
(v)	In the event of a change in project profile or change in the implementation agency, afresh reference shall be made to the Ministry of Environment and Forests	Noted and will be adhered
(vi)	The project proponents shall inform to the Regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work	Noted and will be adhered
(vii)	A copy of the clearance letter shall be marked to concerned Panchayat/local NGO if any, from whom any suggestions/representations has been made a received while processing the proposal	Noted and complied. Annexure-X
(viii)	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office/Tehsildar's office for 30 days.	
9.	The above stipulations would be enforced among others under the provisions of Water (Prevention and	Noted and complied

S. No.	Condition of 2013 clearance	Compliance
	Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance Act), 1991 and EIA notification 1994 including the amendments and rules made thereafter	
10.	All other statuary clearances such as approvals for storage of diesel from Chief Controller of Explosive, Fire Department, Civil Aviation Department and clearances under the Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities	Noted and complied. Clearances under Forest Conservation Act, 1980 has been taken by MMRDA from MoEF & CC on 22 nd January 2016 vide letter F.No.8-89/2013-FC. The project proponent had allotted the construction work to L&T and JV of Daewoo and Tata through contract and the statuary clearances such as approvals for storage of diesel from Chief Controller of Explosive, Fire Department, Civil Aviation Department has been taken by them. After completion of the project MMRDA
11.	The project proponent shall advertise in at least two local newspapers widely circulate in the region, one of which shall be in a vernacular language informing that the project has been accorded CRZ Clearance and copies of the clearance letter are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forest at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of the receipt of the clearance letter and a copy of the same should be forwarded to the Regional office of this ministry at Bhopal	 will ensure compliance. Noted and complied. The advertisement for accord of the CRZ clearance was published in the (Lok Satta and Indian Express on 30.01. 2016) Annexure-X
12	The clearance is subject to final order of the Hon'ble Supreme Court of India in	Noted

S. No.	Condition of 2013 clearance	Compliance
	the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	
13	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010	Noted
14	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent on its website.	Noted and Complied The status of the compliance of stipulated EC conditions are uploaded on the website of MMRDA
15	A copy of the clearance letter shall be sent by the proponent to be concerned Panchayat, Zilla parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The Clearance letter shall also be put on the website of the company by the proponent.	Noted and Complied
16	The proponent shall upload the status of the compliance of stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF, the respective Zonal Office of CPCB and the SPCB	Noted and complied The status of the compliance of stipulated EC conditions, including results of monitored data are uploaded on the website of MMRDA and also submitted to Regional Office of the MoEF&CC, the respective Zonal Office of CPCB and the SPCB
17	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as by e-mail) to the respective Zonal Office of CPCB and the SPCB	Noted and complied

S. No.	Condition of 2013 clearance	Compliance
18	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rule 1986 as amended subsequently, shall also be put on the website of the company along with the status of the compliance of EC conditions	Noted and Complied
	and shall also be sent to the respective Regional Offices of MoEF by e-mail.	

Compliance to the Conditions Recommended in CRZ Clearance-2016

Sr. No.	SPECIFIC CONDITIONS	COMPLIANCE STATUS
i.	All the terms and conditions stipulated by	Noted. MMRDA is following the
	the MCZMA in their letter No. CRZ 2015/CR236/TC 4 dated 26 th November	conditions stipulated in the CRZ Clearance.
	2015 shall be strictly complied with.	
ii.	All the terms and conditions as mentioned	Noted.
11.	in the earlier CRZ Clearance dated 19 th July	
	2013, shall also be complied with in letter	MMRDA is following the conditions
	and spirit,	stipulated in the CRZ Clearance dated 19 th July 2013.
iii.	The Environment Management Plan as	MMRDA is implementing the
	presented during the meeting shall be implemented in consultation with all the	Environment Management plan as stipulated in CRZ clearance. The
	stakeholders.	implementation plan with detailed EMP
	Statenoración	is attached as an Annexure V
iv.	The project/activity shall be carried out	Noted and is being complied
10.	strictly be in accordance with the provisions	Noted and is being complied
	of CRZ Notification, 2011, and shall not	
	affect the coastal ecology of the area	
	including flora and fauna.	
v.	The project proponent shall obtain all	Noted and will be complied
	permissions from concerned authorities	
	prior to commencement of the project and	
	shall observe all safety requirements	
	onshore and offshore.	
vi.	The project proponent shall not undertake	This condition has been revised by
	any blasting/construction activities during	MoEF& CC vide letter dated 28th August,

Sr. No.	SPECIFIC CONDITIONS	COMPLIANCE STATUS		
	night hours.	2017 having file no F. No. 11-65/2012- IA. III. Refer Annexure-VI (QPR)		
vii.	The proposal indicates the diversion of 47.417 ha forest land for which the proponent shall obtain the requisite Forest Clearance. The project may be executed in the entire stretch in non-forest land, and while making application to get the Forest Clearance, the execution of work on non- forest land shall not be cited as a reason for grant of FC and in case FC is declined, the forest land shall be maintained at its existing condition. The PP shall submit an undertaking to this effect at the earliest to the concerned Regional Office to this Ministry.	diversion of forest land for non-forestry use has been received from MoEF & CC on 22nd January 2016 vide letter F.No.8 89/2013-FC.		
viii.	All the wildlife mitigation measures as proposed by BNHS in their report dated 23.09.2015 for original alignment shall be implemented with the following modification	Noted and shall be complied		
	a) Construction of jetty on both the ends passing through mud flats and mangroves must not exceed 30 months and construction of actual spans must not exceed more that further 12 months.	Noted		
	b) The distance between the supporting pillars shall remain 50 m as currently proposed by the MMRDA.	The distance between the piers is maintained more than 50 m.		
	c) MMRDA will partly bear the cost of setting of effluent treatment plant in the region as suggested by BNHS.	Noted and being complied		
ix.	The project proponent shall not undertake any blasting/construction activities during night hours.	This condition has been revised by MoEF&CC vide letter dated 28 th August 2017 having file no F. No. 11-65/2012- IA. III. Refer Annexure-VI (QPR)		

Sr.No.	GENERAL CONDITIONS	COMPLIANCE STATUS
1 2	Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment. Full support shall be extended to the officers of this Ministry (Decience) Officer at Nagrup by the	Noted and is being complied.
	this Ministry/Regional Office at Nagpur by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Noted and shall be complied.
3	A Six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Nagpur regarding the implementation of the stipulated conditions.	Noted and is being complied. List of Six-monthly compliance report uploaded are: 1. January to June 2016. 2. July to December 2016. 3. January to June 2017. 4. July to December 2017. 5. January to June 2018. 6. July to December 2018. 7. January to June 2019. 8. July to December 2019 9. January to June 2020 10. July to December 2020 11. January to June 2021 12. July to December 2021
4	MoEF&CC or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of environment and the same shall be complied with.	Noted and shall be complied
5	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with to the satisfaction of the Ministry.	Noted.
6	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the MoEF & CC.	Noted.
7	The project proponents shall inform to the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the	Noted.

Sr.No.	GENERAL CONDITIONS	COMPLIANCE STATUS
	date of start of land development work.	
8	A copy of the clearance letter shall be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal	Noted and complied
9	A copy of the CRZ Clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The Clearance letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/Tehsildar's Office for 30 days.	Noted and complied.
10	The above stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.	Noted and will be complied.
11	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, and clearances under the Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Noted and are being complied.
12	The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest & Climate Change at. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the regional office of this Ministry at Nagpur.	Complied.

Sr.No.	GENERAL CONDITIONS	COMPLIANCE STATUS
13	This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.	Noted.
14	Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.
15	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent on its website.	Stipulated environmental conditions as mentioned in CRZ are complied in six monthly compliance reports. Environmental Safeguards are incorporated in Environmental Management Plan which is being implemented as per the budgetary provisions mentioned in CRZ. Reports & Publications: Half Yearly Report (https://mmrda.maharashtra.gov.in)
16	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.
17	The proponent Shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Noted. Six monthly reports on compliance & monitoring results of conditions stipulated in CRZ clearance is being submitted to MPCB Regional, sub regional office, Nagpur MPCB office, MCZMA & SEIAA.
18	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF & CC, the respective Zonal Office of CPCB	Noted. Six monthly reports on compliance & monitoring results of conditions stipulated in CRZ clearance is being submitted to MPCB Regional, sub regional office, Nagpur MPCB office, MCZMA & SEIAA.

Sr.No.	GENERAL CONDITIONS	COMPLIANCE STATUS
	and the SPCB.	
19	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail.	Noted. Individual construction packages have obtained CTE for batching plant and casting yards and the stipulations are being adhered to and are uploaded on the website of MMRDA

Annexures

Annexure No.	Particulars	Page No.	
Annexure I	Permission copy of High court for Mangrove Cutting		
Annexure II	Item wise cost breakup of the Environmental Management Plan		
Annexure III	Photographic evidence of construction equipment used by contractors are provided with exhaust silencers to reduce noise		
Annexure IV	Muck analysis report from Package-I & II		
Annexure V	EMP Expenditure details		
Annexure VI	Quarterly Progress Reports 19 (October to December 2021) & 20 (January to March 2022)		
Annexure VII	Actual expenditure incurred on the environmental management plans for (January to June 2022)		
Annexure VIII	Status report on Mangrove plantation		
Annexure IX	IX A-Permission letter for Tree cutting by CIDCO		
	B-Permission letter for Tree cutting by CIDCO		
Annexure X	Clearance letter marked to concerned Panchayat /local NGO		
Annexure XI	EOT letters issue to Contractors up to Sept. 2023		

BDPPS

NM/307/2016

IN THE HIGH COURT OF JUDICATURE AT BOMBAY ORDINARY ORIGINAL CIVIL JURISDICITON NOTICE OF MOTION NO.307 OF 2016 IN

PUBLIC INTEREST LITIGATION NO.87 OF 2006

Mumbai Metropolitan Region **Development Authority**

Applicant.

.....Petitioners.

In the matter between

Bombay Environment Action Group and Another

State of Maharashtra and Others.

.... Respondents.

Mr. Saket Mone axw Mr. Subit Chakrabarti i/b Vidhi Partners for applicant in Notice of Motion No. 307 of 2016 in PIL No.87 of 2016.

Mr. Navroz Seeryai, Senior Counsel a/w Ms. Shreya Parikh for the Petitioner in PIL No.87 of 2006.

Mrs. P.H. Kantharia, AGP for Respondent/State in PIL No.87 of 2006.

Ms. Trupti Puranik for Respondent/BMC.

Ms. Sharmila Deshmukh for CRZ.

CORAM: V. M. KANADE & MS. NUTAN D. SARDESSAI, JJ.

28th November, 2016 DATE:

V/s

2/2

NM/307/2016

<u>P.C.:-</u>

1. This Notice of Motion is taken out by the Applicant for carrying out construction of the proposed Mumbai Trans Harbour Link (a proposed 22 km freeway grade road bridge connecting the island city of Mumbai with Navi Mumbai).

2. The learned Counsel appearing on behalf of the Applicant submits that Applicant has obtained clearance from all the concerned authorities. He submitted that Ministry of Environment and Forest, Government of India has granted approval on 22/01/2016 and CRZ clearance has been granted on 25/01/2016. Applicant has given an undertaking in paras 12 and 27 of the affidavit in support of the Notice of Motion. The said undertaking is accepted. Applicant shall comply with all the conditions which are imposed in the said letters of sanction granted by both the authorities.

3. We are satisfied that the said project is public utility project and we grant leave in terms of prayer clause (a) of the Notice of Motion subject to conditions imposed by both the authorities.

4. Notice of Motion is accordingly allowed in terms of prayer clause(a) and disposed of.

(MS. NUTAN D. SARDESSAI, J.) (V.M. KANADE, J.)

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Sr. No	Environmental attribute	Cost in Crores	
1.	Environmental Monitoring- Air Act, Water Act, Noise levels	8	
2.	Compensatory Restoration Plan (Mangroves)	25	
3.	Implementation of the suggestions given by BNHS	25	
4.	Noise barriers	45	
5.	Mitigation of marine water pollution caused due to the surrounding industries and Sewage from Urban Bodies, by providing Funding and Capacity Building for Enabling Effluent Treatment		
6.	 Contribution to Mangroves Fund, an initiative by Govt. of Maharashtra for Conservation and Protection of Mangroves in Coastal areas by depositing Seed Money. This can be used for Survey & Demarcation of Notified areas Purchase of vehicles and equipment for anti-Encroachment drives, etc. 	25	
7.	Oil Spill Mitigation Plan	10	
8.	Habitat quality assessment and monitoring Surveillance management and monitoring team for migratory birds, marine flora, turbidity in sea floor, etc Corpus fund for mudflat restoration program	20	
9.	Appointment of Bird Monitor and his assistant till Restoration of Baseline data	4	
10.	DMP, Firefighting, Risk Analysis	15	
11.	Sustainable development including establishing Nature Interpretation Centre		
12.	Safety and Security	15	
13.	Energy conservation	10	
14.	Landscaping-Plantation of trees, flower in plants etc.	8	
15.	Compensation and Capacity Building of Fisher folks due to Temporary and Permanent Loss of Fishing round	75	
		335 crores	

Annexure-II Environment Management Plan stipulated in CRZ clearance









Manufactured by: SUDHI Plot No. 8,9 & 1 Village - ATHAL This product conforms to the Env 1986 and Notification No. G.S.R 3 (Noise Limit for diesel generator at 1 meter distance	0, Athal Industrial Estate , SILVASSA - 396 230. (U.T of D. & N.H.) viroment (Protection) Rules (71 (E) Dated 17th May 2002
Type Approval Certificate No. :	ARA HOWALSING SWOOUST
Product Model :	17 Sur206
Sr. no. :	180901939
Date of Manufacture :	218/18

Netel (India) Limited

			EFURI			
	of Organization : M/s. L & T Con					
		vri Timber Pond, N		vri(East), N	lumbai.	
Customer Reference : EH401WOD8000155 Dated 21.04.2022						
MoEFC	MoEFCC Validity : 16th Oct 2024					
Discipi	line/Group : Chemical- Pollu	ution & Environmer	Test Report No.		: NIL/SO/06/22/025	
Sample			Sample Code		: NIL/SO/06/22/025	
	ing Method : NIL/Soil/SOP-1	1	Ambient Temper		: 28°C	
	ing Date : 16.06.2022		Sample Receive		: 16.06.2022	
	is Start Date : 17.06.2022		Analysis End Da		: 23.06.2022	
Report	ing Date : 23.06.2022		Sample Qty & Pk	ing.	: 1 kg ,Plastic Zip Lock bag	
Sampli	ng Location : Interchange Ga	idi Adda Pumping	Sampling Done I	Зу	: Netel India Limited	
Sr. No	Parameter	Result	Limit (Schedule II)	Unit	Method	
1	Cadmium (Cd)	0.02	1.0	mg/lit	EPA Method 1311& by AAS	
2	Lead (Pb)	0.26	5.0	mg/lit	EPA Method 1311& by AAS	
3	Chromium (as Cr6+)	<0.05	5.0	mg/lit	EPA Method 1311& by AAS	
4	Arsenic (As)	<0.01	5.0	mg/lit	EPA Method 1311& By FIAS	
5	Total Mercury (Hg)	<0.01	0.2	mg/lit	EPA Method 1311& by FIAS	
6	Copper (Cu)	0.02	25	mg/lit	EPA Method 1311& by AAS	
7	Silver (Ag)	0.01	5.0	mg/lit	EPA Method 1311 &by AAS	
8	Zinc (Zn)	0.12	250	mg/lit	EPA Method 1311 &by AAS	
9	Selenium (Se)	<0.01	1.0	mg/lit	EPA Method 1311 &by FIAS	
10	Antimony	<1	15	mg/lit	EPA Method 1311 &by AAS	
11	Barium (as Ba)	30.4	100	mg/lit	EPA Method 1311 &by AAS	
12	Beryllium	<0.5	0.75	mg/lit	EPA Method 1311 &by AAS	
13	Fluoride (F-)	<1	180	mg/lit	EPA Method 1311 &by UV- VIS. Spectroscopy	
14	Ammonium Compound	<0.4	50	mg/lit	EPA Method 1311 &by UV- VIS. Spectroscopy	

TEST REPORT

Page 1 of 2

A Neterwala Group Company

CIN: U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701. Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.

CONFERENCE AN AV

Netel (India) Limited

Sampl	ing Location : Interchange Ga	di Adda Pumping	Test Report No.		: NIL/SO/06/22/025
Sample Type : Muck			Sample Code : NIL/SO/06/22/025		
Sampling Date : 16.06.2022			Sample Receive Date : 16.06.2022		
Analys	is Start Date : 17.06.2022		Analysis End Da	te	: 23.06.2022
Report	ing Date : 23.06.2022		Sample Qty & Pk	kng.	: 1 kg ,Plastic Zip Lock bag
Sr. No	Parameter	Result	Limit (Schedule II)	Unit	Method
15	Dibromochloromethane	<1	10	mg/lit	EPA Method 1311 &By GC- FID
16	Chlorobenzene	<1	100	mg/lit	EPA Method 1311 &By GC- FID
17	Methyl Ethyl Ketone	<1	200	mg/lit	EPA Method 1311 &By GC- FID
18	Naphthanlene	<1	5.00	mg/lit	EPA Method 1311 & By HPLC
19	Benzo (a) Pyrene	<0.001	0.001	mg/lit	EPA Method 1311 & By HPLC
20	Aldrin	<0.01	0.14	mg/lit	EPA Method 1311 by GC- ECD
21	Dieldrin	<0.01	0.8	mg/lit	EPA Method 1311 by GC- ECD
22	Chlordane	<0.01	0.03	mg/lit	EPA Method 1311 by GC- ECD
23	Dichlorodiphenyltrichloroethane (DDT)	<0.01	0.1	mg/lit	EPA Method 1311 by GC- ECD
24	MethoxychlorDichlorodiphenydichl oroethylene(DDE)	<0.01	10	mg/lit	EPA Method 1311 by GC- ECD
25	Dichlorodiphenyldichloroethane(D DD)	<0.01	0.1	mg/lit	EPA Method 1311 by GC- ECD
26	2,4-Dichlorophenoxyacetic Acid(2,4-D)	<0.01	10	mg/lit	EPA Method 1311 by GC- ECD
27	Endrin	<0.01	0.02	mg/lit	EPA Method 1311 by GC- ECD
28	Heptachlor	<0.001	0.008	mg/lit	EPA Method 1311 by GC- ECD
29	Lindane	<0.01	0.4	mg/lit	EPA Method 1311 by GC- ECD

Note :

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- 2. This Test Report shall not be reproduced except in full, without written approval of the Laboratory.
- 3. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.
- 4. Lab SOP Based on manual o Soil testing in India , Ministry of Agriculture, GOI:2011

End of Report Verified by Issued by Surekha Jamdar Shraddha Kere **Technical Manager Quality Manager**

A Neterwala Group Company

CIN : U74999MH2003P200142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701. Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





	Name of Organization : M/s. L & T Constructions				
Custor	ustomer Address : Gate No. 1 Sewri Timber Pond, Near GadiAdda, Sewri(East), Mumbai.				
Custor	Customer Reference : EH401WOD8000155 Dated 21.04.2022				
MoEFCC Validity : 16th Oct 2024					
Discipline/Group : Chemical- Pollution & Environmer		ution & Environment	Test Repor	t No. : NIL/SO/06/22/025	
Sample Type : Muck			Sample Code : NIL/SO/06/22/025		
Sampling Method : NIL/Soil/SOP-11		Ambient Temperature : 28°C			
Sampling Date : 16.06.2022		Sample Receive Date : 16.06.2022			
Analysis Start Date : 17.06.2022		Analysis End Date : 23.06.2022			
Reporting Date : 23.06.2022		Sample Qty	/ & Pkng. : 1 kg ,Plastic Zip Lock bag		
Sampli	ng Location interchange Ga Yard	Interchange Gadi Adda Pumping		Sampling Done By : Netel India Limited	
Sr. No		Result	Unit	Method	
Genera	I Analyzed Parameters				
1	Cadmium(Cd)	1.5	mg/kg	Lab SOP No:NIL/SOP/15 dt 01/07/14	
2	Lead(Pb)	49.7	mg/kg	Lab SOP No:NIL/SOP/15 dt 01/07/14	
3	Chromium (as Cr6+)	<0.05	mg/kg	APHA 3500-Cr-B	
4	Arsenic (As)	<0.01	mg/kg	EPA 3050B & By FIAS	
5	Total Mercury (Hg)	<0.01	mg/kg	EPA 3050B & By FIAS	
6	Copper (Cu)	116	mg/kg	Lab SOP No:NIL/SOP/15 dt 01/07/14	
7	Dichloromethane	<1	mg/kg	By GC-FID	
8	Carbon Tetrachloride	<1	mg/kg	By GC-FID	
9	Benzene	<1	mg/kg	APHA 6200-C	
10	Selenium (Se)	< 0.01	mg/kg	EPA 3050B & By FIAS	

TEST REPORT

Note :

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2. This Test Report refers only to the sample tested.

3. Any correction in this certificate invalidates the certificate.

4. The testing results reported reflects the quality of sample at the time of testing.

5. The Complaint register is available with the Laboratory as per Environment Protection Act 1986.

End of Report

Verified by

Surekha Jamdar Technical Manager



Issued by

Shraddha Kere Quality Manager

Page 1 of 1

A Neterwala Group Company

CIN: U74999MH2003PLC142228





-			REPORT				
	f Organization : M/s. L & T C						
			nd, Near GadiAdda, Sewri(East), Mumbai.				
Custom	er Reference : EH401WOD	8000155 Dated	21.04.2022				
MoEFCC Validity : 16th Oct 2024							
Discipline/Group : Chemical- Pollution		ollution & Envire	Test Report No. : NIL/SO/06/22/026				
Sample	(K.K.)		Sample Code : NIL/SO/06/22/026				
	g Method : NIL/Soil/SOF	P-11	Ambient Temperature : 28°C				
Sampling Date : 16.06.2022			Sample Receive I	: 16.06.2022			
	s Start Date : 17.06.2022		Analysis End Date : 23.06.2022				
Reportin			Sample Qty & PK	Sample Qty & Pkng. : 1 kg ,Plastic Zip Lock bag			
Sampling Location : Interchange F C1P10B			Sampling Done By		: Netel India Limited		
Sr. No	Parameter	Result	Limit (Schedule II)	Unit	Method		
1	Cadmium (Cd)	0.03	1.0	mg/lit	EPA Method 1311& by AAS		
2	Lead (Pb)	0.05	5.0	mg/lit	EPA Method 1311& by AAS		
3	Chromium (as Cr6+)	<0.05	5.0	mg/lit	EPA Method 1311& by AAS		
4	Arsenic (As)	<0.01	5.0	mg/lit	EPA Method 1311& By FIAS		
5	Total Mercury (Hg)	<0.01	0.2	mg/lit	EPA Method 1311& by FIAS		
6	Copper (Cu)	0.12	25	mg/lit	EPA Method 1311& by AAS		
7	Silver (Ag)	<0.01	5.0	mg/lit	EPA Method 1311 &by AAS		
8	Zinc (Zn)	1.26	250	mg/lit	EPA Method 1311 &by AAS		
9	Selenium (Se)	<0.01	1.0	mg/lit	EPA Method 1311 &by FIAS		
10	Antimony	<1	15	mg/lit	EPA Method 1311 &by AAS		
11	Barium (as Ba)	<1	100	mg/lit	EPA Method 1311 &by AAS		
12	Beryllium	<0.5	0.75	mg/lit	EPA Method 1311 &by AAS		
13	Fluoride (F-)	<1	180	mg/lit	EPA Method 1311 &by UV-VIS. Spectroscopy		
14	Ammonium Compound	<0.4	50	mg/lit	EPA Method 1311 &by UV-VIS. Spectroscopy		

TEST REPORT

Page 1 of 2

A Neterwala Group Company

CIN: U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701. Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.

स्वज्य मारत एक रुदम स्वच्छारा औ और

Netel (India) Limited

Discipli	ne/Group : Chemical- Pc	Ilution & Enviro	Test Report No.		: NIL/SO/06/22/026		
Sample Type : Muck			Sample Code : NIL/SO/06/22/026				
Sampling Date : 16.06.2022			Sample Receive Date : 16.06.2022				
Analysi	s Start Date : 17.06.2022		Analysis End Dat	e	: 23.06.2022		
Reporting Date : 23.06.2022			Sample Qty & Pkng.		: 1 kg ,Plastic Zip Lock bag		
Sr. No	Parameter	Result	Limit (Schedule II)	Unit	Method		
15	Dibromochloromethane	<1	10	mg/lit	EPA Method 1311 &By GC-FID		
16	Chlorobenzene	<1	100	mg/lit	EPA Method 1311 &By GC-FID		
17	Methyl Ethyl Ketone	<1	200	mg/lit	EPA Method 1311 &By GC-FID		
18	Naphthanlene	<1	5.00	mg/lit	EPA Method 1311 & By HPLC		
19	Benzo (a) Pyrene	<0.001	0.001	mg/lit	EPA Method 1311 & By HPLC		
20	Aldrin	<0.01	0.14	mg/lit	EPA Method 1311 by GC-ECD		
21	Dieldrin	<0.01	0.8	mg/lit	EPA Method 1311 by GC-ECD		
22	Chlordane	<0.01	0.03	mg/lit	EPA Method 1311 by GC-ECD		
23	Dichlorodiphenyltrichloroethane (DDT)	<0.01	0.1	mg/lit	EPA Method 1311 by GC-ECD		
24	MethoxychlorDichlorodiphenydichl oroethylene(DDE)	<0.01	10	mg/lit	EPA Method 1311 by GC-ECD		
25	Dichlorodiphenyldichloroethane(D DD)	<0.01	0.1	mg/lit	EPA Method 1311 by GC-ECD		
26	2,4-Dichlorophenoxyacetic Acid(2,4-D)	<0.01	10	mg/lit	EPA Method 1311 by GC-ECD		
27	Endrin	<0.01	0.02	mg/lit	EPA Method 1311 by GC-ECD		
28	Heptachlor	<0.001	0.008	mg/lit	EPA Method 1311 by GC-ECD		
29	Lindane	<0.01	0.4	mg/lit	EPA Method 1311 by GC-ECD		

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- 4. Lab SOP Based on manual o Soil testing in India , Ministry of Agriculture, GOI:2011

End of Report CIAL Verified by Issued by Surekha Jamdar Shraddha Kere **Technical Manager Quality Manager** IME.

A Neterwala Group Company

CIN : U74999MH2099 20942228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701. Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.

the formation and and



	Name of Organization : M/s. L & T Constructions					
Custor	istomer Address : Gate No. 1 Sewri Timber Pond, Near GadiAdda, Sewri(East), Mumbai.					
Customer Reference : EH401WOD8000155 Dated 21.04.2022						
MoEFCC Validity : 16th Oct 2024						
Discipline/Group : Chemical- Pollu		ution & Environment	Test Report	t No. : NIL/SO/06/22/026		
Sample Type : Muck			Sample Code : NIL/SO/06/22/026			
Sampling Method : NIL/Soil/SOP-1		1	Ambient Temperature : 28°C			
Sampling Date : 16.06.2022			Sample Receive Date : 16.06.2022			
Analysis Start Date : 17.06.2022			Analysis End Date : 23.06.2022			
Reporting Date : 23.06.2022			Sample Qty & Pkng. : 1 kg ,Plastic Zip Lock			
Sampli	ng Location : Interchange Pil	: Interchange Pile No-C1P10B		Sampling Done By : Netel India Limited		
Sr. No	Parameter	Result	Unit	Method		
General Analyzed Parameters						
1	Cadmium(Cd)	2.3	mg/kg	Lab SOP No:NIL/SOP/15 dt 01/07/14		
2	Lead(Pb)	92.8	mg/kg	Lab SOP No:NIL/SOP/15 dt 01/07/14		
3	Chromium (as Cr6+)	<0.05	mg/kg	APHA 3500-Cr-B		
4	Arsenic (As)	<0.01	mg/kg	EPA 3050B & By FIAS		
5	Total Mercury (Hg)	<0.01	mg/kg	EPA 3050B & By FIAS		
6	Copper (Cu)	143	mg/kg	Lab SOP No:NIL/SOP/15 dt 01/07/14		
7	Dichloromethane	<1	mg/kg	By GC-FID		
8	Carbon Tetrachloride	<1	mg/kg	By GC-FID		
9	Benzene	<1	mg/kg	APHA 6200-C		
10	Selenium (Se) <0.01		mg/kg	EPA 3050B & By FIAS		
M - 4 - 5						

TEST REPORT

Note :

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3. Any correction in this certificate invalidates the certificate.

4. The testing results reported reflects the quality of sample at the time of testing.

5. The Complaint register is available with the Laboratory as per Environment Protection Act 1986.

End of Report

Verified by

Surekha Jamdar Technical Manager



Issued by

Shraddha Kere Quality Manager

Page 1 of 1

A Neterwala Group Company

CIN: U74999MH2003PLC142228





: M/s. Daewoo-TPL-JV Name of Organization MTHL Pkg-2, Daewoo – TPL JV, Shivaji Nagar Post Khar Kopar, Sector 8, Ulwe, Navi Mumbai Customer Address - 410206 Sampling Done By : Netel (India) Limited Sample Type Muck : 2 Kgs Sample Packing : Plastic Bag Sample Quantity Date of Sampling : 16.02.2022 Analysis Date : 18.02.2022 - 24.02.2022 Sample Received : 17.02.2022 Date of Reporting : 24.02.2022 Sampling Location : MP175-LHS Sample Code : NIL/SO /02/22/007 MDL* Sr. No. **Test Parameter** Unit Result Method Leachate - Lab SOP* NIL/IHM/01 5.7 1 Organic Phosphorus 0.5 mg/kg Analysis - APHA 4500-P-C 2 Cynide APHA 4500-CN mg/kg 0.005 < 0.005 0.14 3 Lead Lab SOP* NIL/SOP/15 0.1 mg/kg 4 Cadmium Lab SOP* NIL/SOP/15 0.1 BDL mg/kg BDL 5 Chromium EPA 3050B 0.1 mg/kg 6 Lab SOP* NIL/SOP/15 3.3 Copper 0.1 mg/kg 7 BDL Mercury EPA 3050B / By FIAS mg/kg 0.1 9 Selenium EPA 3050B / By FIAS BDL mg/kg 0.1 10 Arsenic BDL EPA 3050B / By FIAS mg/kg 0.1 Polychlorinated Biphenyls BDL 11 GC ECD 0.01 mg/kg 12 Dichloromethane GC FID BDL mg/kg 0.1 13 Carbon Tetrachloride GC FID BDL 01 mg/kg 14 1.2-Dichloroethane BDL EPA-8260 B mg/kg 0.1 15 1,1-Dichloroethylene BDL EPA-8260 B mg/kg 0.1 16 cis-1,2-Dichloroethylene EPA-8260 B BDL 0.1 mg/kg 17 1.1.1-Trichloroethane EPA-8260 B BDL mg/kg 0.1 18 1,1,2-Trichloroethane EPA-8260 B 0.1 BDL mg/kg 19 Trichloroethylene EPA-8260 B mg/kg 0.1 BDL 20 Tetrachloroethylene EPA-8260 B 0.1 BDL mg/kg 21 1,3-Dichloropropane EPA-8260 B mg/kg 0.1 BDL

TEST REPORT

A Neterwala Group Company

CIN: U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701. Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





22	Thiuram	GC-MS	mg/kg	0.1	BDL
23	Simazine	GC-MS	mg/kg	0.1	BDL
24	Thiobencarb	GC-MS	mg/kg	0.1	BDL
25	Benzene	GC FID	mg/kg	0.1	BDL
26	Oil & Grease	EPA Method 9071 B	mg/kg	1	BDL

Note :

1. MDL – Method Detectible Limit.

2. BDL - Below Detectible Limit.

3. * Based on Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011

4. This Test Report shall not be reproduced except in full, without written approval of the Laboratory.

5. This Test Report refers only to the sample tested.

6. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.

Verified by:

Surekha Jamdar Dy. Technical Manager

End of Report

Issued by: Cere Shraddha Kere

Technical Manager



CIN: U74999MH2003PLC142228



Name	IESI REPORI Name of Organization : M/s. Daewoo-TPL-JV								
	MTHL Pkg-2, Daewoo – TPL JV,Shivaji Nagar Post Khar Kopar, Sector 8,Ulwe,Navi Mumbai -								
	410206								
	e Type : Muck			ng Done By	: Netel (India) Limited			
	e Packing : Plastic Ba	0	Sample Quantity : 2 Kgs						
	f Sampling : 16.02.202		Analysis Date : 18.02.2022 — 24.02.2022						
	e Received : 17.02.202			Reporting	: 31.03.2021				
	ing Location : Rescue p		Sample		: NIL/SO /02/				
Sr. No	. Test Parameter	Method		Unit	MDL*	Result			
1	Organic Phosphorus	Leachate - Lab SOP* NIL/I Analysis - APHA 4500-F		mg/kg	0.5	3.9			
2	Cynide	APHA 4500-CN		mg/kg	0.005	<0.005			
3	Lead	Lab SOP* NIL/SOP/1	5	mg/kg	0.1	0.13			
4	Cadmium	Lab SOP* NIL/SOP/1	5	mg/kg	0.1	BDL			
5	Chromium	EPA 3050B / By FIAS	6	mg/kg	0.1	BDL			
6	Copper	Lab SOP* NIL/SOP/1	5	mg/kg	0.1	14			
7	Mercury	EPA 3050B / By FIAS	6	mg/kg	0.1	BDL			
9	Selenium	EPA 3050B / By FIAS	5	- mg/kg	0.1	BDL			
10	Arsenic	EPA 3050B / By FIAS	5	mg/kg	0.1	BDL			
11	Polychlorinated Biphenyls	GC ECD		mg/kg	0.01	BDL			
12	Dichloromethane	GC FID		mg/kg	0.1	BDL			
13	Carbon Tetrachloride	GC FID		mg/kg	0.1	BDL			
14	1,2-Dichloroethane	EPA-8260 B		mg/kg	0.1	BDL			
15	1,1-Dichloroethylene	EPA-8260 B		mg/kg	0.1	BDL			
16	cis-1,2-Dichloroethylene	EPA-8260 B		mg/kg	0.1	BDL			
17	1,1,1-Trichloroethane	EPA-8260 B		mg/kg	0.1	BDL			
18	1,1,2-Trichloroethane	EPA-8260 B		mg/kg	0.1	BDL			
19	Trichloroethylene	EPA-8260 B		mg/kg	0.1	BDL			
20	Tetrachloroethylene	EPA-8260 B		mg/kg	0.1	BDL			
21	1,3-Dichloropropane	EPA-8260 B		mg/kg	0.1	BDL			

TEST REPORT

A Neterwala Group Company

CIN: U74999MH2003PLC142228

Office & Laboratory : W-408, Rabale MIDC, TTC Industrial Area, Navi Mumbai - 400 701. Phone : 72080976 92 / 93 / 94 / 95 • Website : www.netel-india.com • E-mail : ems@netel-india.com Registered office : Liberty Building, 3rd Floor, Sir Vithaldas Thackersey Marg, (New Marine Lines), Mumbai - 400 020.





22	Thiuram	GC-MS	mg/kg	0.1	BDL
23	Simazine	GC-MS	mg/kg	0.1	BDL
24	Thiobencarb	GC-MS	mg/kg	0.1	BDL
25	Benzene	GC FID	mg/kg	0.1	BDL
26	Oil & Grease	EPA Method 9071 B	mg/kg	1	BDL

Note :

1. MDL - Method Detectible Limit.

2. BDL - Below Detectible Limit.

3. * Based on Manual of Soil testing in India, Ministry of Agriculture, GOI, 2011

4. This Test Report shall not be reproduced except in full, without written approval of the Laboratory.

5. This Test Report refers only to the sample tested.

6. The complaint register is available with the Laboratory as per Environment Protection Act, 1986.

Verified by:

Surekha Jamdar Dy. Technical Manager

End of Report

Issued by:

Technical Manager

A Neterwala Group Company



CIN: U74999MH2003PLC142228

Annexure-V

	EMP break up	for January to Jun	e 2022		
Sr. No	Environmental attribute	Cost in crores (As stipulated in CRZ clearance) (Rs. in Crore)	Expenditure incurred on the environmental management plans (Rs. in Crore)	Cumulative Expenditure (Rs. In Crore)	
1.	Environmental Monitoring- Air Act, Water Act, Noise levels	8	1.29	2.23	
2.	Compensatory Restoration Plan (Mangroves)	25	0.1611	50.9811	
3.	Implementation of the suggestions given by BNHS	25	0	41.98	
4.	Noise barriers	45	0	1.1426	
5.	Mitigation of marine water pollution caused due to the surrounding industries and Sewage from Urban Bodies, by providing Funding and Capacity Building for Enabling Effluent Treatment	40	0	5.8	
6.	Contribution to Mangroves Fund, an initiative by Govt. of Maharashtra for Conservation and Protection of Mangroves in Coastal areas by depositing Seed Money. This can be used for Survey & Demarcation of Notified areas. Purchase of vehicles and equipment for anti- Encroachment drives, etc.	25	0	25	
7.	Oil Spill Mitigation Plan	10	0.08	1.84	
8.	Habitat quality assessment and monitoring Surveillance management and monitoring team for migratory birds, marine flora, turbidity in sea floor, etc Corpus fund for mudflat restoration program	20	0	0	

	EMP break up	for January to Jun	e 2022	
Sr. No	Cost in croresExpenditure(As stipulatedincurred on theEnvironmental attributein CRZenvironmentalclearance)(Rs. in Crore)(Rs. in Crore)		Cumulative Expenditure (Rs. In Crore)	
9.	Appointment of Bird Monitor and his assistant till Restoration of Baseline data	4	0	0
10.	DMP, Firefighting, Risk Analysis	15	0.099	2.76914
11.	Sustainable development including establishing Nature Interpretation Centre	10	0	10
12.	Safety and Security	15	3.40	17.62
13.	Energy conservation	10	0.11	3.573
14.	Landscaping-Plantation of trees, flower in plants etc.	8	0	0.77
15.	Compensation and Capacity Building of Fisher folks due to Temporary and Permanent Loss of Fishing round	75	0	118.81
	TOTAL	335 Crores	5.14	282.51



Mumbai Trans Harbour Link Project Quarterly Progress Report No. 19 1st October 2021 to 31st December 2021 Loan Agreement No. ID-P255 (Tranche–I)

ORGANIZATION INFORMATION

	Mumbai Met	ropolitan Region Development Authority	
_	Person in Charge	Metropolitan Commissioner, MMRDA	
Borrower	Contact Address	M.M.R.D.A. New Office Building, Bandra-Kurla Complex, Plot no. R-5, R-6 & R-12, E Block, Bandra (East), Mumbai - 400051 Phone: +91-22-26594000 Fax No:+91-22-2659 1264	
	Mumbai Trans Harbour Link Project Implementation Unit		
Executing	Headed by:	Chief Engineer Mumbai Trans Harbour Link Project Implementation Unit	
Agency	Contact Address	M.M.R.D.A. New Office Building, Bandra-Kurla Complex, Plot no. R-5, R-6 & R-12, E Block Bandra (East), Mumbai - 400 051 Phone: +91-22-2659 4034 Fax No: +91-22-2659 4179	

Details of JICA Loan

	JICA ODA Loan Portion:	238,572 million Japanese YEN (JPY)
Source of Finance	Tranche-I:	144,795 million Japanese YEN (JPY) (Loan Agreement signed on 31 st March 2017)
	Tranche-II:	66,909 million Japanese YEN (JPY) (Loan Agreement signed on 27 th March 2020)
Terms and Conditions of JICA ODA Loan (Tranche-1)	Repayment Period:	30 years, including 10 years of grace period.

PROJE	CT NAME	Mumbai Trans Harbour Link Project				
DOC NO.		19	DATE OF IS	SSUE	17/01/2022	
DOC T	ITLE	Quarterly Progress Report No. 19				
REV No.	DATE OF ISSUE	DESCRIPTION	PREPARED BY	CHECKED BY		APPROVED BY
RO	05/07/2017	Quarterly Progress Report No. 1 (Apr-Jun 17)	J Senthil	Dr T K Sund	aram	Dr Robin Sham
RO	05/10/2017	Quarterly Progress Report No. 2 (Jul-Sep 17)	J Senthil	Dr T K Sund	aram	Dr Robin Sham
RO	05/01/2018	Quarterly Progress Report No. 3 (Oct-Dec 17)	J Senthil	Dr T K Sund	aram	Dr Robin Sham
RO	05/04/2018	Quarterly Progress Report No. 4 (Jan-Mar 18)	J Senthil	Dr T K Sund	aram	Dr Robin Sham
RO	24/07/2018	Quarterly Progress Report No. 5 (Apr-Jun 18)	Prashant B	Dr T K Sund	aram	Dr Robin Sham
RO	10/10/2018	Quarterly Progress Report No. 6 (Jul-Sep 18)	Prashant B	Dr T K Sundaram		Dr Robin Sham
R1	08/02/2019	Quarterly Progress Report No. 7 (Oct-Dec 18)	Prashant B	J Senthi Dr T K Sund		Dr Robin Sham
RO	05/04/2019	Quarterly Progress Report No. 8 (Jan-Mar 19)	Prashant B	J Senthil		V. D. Sharma/ Dr Robin Sham
RO	18/09/2019	Quarterly Progress Report No. 9 (Apr-Jun 19)	Prashant B	Mr. Som Ghosh		Dr Robin Sham
RO	13/11/2019	Quarterly Progress Report No. 10 (Jul-Sep 19)	Prashant B	Mr. Som Ghosh		Dr Robin Sham
RO	11/02/2020	Quarterly Progress Report No.11 (Oct-Dec 19)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	25/11/2020	Quarterly Progress Report No.12 (Jan-Mar 20)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	15/12/2020	Quarterly Progress Report No.13 (Apr-Jun 20)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	06/01/2021	Quarterly Progress Report No.14 (Jul-Sept 20)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	12/02/2021	Quarterly Progress Report No.15 (Oct-Dec 20)	Prashant B	Mr. Som Ghosh		Dr Robin Sham
RO	06/05/2021	Quarterly Progress Report No.16 (Jan-Mar 21)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	30/07/2021	Quarterly Progress Report No.17 (Apr-Jun 21)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	11/11/2021	Quarterly Progress Report No.18 (Jul - Sep 21)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham
RO	17/01/2022	Quarterly Progress Report No.19 (Oct - Dec 21)	Prashant B	Mr. Som Gl	nosh	Dr Robin Sham

DOCUMENT VERIFICATION AND REVISION RECORD

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1.0 PROJECT DESCRIPTION

1.1 Project Objective

Original:

To improve connectivity in Mumbai Metropolitan region by constructing the Mumbai Trans Harbour Link connecting Mumbai with Navi Mumbai, thereby contributing to mitigation of traffic congestion and promoting regional economic development.

Actual (P/R, PCR)

There is no change in the Project Objective.

1.2 Necessity of the Project

The Project is consistent with the development policy, sector plan, national/regional development plans and demand of target group of the recipient country.

Benefits from MTHL Project

- Saving in travel time for commuters from Mumbai to Navi Mumbai.
- Improved comfort and accessibility between the island and the mainland.
- Reduced operating costs of vehicles due to lesser congestion.
- Smooth traffic flow from Navi Mumbai airport to Mumbai Island.
- Accelerated economic development of Navi Mumbai and nearby regions.
- Greater economic integration of Mumbai Island with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug.
- Improvement in environment and reduced pollution levels.
- Improved safety due to reduction in accidents.
- Improvement in trade competitiveness through faster and improved logistics.
- Accelerated growth of Navi Mumbai.
- Decongestion of Mumbai Island and dispersal of population to Navi Mumbai region & beyond.

Necessity of the Project

- Although the urbanization in India has been rapidly progressing, infrastructure development in the urban areas has not caught up its progress. Particularly, the traffic congestion in the urban areas due to a lack of road network hinders the economic development. Thus, Government of India (GOI) places transport and connectivity as one of the "Growth Enablers" and plans to enhance road network in the "Three Year Acton Agenda 2017-2018 to 2019-20 (NITI Aayog)".
- Mumbai Metropolitan Region, which includes Mumbai and Navi Mumbai, has about 18.4 million people in population as of 2011 (Census 2011) and the population density reaches 20,694 people per square km in the center of Mumbai, which is one of the most overpopulated and high-density cities in the world.
- 3. Mumbai, the narrow stretch of land that has traditionally been the epicentre of India's commerce, has seen a steady increase in population in the last three decades despite obvious spatial constraints. Thus, the development of Navi Mumbai has been identified as

an urgent requirement for broad development in Mumbai Metropolitan Region.

- 4. The Government of Maharashtra (GoM), of which Mumbai Metropolitan Region is under jurisdiction, has been facilitating various development plans particularly in Navi Mumbai area, which stands at the opposite site of Mumbai across the Mumbai Bay and still has spacious area for development, such as a new international airport, Special Economic Zone (SEZ) and expansion of Jawaharlal Nehru Port in order to promote the sustainable economic development in Mumbai Metropolitan Region.
- 5. Furthermore, a lack of connectivity in Mumbai has stunted its growth. The GoM has given importance to construct the faster connection with Mumbai to Navi Mumbai International Airport, Jawaharlal Nehru Port, Mumbai-Pune expressway and main hinterland.
- 6. Accordingly, the Mumbai Trans Harbour Link (MTHL) has been identified as the important infrastructure to improve the connectivity between Mumbai and Navi Mumbai and continue economic development in Mumbai Metropolitan Region.

The MTHL is proposed to be developed as an expressway link comprising of a dual threelane main carriageway bridge connecting Sewri in Mumbai to Chirle in Navi Mumbai. When completed, MTHL will reduce the distance between Mumbai and Navi Mumbai and will help save approximately an hour in travel time. Also, development of Navi Mumbai along with the imminent construction of the Navi Mumbai airport will lead to increased traffic between Mumbai and Navi Mumbai. Consequently, the project is envisaged to; improving accessibility between Mumbai and Navi Mumbai, accelerating growth of Navi Mumbai, smooth traffic flow from Navi Mumbai airport to Mumbai, accelerating economic development of Navi Mumbai and surrounding regions, greater economic integration of Mumbai with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug, and decongestion of Mumbai and dispersal of population to Navi Mumbai region and beyond.

- 7. The Comprehensive Transportation Study (CTS) for Mumbai Metropolitan Region which was guided by Mumbai Metropolitan Region Development Authority (MMRDA) and supported by World Bank, was completed in July 2008, which was over 25 years after the issuance of the last comprehensive transport study. The report provided a vision for Mumbai's future transportation as seamless and integrated system, in which commuters can make their journeys safely and conveniently by various modes of transport, particularly by public transport, and recommended the development of Multi Modal Corridor to take care of the varied travel demands of the region for the period up to 2031. The CTS proposed to develop the highway network in the region. The MTHL has been regarded as the priority road for Mumbai, considering its function and importance connecting between Mumbai and Navi Mumbai.
- 8. Necessity of the Project: To promote economic development in Mumbai Metropolitan Region it is essential to improve the connectivity between Mumbai and Navi Mumbai, by constructing MTHL.

Actual (P/R, PCR)

There is no change in the Necessity of the Project preamble.

1.3 Rationale of the Project Design

- Timing, Scale, Technology of the Project:
- 1st October to 31st December 2021

Demand Analysis

1. At the opening year 2022, the daily traffic on the main bridge is expected to be 39,300 PCU. The traffic is projected to increase up to 103,900 by 2032 and up to 145,500 by the year 2042. The daily breakdown by vehicle class on the main bridge link is presented in the Table 1.3.1 below:

Vehicle Type	Between Sewri Interchange and Shivaji Nagar Interchange			Between Shivaji Nagar Interchange an Chirle Interchange		
	2022	2032	2042	2022	2032	2042
Car	24,100	66,400	94,100	4,900	21,300	43,300
Taxi	2700	14,100	20,200	100	400	2,300
Bus	2,700	3,700	3,700	2,700	3,700	3,700
LCV	2,200	4,100	5,600	700	1,300	1,800
HCV	3,000	6,500	8,100	1,000	2,000	2,200
MAV	4,600	9,100	13,800	400	900	1,700
Total	39,300	103,900	145,500	9,800	29,600	55,000

Table 1.3.1 Demand Projections Over the Period

LCV: Light Commercial Vehicle; HCV: Heavy Commercial Vehicle; MAV: Multi Axle Vehicle

- 2. At the opening year in 2022, the traffic flow on MTHL represents a diversion of 10% on the traffic across Thane creek which will increase up to 16% in 2032. If only Thane Creek Bridge is considered, then the diverted traffic from the bridge will be 21% in 2022 which will rise up to 35% in 2032.
- 3. 6-lane of main carriageway was decided by GoM. It was reviewed based on the forecasted result of future traffic volume by Manual of Specification and Standards for Expressways (IRC: SP:99-2013). The result of the review shows that 6-lane will be required in 2032 (10 years later after traffic open). Although, 8-lane will be required in 2042, it is assumed that the level of service of MTHL would be maintained as additionally metro might be constructed in parallel with MTHL.

Design Parameters / Overall Design

- 4. The MTHL which is 21.8 km long road bridge partly on the land and partly over the creek across the Mumbai Bay between Sewri in Mumbai and Chirle in Navi Mumbai, is to be constructed with the approach sections and interchanges. ITS (Intelligence Transport System) and the other necessary facilities will be provided for full access-controlled bridges.
- 5. As per the provisions of IRC (Indian Road Congress) SP:99-2013, the Width of each lane of the Main Carriageway is 3.5 meters.
- 6. When the design speed is 100 km/h according to the traffic demand forecast the large vehicle, ratio will be as low as 9.4% (2022).
- 7. The shoulder width of bridge towards outside of each carriageway is 2.5 meters and towards median side of each carriageway is 0.75 meters.
- 8. The major portion of MTHL structure is on sea and partly towards ends is on land with different type and with different span, viz., PC box girder with 50 m spans which is typically applied on marine viaduct since, it is economical, easy to construct and maintain.

- 9. On the land portion, the PC box girder having span of generally 30m is used.
- 10. As far as the location in which long span (150-180 m) is required to cross significant obstacles, such as navigation channels, pipelines and creeks, the steel box girder bridge with steel deck is proposed with large block erection method to shorten the construction period.
- 11. The project is coded with three lanes of traffic in each direction. The reference toll is presented in the Table 1.3.2 below for each vehicle class in Year 2022 (based on 2015 monetary value reflecting price escalation).

Table 1.3.2: Base Toll Rates (Rs) for different class of vehicles between Interchanges

Vehicle Type	Sewri to Shivaji Nagar	Shivaji Nagar to Chirle	Total
Car	180	60	240
Bus	420	130	550
LCV	240	70	310
HCV	420	130	550
MAV	600	180	780

Intelligent Transport Systems (ITS) and Toll Management System (TMS)

- 12. The Toll Management System will be implemented in MTHL to collect tolls from all road users of MTHL. Two types of toll collection method will be adopted: Electronic Toll Collection (ETC) and Manual (paying by cash).
- 13. The lanes corresponding to these toll collection methods are dedicated ETC lanes and Manual lanes, and Manual system shall be installed to ETC lanes for backup to be able to cope at the time of the trouble of ETC equipment failure.

Traffic management System

- 14. Traffic Management System is a support system to Manage the traffic on MTHL safely and efficiently. The System consists of the information collection system including Closed-Circuit Television (CCTV), Emergency Call Box (ECB), Automatic Traffic Counter-Cum-Classifier (ATCC) and Meteorological Data System (MDS), and Information Dissemination System including Variable message Sign (VMS).
- 15. CCTV Cameras shall be installed at around three places per 1 km, on Both side of main route and the monitoring of the traffic condition of the whole stretch of MTHL will be almost enabled in the Traffic Control Centre and VMS displays the appropriate information for road users on the collated information.
- 16. The Information collected by these devices shall be transmitted to the Command Control Centre through the medium of an Optical Fiber Cable laid in MTHL.

Actual (P/R, PCR)

There is no change in the Rationale of the Project Design.

2.0 PROJECT IMPLEMENTATION

2.1 Project Scope

Refer Table 2.1.1 and 2.1.2 for details on Scope of the Project.

Table 2.1.1 Comparison of Original and Actual location

	Original: (P/M)	
Location	Mumbai Metropolitan Region Development	Actual: (P/R and PCR)
	Authority, Mumbai, State of Maharashtra	

Table 2.1.2 Comparison of Original and Actual Scope

Items	Original	Actual									
Construction	Construction work: 6-lane Marine Bridge Road (21.8 km)										
Package-1 Ch 0+000- 10+380 (10.380 km)	 1 Interchange (Sewri) Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder) Viaduct Substructure (RC Concrete Structure) Viaduct Foundation (Bored piles) Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers) 	(P/R and PCR)									
Package-2 Ch 10+380- 18+187 (7.80 km)	 1 Interchange (Shivaji Nagar) Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder) Viaduct Substructure (RC Concrete Structure) Viaduct Foundation (Bored piles) Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers) 	(P/R and PCR) Actual: No View Barriers									
Package-3 Ch 18+187- 21+800 (3.61 km)	 2 Interchanges (State Highway-54, National Highway-4B) Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder & Steel Truss Girder for Rail-over-Bridges (ROB) Viaduct Substructure (RC Concrete Structure) Viaduct Foundation (Bored piles) Cutting Section (6-lane with Slope Protection) Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers) 	<i>(P/R and PCR)</i> Actual: <i>No</i> Noise Barriers & <i>View Barriers</i>									

Items	Original	Actual
Package-4 ITS (Intelligent Transport System)	 Administrative Buildings Toll Booths (1 for main alignment and each on and off rumps for 3 interchanges) Traffic Management System (Traffic Control Centre, Closed Circuit Television (CCTV), Meteorological Observation System (MET), Emergency Call Box (ECB), Automatic traffic Counter-cum-Classifier (ATCC), Variable Message Sign (VMS)) Highway Lighting (Whole sections Low-positioned lighting for some sections) Electrical Powering System including HV/ LV Ring Network across the Bridge. 	(P/R and PCR)
Consulting Services	 Tender Assistance Construction Supervision Facilitation of Implementation of Environmental Management Plan (EMP), Environmental Monitoring plan (EMoP). 	(P/R and PCR)

2.2 Implementation Schedule

2.2.1 The Original Implementation Schedule

Table 2-2-1 Comparison of Original and Actual Schedule

Items Original Actual Schedule Status (P/R and PCR								
	Items	Original	as on 31 st December 2021					
1)	Completion of Land Acquisition and Resettlement	March 2019	March 2022					
2)	Consulting Services							
	a) Selection of Consultant	May – December 2016	May – December 2016					
	b) Consultancy Works	December 2016 – September 2024	December 2016 – September 2024					
3)	Selection of Contractor		-					
Pa	ckage-1, Package-2 & Package-3	(Civil)						
	a) Pre-Qualification Process	May – December 2016	May – December 2016					
	b) Main Bidding	January – December 2017	January – December 2017					
	 c) JICA's Concurrence of Contract 	February-2018	February-2018					
Pa	ackage-4 (ITS)							
	a) Pre-Qualification Process	January 2019 – May 2019	January 2020 – May 2020					
	b) Main Bidding	June 2019 – September 2020	June 2020 – December 2021					
4)	Civil Construction							
Pa	ckage-1 and Package-2	March 2018 – September 2022	March 2018–September 2023 (Extended)					
Pa	ockage-3	March 2018 – September 2021	March 2018 – March 2023 (Extended)					
Pa	ackage-4	October 2020 – September 2022	February 2022 – May 2023					
5)	Defect Liability Period	•						
	ckage-1, Package-2 and ackage-4	October 2022 – September 2024	October 2022 – September 2025					
Pa	ackage-3	October 2021 – September 2023	April 2023 – March 2025					
6)	Commencement of Toll Collection	September -2022	September -2023					
7)	Selection of O&M Organization	October 2020 – September 2021	October 2022 – September 2023					

Attachment 6, 7 & 8: Package wise construction schedules (progress) updated at the end of 3rd Quarter (October- November- December 2021).

2.2.2 Reasons for changes of the schedule and their effects to the Project

(P/R and PCR)

No change in the Implementation Schedule except the selection of O&M Organization timeline.

2.3 Project Cost

2.3.1.a Comparison of Originally Planned and Actually Incurred Cost BY ITEM

Table 2.3.1.a.(i) Originally Planned Cost BY ITEM

	Foreign Currency Portion			Local	Currency P	ortion	Total		
Cost Breakdown	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	Total (Rs. mil)	JICA Portion (Rs. mil)	Others (Rs. mil)	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)
Package-1	34,398	34,398	0	45,376	45,376	0	105,713	105,713	0
Package-2	26,513	26,513	0	32,617	32,617	0	77,774	77,774	0
Package-3	759	759	0	8,276	8,276	0	13,766	13,766	0
Package-4 (ITS)	0	0	0	1,444	1,444	0	2,269	2,269	0
Package-5 (Geotechnical Investigation)	0	0	0	166	0	166	260	0	260
Dispute Boards (Package-1, 2, 3 & 4)	63	63	0	45	45	0	134	134	0
Price Escalation	2,251	2,251	0	7,133	7,133	0	13,460	13,460	0
Physical Contingency	6,398	6,398	0	9,506	9,489	17	21,338	21,312	26
Consulting Services	1,650	1,650	0	1,587	1,587	0	4,145	4,145	0
Land Acquisition*	0	0	0	11,293	0	11,293	17,748	0	17,748
Administration Cost	0	0	0	4,898	0	4,898	7,698	0	7,698
GST	0	0	0	18,238	0	18,238	28,663	0	28,663
Import Tax	0	0	0	13,435	0	13,435	21,114	0	21,114
Interest during construction	2,942	0	2,942	0	0	0	2,942	0	2,942
Front End Fee	477	0	477	0	0	0	477	0	477
Total	75,451	72,032	3,419	154,013	105,967	48,046	317,501	238,572	78,929

(Note) 1. Exchange Rate: US\$1=Rs. 71.9, US\$1=JPY 113.0, Rs.1 = JPY 1.57

2. Price Escalation (a) Foreign Currency Portion: 1.83% p.a.

(b) Local Currency Portion: 4.13% p.a.

3. Physical Contingency: 10%

4. Base Year for Cost Estimation: December 2018

* Base Cost for Land Acquisition considered in the year 2016 was INR 9,062,669,696. The base cost has been revised to INR 11,293 million considering Price Escalation and 10% Physical Contingency.

	Foreign	Currency	Portion	Local Currency Portion			Total		
Cost Breakdown	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	Total (Rs. mil)	JICA Portion (Rs. mil)	Others (Rs. mil)	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)
Package-1	18,880	18,880	-	31,020	31,020		64,975	64,975	
Package-2	19,923	19,923	-	20,151	20,151		50,714	50,714	
Package-3	623	623	-	5,862	5,862		9,256	9,256	
Package-4 (ITS)	-		-	-			-		
Package-5 (Geotechnical Investigation)	-			196		196	308		308
Dispute Boards (Package-1, 2, 3 & 4)	-			-			-		-
Price Escalation	-			4	4		6	6	-
Physical Contingency	-			-			-		-
Consulting Services	253	253		362	362		1,108	1,108	
Land Acquisition*	-			6,712		6,712	10,538		10,538
Administration Cost	-			3,980		3,980	6,248		6,248
GST	-			11,183		11,183	17,557		17,557
Import Tax	-			-			-		-
Interest during construction	-			-			-		-
Front End Fee	-			-			-		-
Total	39,679	39,680	-	79,470	57,398	22,071	160,710	126,059	34,651

Table 2.3.1.a.(ii) Actually Incurred Cost BY ITEM

(Note) 1. Exchange Rate: Rs.1 = JPY 1.57 for MMRDA Portion only

2. Price Escalation (a) Foreign Currency Portion: 1.83% p.a.

(b) Local Currency Portion: 4.13% p.a.

3. Physical Contingency: 10%

4. Base Year for Cost Estimation: December 2018

* Base Cost for Land Acquisition considered in the year 2016 was INR 9,062,669,696. The base cost has been revised to INR 11,293 million considering Price Escalation and 10% Physical Contingency.

2.3.1.b Comparison of Originally Planned and Actually Incurred Cost BY YEAR

Table 2.3.1.b.(i) Originally Planned Cost BY YEAR

(All Figures are in JPY mil)

Cost	Total		Others (MMRDA			
Breakdown	Total	Tranche I	Tranche I Tranche II Tranche III		Sub Total	Portion)
FY 2017	12,679	10,134	0	0	10,134	2,545
FY 2018	30,771	22,707	0	0	22,707	8,064
FY 2019	72,379	56,816	0	0	56,816	15,563
FY 2020	92,944	55,138	16,040	0	71,178	21,765
FY 2021	66,397	0	50,869	0	50,869	15,527
FY 2022	27,683	0	0	20,113	20,113	7,570
FY 2023	3,723	0	0	565	565	3,158
FY 2024	10,925	0	0	6,189	6,189	4,735
Total	317,501	144,795	66,909	26,868	238,571	78,929

Table 2.3.1.b.(ii) Actually Incurred Cost BY YEAR

(All Figures are in JPY mil)

Cost	Total		Others (MMRDA			
Breakdown	TOtal	Tranche I	Tranche II	Tranche III	Sub Total	
FY 2017	13,738	9,232	-	-	9,232	4,506
FY 2018	26,813	21,695	-	-	21,695	5,118
FY 2019	40,410	31,014	-	-	31,014	9,396
FY 2020	31,859	23,922	-	-	23,922	7,937
FY 2021	47,890	40,196	-	-	40,196	7,694
FY 2022						
FY 2023						
FY 2024						
Total	160,710	126,059	-	-	126,059	34,651

(Note) 1. Exchange Rate used: Rs.1 = JPY 1.57 for MMRDA Portion only

2. Fiscal Year starting from 1st April and ending on 31st March.

2.3.2 Reason(s) for the wide gap between the original and actual, if there have been any, the remedies you have taken, and their results.

(P/R and PCR)

There is no major gap between the original and actual cost.

2.4 Organization for Implementation

2.4.1 Executing Agency

Original:

Executing Agency

Mumbai Metropolitan Region Development Authority (MMRDA) was established on 26thJanuary 1975 in accordance with the Mumbai Metropolitan Development Act, 1974 to make Mumbai Metropolitan Region (MMR) a destination for economic activity by promoting infrastructure and regional planning. MMRDA takes all the necessary measures, required from time to time, in an effective manner and be fully responsible for the Project implementation. After completion of the Project, MMRDA continues to be responsible for the efficient operation and maintenance of the Project.

The GoM appointed MMRDA as the implementing/ executing agency of MTHL vide Government Resolution dated 4th February 2009 and further the ownership of MTHL would be with MMRDA vide Government Resolution dated 8th June 2011.

Organization's Role

To construct, execute, carryout, improve, work, develop, administer, manage, control or maintain in MMR all types of roads, highways, express routes, paths, streets, bridges, sideways, tunnels and other infrastructure, works and conveniences, approach road, etc. Under the Project, MMRDA is responsible for all the tendering process including employment of consultants, as well as for the construction process.

Project Implementation Unit (PIU)

The PIU is in charge of the Projects. The PIU is headed by Chief Engineer, comprising of 6 Divisions/Cells (Finance Division, Social Development Cell, Engineering Division, Land Cell, Administrative Division and Environmental Cell), Supervision/ ITS Consultant and supporting staff.

Procurement

MMRDA shall have to adopt the JICA's Standard Biding Documents of the latest version, as stipulated in Section 4.01 (2) of "Guidelines for Procurement under Japanese ODA Loans.

Procurement of goods and services, except for consulting services, converted by the Japanese ODA Loan should be implemented in accordance with "Guidelines for Procurement under Japanese ODA Loans", dated in April 2012. Employment of consultants should be implemented in accordance with "Guidelines of Employment of Consultant under Japanese ODA Loans", dated in April 2012. "Principles of Procurement under the Project" is attached for brief explanation of the above Guidelines.

Actual, if changed: (*P/R and PCR*)

There is no change made in original Organisation Set-up & Implementation methods. Refer Annexure III Organisation Chart.

2.4.2 Contractor(s)/ Supplier(s), and Consultant(s) and their Performance:

2.4.2.1 Procurement & Consultant

Table 2.4.2 Procurement of Contractor(s)/ Supplier(s) and Consultant(s)

Contract	Selection Method									
Package	Original: (P/M)	Actual: (P/R and PCR)								
Construction Works										
1	<u>Package-1:</u> From CH 0+000 - To CH 10+380 (10.38 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change							
2	<u>Package-2:</u> From CH 10+380 - To CH 18+187 (7.80 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change							
3	<u>Package-3:</u> From CH 18+187 - To CH 21+800 (3.61 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change							
4	Package-4: To install ITS (Toll Management System and Highway Traffic Management System)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	International Competitive Direct Bidding Process without Pre-Qualification							
5	<u>Package-5:</u> To conduct the geotechnical investigation	Local Competitive Bidding Process	No Change							
Consultin	g Services									
1	Consulting Service for Supervision	Short List Method (QCBS)	No Change							

2.4.2.2 Performance

Consultant's Progress:

October 2021:

- 1 GC scrutinized & certified the following invoices claimed by the Contractors:
 - i) Package-1: IPC-44 20% Detailed Verification and IPC-45 80% Ad-hoc.
 - ii) Package-2: IPC-38 20% Detailed Verification and IPC-39 & IPC-40 80% Ad-hoc.
 - iii) Package-3: IPC-37 20% Detailed Verification.
- 2 GC has prepared and submitted a total reimbursement claim of 5278.25 million JPY to MMRDA / JICA in October 2021.

November 2021:

- 1 GC scrutinized & certified the following invoices claimed by the Contractors:
 - i) Package-1: IPC-45 20% Detailed Verification and IPC-46 80% Ad-hoc.
 - ii) Package-2: IPC-40 20% Detailed Verification and IPC-42 80% Ad-hoc.
 - iii) Package-3: IPC-37 20% Detailed Verification and IPC-38 & IPC-39 80% Ad-hoc.
- 2 GC has prepared and submitted a total reimbursement claim of 5084.42 million JPY to MMRDA / JICA in November 2021.

December 2021:

- 1 GC scrutinized & certified the following invoices claimed by the Contractors:
 - i) Package-1: IPC-46 20% Detailed Verification and IPC-47 80% Ad-hoc.
 - ii) Package-2: IPC-42 20% Detailed Verification and IPC-43 80% Ad-hoc.
 - iii) Package-3: IPC-38 & 39 20% Detailed Verification and IPC-40 80% Ad-hoc.
- 2 GC has prepared and submitted a total reimbursement claim of 3819.32 million JPY to MMRDA / JICA in December 2021.
- 3 100% of the Technical Design Modules across all the 3 Packages have been given "NONO" by the GC.
- 4 Approximately 97% of the Construction (GFC Good For Construction) Design Modules across all the 3 Packages have been given "NONO" by the GC.

Package-1 – 100%, Package-2 – 90%, Package-3 -100%

5 GC helped in evaluating the Package-4's Pre-Qualification and Technical bid proposal and the analysis has been sent to the Employer for further approval.

Contractor's Progress:

Package-1 Physical Progress till 31st December 2021

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks
1	Temporary Access Bridge					
1.1	Bridge Deck	2953	Rmt	2953	100%	
2	Test Pile					
2.1	Test Piles	5	No.	5	100%	
3	Permanent Bridge Works -	Land/ Inter	rchange	Zone		
3.1	Piles	523	No.	456	87.2%	
3.2	Pile Caps	158	No.	82	51.9%	
3.3	Piers	228	No.	148	64.9%	
3.4	Pier Caps	215	No.	141	65.6%	
4	Permanent Bridge Works -	Intertidal Z	one			
4.1	Piles	312	No.	312	100%	
4.2	Pile Caps	66	No.	75	100%	
4.3	Piers	114	No.	126	86.3%	
4.4	Pier Caps	110	No.	124	84.9%	
5	Permanent Bridge Works -	Marine Zo	ne			
5.1	Piles	403	No.	403	100.0%	
5.2	Pile Caps	79	No.	72	90.0%	
5.3	Piers	160	No.	95	58.6%	
5.4	Pier Caps	160	No.	86	53.1%	
6	Permanent Bridge Works -	Total				
6.1	Piles	1238	No.	1171	94.6%	
6.2	Pile Caps	313	No.	229	73.2%	
6.3	Piers	536	No.	369	68.8%	
6.4	Pier Caps	523	No.	351	67.1%	
7	Precast Segments					
7.1	Segment Casting	6713	No.	3364	50.1%	
7.2	Span Erection+ Cast-in- Situ Slab	478	No.	154	32.2%	
8	OSD Structural Steel					
8.1	Fabrication	52726	МТ	48590	92.16%	
8.2	Erection	52726	МТ	0	0%	

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks
1	Temporary Access Bridge					
1.1	Bridge Deck	2682	Rmt	2682	100%	
2	Test Pile					
2.1	Test Piles	2	No.	2	100%	
3	Permanent Bridge Works -	Land/ Inte	erchange	Zone		
3.1	Open Foundation	113	No.	113	100%	
3.3	Piers	119	No.	119	100%	
3.3	Pier Caps	105	No.	78	74.28 %	
3.4	Portal Beams- Land	6	No.	6	100%	
3.5	Pier Head Segments -Land	42	No.	34	80.95%	
4	Permanent Bridge Works -	Intertidal	& CRZ Z	one		
4.1	Piles	280	No.	280	100%	
4.2	Pile Caps	72	No.	72	100%	
4.3	Piers	72	No.	72	100%	
4.4	Pier Caps	18	No.	18	100%	
4.5	Pier Head Segments	54	No.	53	98.14%	
5	Permanent Bridge Works -	Marine Z	one			
5.1	Piles	512	No.	481	93.94%	
5.2	Pile Caps	120	No.	96	80%	
5.3	Piers	120	No.	63	52.50%	
5.4	Pier Caps	48	No.	9	18.75%	
5.5	Pier Head Segments	72	No.	2	3.85%	
6	Permanent Bridge Works -	Total				
6.1	Open Foundation	113	No.	113	100%	
6.2	Piles	792	No.	761	96.08%	
6.3	Pile Caps	192	No.	168	87.50%	
6.4	Piers	305	No.	254.3	81.76%	
6.5	Pier Caps/ Portal Beams	177	No.	111	62.71%	
6.6	Pier Head Segments	168	No.	89	52.97%	
7	Precast Segments					
7.1	Segment Casting	3142	No.	1382	43.98%	
7.2	Span Erection	272	No.	72	26.47%	
8	OSD Structural Steel					
8.1	Fabrication	34726	МТ	34726	100%	
						+

Package-3 Physical Progress till 31st December 2021

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks			
1	Permanent Bridge Works								
1.1	Open Foundations	219	No.	213	97.26%				
1.2	Pile Foundations	6	No.	4	66.67%				
1.3	Piers	242	No.	200	82.64%				
1.4	Pier Caps	189	No.	152	80.42%				
1.5	Segment Casting	810	No.	768	94.81%				
1.6	Segment/ Span Erection	53	No.	24	45.28%				
1.7	Cast in-situ Slab	114	No.	47	41.22%				

Package-4 (ITS) Progress till 31st December 2021

- 1. Preparation of Bid Documents for the Package-4 ITS (Intelligent Transport System) is in progress.
- 2. As recommended by the GC, JICA accorded concurrence for Single Stage Bidding (without Pre-Qualification) on 9th October 2020 and asked to submit draft Bid Document for review and approval.
- 3. The GC submitted first draft Bid Document to the Employer on 2nd November 2020 for review.
- 4. After reviewing the draft, MMRDA issued the observations on 29th December 2020 for further correction & amendments, etc. The GC is in the process of preparing the revised draft Bid Document.
- 5. The GC submitted the revised draft Bid Document to the Employer on 14th June 2021 for a review and further concurrence with JICA.
- 6. The Employer received JICA concurrence for the revised Bid Documents on 24th August 2021.
- 7. The Tender has been floated (published) on 3rd September 2021. A Pre-bid Meeting was arranged on 27th September 2021. The GC is resolving the queries raised by the prospective bidders.
- 8. The GC has resolved the queries raised by the prospective bidders. The Pre-Bid Responses and Addendum-1 were uploaded on 20th Oct. and 2nd Nov. 2021.
- 9. The revised date for Bid Submission is 13th Dec. 2021 and the bid opening date is 20th Dec 2021. The Bid evaluation is under progress.

Please refer Attachment 9 - Site Progress Photos showing the development of the project.

Health & Safety and Environment (HSE)

The HSE Plans have been submitted by the respective construction agencies for the Packages which are being monitored by the GC on a regular basis.

Package-1 Safety Report

Sr. No	Description	From October to December 2021	Cumulative
1	Total Man Hours Since Inception	4,241,988	39,231,458
2	Number of Man-Hours (Accident-Free Man-Hours)	3,789,504	2,229,360
3	Number of Man-Days	530,249	4,903,932
4	Number of Reportable Fatal Accidents	1	6
5	Number of Non-Fatal Accidents	0	3
6	Number of Near Miss Incidents	9	102
7	Number of First Aid Cases	22	243
8	Number of Dangerous Occurrences	0	1
9	Number of Reportable Sick Cases	0	0
10	Number of Man-Hours Lost	49,440	290,712
11	Number of Man-Days Lost	6,180	36,339
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	1	0.23
13	Number of Inspections done for Offices & Sites	457	3,632
14	Number of Training/ Induction done for Offices & Sites	343	1,925
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	12,750	7,065
16	Details of Safety Committee meetings	3	38
17	No. of toolbox talks	14,633	99,090
18	No. of critical excavations.	14	68
19	Pre-employment Medical check-up	3,329	35,251
20	No. of Safety Walk down	20	236
21	No. of Safety Inductions completed	3,329	35,251

Package-2 Safety Report

Sr. No	Description	From October to December 2021	Cumulative
1	Total Man Hours Since Inception	2,895,101	19,880,377
2	Number of Man-Hours (Accident-Free Man-Hours)	1,435,841	165,924
3	Number of Man-Days	271,646	1,817,109
4	Number of Reportable Fatal Accidents	0	0
5	Number of Non-Fatal Accidents	2	7
6	Number of Near Miss Incidents	32	226
7	Number of First Aid Cases	14	146
8	Number of Dangerous Occurrences	1	10
9	Number of Reportable Sick Cases	1	2
10	Number of Man-Hours Lost	928	2,268
11	Number of Man-Days Lost	116	265
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	2	0.35
13	Number of Inspections done for Offices & Sites	75	1,077
14	Number of Training/ Induction done for Offices & Sites	86	810
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	10,152	5,635
16	Details of Safety Committee meetings	3	42
17	No. of toolbox talks	1,134	8,806
18	No. of critical excavations.	0	0
19	Pre-employment Medical check-up	1,155	14,132
20	No. of Safety Walk down	11	141
21	No. of Safety Inductions completed	1,166	14,430

Package-3 Safety Report

Sr. No	Description	From October to December 2021	Cumulative
1	Total Man Hours Since Inception	733,821	4,497,018
2	Number of Man-Hours (Accident-Free Man-Hours)	733,821	2,396,669
3	Number of Man-Days	91,727	562,126
4	Number of Reportable Fatal Accidents	0	0
5	Number of Non-Fatal Accidents	0	2
6	Number of Near Miss Incidents	3	22
7	Number of First Aid Cases	13	98
8	Number of Dangerous Occurrences	0	1
9	Number of Reportable Sick Cases	0	0
10	Number of Man-Hours Lost	0	2320
11	Number of Man-Days Lost	0	290
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	0	0.44
13	Number of Inspections done for Offices & Sites	51	453
14	Number of Training/ Induction done for Offices & Sites	16	232
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	2,196	1,144
16	Details of Safety Committee meetings	3	38
17	No. of toolbox talks	616	6,203
18	No. of critical excavations.	0	3
19	Pre-employment Medical check-up	1,132	8229
20	No. of Safety Walk down	12	145
21	No. of Safety Inductions completed	1,132	8229

3.0 BENEFITS DERIVED FROM THE PROJECT (EFFECTIVENESS)

3.1 Operational and Physical Condition

(This section will be developed when the operational plan is available)

Facilities	Description of condition	Problems, its Background and Remedial Action Plan
(P/R and PCR)	(P/R and PCR)	(P/R and PCR)

3.2 Precautions (Measures To Be Adopted/ Points Which Require Special Attention)

Original Issues and Countermeasure(s)	Actual Issues and Countermeasure(s)
3.2.1 General Issues	(P/R and PCR)
1. Toll Arrangement/ Toll Rate	
Fixed toll rate as per the type of vehicle	Appropriate Tolling Policy/ Rates will be finalized
will be levied for the road users after the	by December 2021.
completion of the Project. An appropriate	
tolling policy/ rates will be finalized in	
consultation with the state government	
prior to the completion of Civil works.	
2. Operation and Maintenance	
MMRDA proposes to appoint separate	
agencies for Operation & Maintenance of	Single Operation and Maintenance Contractor
the bridge and for Toll Management	will be appointed by December 2021.
System. Both the agencies for O & M and	
Toll Management System may be	
appointed through open tendering	
process. Overall monitoring of the two	
agencies would be done by MMRDA in	
house through a separate cell which	
could be constituted for the purpose.	
MMRDA has confirmed to allocate	
adequate budget for engaging the	
Contractors.	
3.2.2 Environmental and Social	(P/R and PCR)
Consideration	• MMRDA has disclosed Supplemental EIA &
a. CRZ Clearance	SIA on MMRDA website.
i. Supplemental EIA has been approved	5
by MMRDA and disclosed on the	
website of JICA. Supplemental EIA	
report has been disclosed also on the	Contractors as the Employer's requirements.
website of MMRDA.	MMRDA has actively monitored the
ii. Furthermore, renewed CRZ Clearance	compliances of the approval conditions and
has been obtained in January 2016.	maintains throughout the construction phase.
iii. In accordance with the conditions for	MMRDA appointed Mangroves & Marine

CRZ Clearance, appropriate measures	Biodiversity Foundation for bird monitoring
shall be taken, and necessary budget	and implementation of Flamingos and bird
shall be secured by MMRDA.	monitoring program for the MTHL project
	during the construction as well as the long-
	term monitoring after the construction.
	• Rs 91.42 Crore has been transferred to
	Mangroves & Marine Biodiversity Foundation,
	Mumbai for the development & conservation
	of mangrove area and its afforestation. Such
	funds will be managed by the Mangrove
	Foundation of Maharashtra State.
	 As per the renewed CRZ clearance condition,
	IIT Mumbai has been appointed for the DPR
	study to develop a Mahul creek Effluent
	Treatment Plant (ETP). Rs 4.98 Crore was
	secured for IIT services. The Draft DPR has
	been reviewed and approved.

b. Required Permits

The Permits to be obtained by MMRDA/ Contractors and the present status is given in the following Table.

Clearance Required	Approving Authority	Responsible Organization	Obtained by when	Remark /Status
Mangrove Cutting	Hon. Bombay High Court	MMRDA/ Contractor	Approval received from Hon. Bombay High Court on 28 th November 2016	Mangrove cutting operation was completed with full compliance and as of now, no further follow up work is required.
Tree Cutting /Transplantati on	Respective Tree Authorities	Contractor for respective Packages	-	Pkg-1:TreeCutting/Transplantationpermissionfrom the Garden Dept., MCGMobtainedon 24thDecember2020.Pkg-2:TreeCutting/Transplantationpermissionobtained & completed.Pkg-3:ForestPepartmenthas issued a concurrence on19/05/2019.CIDCO'spermissionfor TreeCutting/Transplantationobtained on25thNovember 2019.
Consent to Establish	Maharashtra Pollution Control Board	Contractor for respective Packages	Pkg-1-18.07.2018 Pkg-2-16.08.2018 Pkg-3-29.05.2019	

Table 3.2.2 Present Status of some Important Permits

3.3 Environmental and Social Impacts

Major environmental and social impacts have occurred during project implementation (e.g. involuntary resettlement, poverty reduction, impacts on the natural environment).

Issue(s)	Action or countermeasure(s) taken and	
	remaining problem(s)	
1. Establishment of Effective Environmental and Social Cell in PIU	Cell is established by MMRDA (Annexure III, Organization chart)	
MMRDA confirmed that Social Development Cell (2 Officers), Land Cell (3 Officers), and Environmental Cell (2 Officers) had been set up. 2. Rehabilitation and Land Acquisition		
Issues a. Affected Area and Population	has been further validated by Social Development Cell of MMRDA. Out of 297 Project Affected Households (PAHs) have given consents as	
Due to the Project, 1282 non- titleholders will be involuntary resettled, and 108.09 ha of land will be handed over by CIDCO.	 follows: 164 PAHs Kanjurmarg for residential 25 PAHs Kanjurmarg for commercial 	
	 7 PAHs (Satsangi Plot) Kanjurmarg for Commercial 	
	 1 PAHs (commercial to residential) for Bhakti Park 	
	100 PAHs HDIL Kurla for residential	
	Navi Mumbai: CIDCO has been finalizing the land acquisition closely monitored by Land Cell of MMRDA. Except private land and forest, CIDCO has possessed all required land of 108.09 ha. Out of the 108.09 ha, 106.345 ha has been handed over by CIDCO to MMRDA. CIDCO is going to acquire the balance 1.745 ha with the help of Collector, Raigad.	
b. Entitlement Policy		
MMRDA prepared the entitlement matrix for resettlement of non-title holders in Sewri, which meets the Resettlement and Rehabilitation Policy for Mumbai Urban Transportation Project (1997, amended in 2000) and JICA guidelines for Environmental and social considerations (2010)	enforcement. As per the Attachment 2-5 of JICA MoD, MMRDA has committed to enforce the agreed/ approved policy.	

Issue(s)	Action or countermeasure(s) taken and
10000(0)	remaining problem(s)
("Guidelines") (Attachment 2-5).	3 1 1 1 1
c. Compensation to Project affected	
Fishermen	Updated Attachments 2-8 and 2-10 are enclosed
Detailed baseline survey will be undertaken by MMRDA in order to identify fishermen who are affected by the Project. Based on the result of the baseline survey, MMRDA will compensate them in accordance with compensation policy prior to the construction. Monitoring will be conducted by MMRDA with assistance of the Consultant to gasp the exact	in the report.
impact during construction and	
operation phase.	
d. Implementation Schedule The Implementation schedule for land acquisition, resettlement and rehabilitation is attached as per Attachment 2-10.	Updated Attachment 2-10 is enclosed in the report.
e. Grievance Redressal Mechanism	
Grievance Redressal Committee ("GRC") set under MMRDA will deal with grievances raised by PAPs in Sewri and fishermen to be affected by the Project. Any grievances raised by PAPs whose land is acquired by CIDCO shall be resolved by CIDCO.	 Sewri: FLGRC (Field Level Grievance Redressal Committee) and SLGRC (Senior Level Grievance Redressal Committee) were set as per the RAP and in operation. Compensation Committee has been constituted to address the issues of Compensation to Lease Holders at Sewri. Fishermen: GRC for resolving grievances of the fisherfolk was set up as per the compensation policy and is in operation.
f. Internal Monitoring	
Internal Monitoring of the Resettlement Action Plan (RAP) implementation will be conducted by MMRDA in accordance with the RAP with necessary assistance of the consultant. RAP Internal Monitoring Form (Attachment 2-8) will be submitted to JICA on a quarterly basis as a part of PSR during the RAP implementation.	Internal Monitoring updates are mentioned in Attachment 2-8.

	Issue(s)	Action or countermeasure(s) taken and	
	. ,	remaining problem(s)	
g.	Qualitative Independent Evaluation		
	An Independent Evaluation Agency will be hired by MMRDA for evaluation of RAP implementation. An external evaluation report will be submitted to MMRDA at mid-term and end-term. MMRDA would submit the evaluation report to JICA in a timely manner.	Updated Attachment 2-10 is enclosed in the report.	
h.	RAP Implementation Budget		
	The amount of estimated resettlement and compensation budget is Rs.906.26 Cr MMRDA informed to the JICA Mission that RAP implementation cost would be borne by MMRDA and ensured sufficient and timely allocation of funds for smooth implementation.	As updated in MOD dated 03/09/2019 for MTHL- II, the base cost Budget towards RAP Implementation is updated as Rs 1129.3 Cr.	
i.	Environmental Management Plan		
	("EMP") The mitigation measures against air pollution, waste, noise, and water pollution etc. shall be taken during construction and operation phase. Mitigation measures such as installation of noise barrier, appropriate waste management, etc. have been prepared by MMRDA. The mitigation measures are listed in the EMP matrix. (Attachment 2-1). During the detailed design stage, MMRDA, with assistance of the Consultant, will update the EMP, as necessary.	EMP will be updated, if required, in due course of construction activities/progress.	
j.	Environmental Monitoring Plan		
	("EMoP") MMRDA takes overall responsibility for implementation of EMoP. During construction, environmental monitoring will be carried out by contractors under supervision by Construction Supervision consultant. The result shall be reported to the JICA India Office on a quarterly basis as a part of Progress	Environmental Monitoring Plan with the package wise budgeted cost is reported in Attachment 2-3 . Environmental Monitoring Results during the construction phase are reported in Attachment 2- 4 .	

Issue(s)	Action or countermeasure(s) taken and remaining problem(s)
Status Report (PSR) by filling in the Reporting Form of Environmental Monitoring Result. (Attachment 2-4). After completion of the construction, EMoP shall be implemented by MMRDA, and the results shall be submitted to the JICA India Office semi- annually until two years after complementation of construction. The required amount of estimated environmental monitoring budget is borne by MMRDA.	
k. Long Term Bird Monitoring MMRDA committed to conduct the long-term monitoring of birds and its habitat in Sewri mudflats with the assistance of hired bird expert. During the long-term monitoring, MMRDA will share information and receive advice from external experts including the one from NGOs and civil society.	 MMRDA has entrusted the work of bird monitoring and implementation of Flamingos and birds related mitigation measures & bird monitoring program to Mangrove and Marine Biodiversity Foundation. Rs. 31.92 Crore deposited to Mangrove foundation, Mumbai for periodical disbursement to BNHS.

3.4 Qualitative and Quantitative Data of Monitoring Indicators

Operation and Effect Indicator EIRR and/ or FIRR

Supporting data for Computing EIRR and/ or FIRR

Indicators	Original (Year 2015)	Target (Year 2024) 2 Years After Commercial Operation
Average Annual Daily Traffic (PCU/ day)	-	47,400
Daily Average Travel Time (min) * 1	61 min	15.8 min
Number of Users (Persons/ year) * 2	-	46,077,504
Cargo Volume (tons/ year) * 3	-	13,511,759

*1 Section on Sewri – Chirle

^{*2} Assumptions: average passengers of car and taxi (2.6 persons), bus (37.2 persons) based on JICA study. Number of passengers of LCV, HCV and MAV is assumed as 1 person each. *3 Assumptions: the maximum capacity of respective vehicle (LCV: 1 ton, HCV and MAV: 15 tons) is used for estimation.

EIRR	Original: 15.4% Cost: Project cost (excluding Price Escalation, Tax and Duties and Administration cost) O&M cost, Land Acquisition Benefit: Travel Time cost and Vehicle Operation cost Project Life: 32 Years	Actual: (PCR) % Cost: Benefit: Project Life: Attachment(s): Supporting data for computing EIRR
FIRR	Original: 1.5% Cost: Project Cost, O&M cost, Land Acquisition cost Benefit: Toll Revenue Project Life: 32 Years	Actual: (PCR) %

3.5 Monitoring Plan for the indicators

Monitoring Methods, Section(s)/ department(s) in charge of monitoring, frequency, the term and so forth are given below:

Original: (*P/M and PCR*)

Monitoring Organization

PIU shall be In-Charge of Monitoring activities for the Project.

Submission of QPR and PCR

The timely submission of the following documents is required by MMRDA.

- a. Quarterly Progress Report (QPR): The progress report for the Project should be submitted by MMRDA to JICA on quarterly basis, not later than 30 days after the concerned quarter, in the form of Project Status Report (PSR) attached hereto as per Annex I; Updated status land Acquisition, milestone achieved with respect to Action Plan with Timetable, the monitoring form for environmental and social consideration should also be appended to the PSR. In addition, MMRDA shall also forward the Monthly & Quarterly Progress Reports (including S-Curve Chart) prepared by the Consultant to JICA India Office on regular basis till project completion.
- b. Project Completion Report (PCR): A project completion report should be submitted by MMRDA to JICA promptly, but in any event not later than six months after completion of the Project, in the form of Project Status Report (PSR) attached hereto as per Annex I.

Actual: (P/R and PCR)

Monitoring Organization

PIU for MTHL has been established for monitoring the Project.

Submission of QPR and PCR

This QPR No. 19 is submitted for the period of 1st October to 31st December 2021.

3.6 Achievement of the Project Objective

(PCR)

4.0 OPERATION AND MAINTENANCE (O&M) (SUSTAINABILITY)

4.1 O&M and Management

- Organization Chart of O&M

- Operational and maintenance system (structure and the number, qualification and skill of staff or other conditions necessary to maintain the outputs and benefits of the project soundly, such as manuals, facilities and equipment for maintenance, and spare part stocks etc.)

Original: (P/M)

Operation & Maintenance, Toll Management and ITS

MMRDA proposes to engage two separate agencies for O&M and Toll Management System. Though MMRDA will not directly carry out O&M, the overall monitoring over the O&M agency will be the responsibility of MMRDA. O&M Budget will be allocated by MMRDA. O&M and increase in toll rate will be done in accordance with the NHAI's manuals such as "NHAI Works manuals".

Actual: (PCR)

4.2 O&M Cost and Budget

- The actual annual O&M cost for the duration of the project, as well as the annual O&M budget.

(PCR) This will be reported when the outcome of the above work study is available.

5.0 EVALUATION

5.1 JICA and Borrower / Executing Agency performance

JICA:

(PCR)

Borrower/ Executing Agency:

(PCR)

5.2 Overall Evaluation

Please describe your evaluation on the overall outcome of the project.

(PCR)

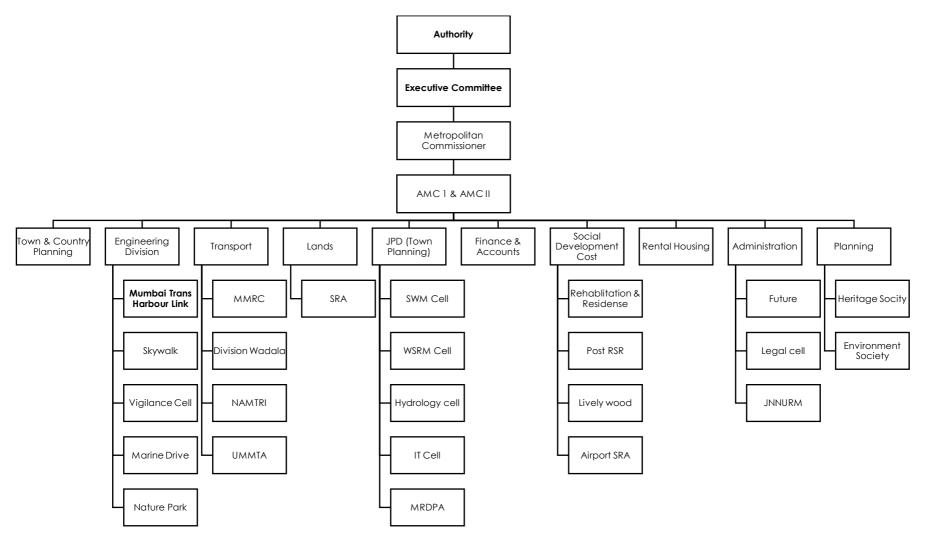
5.3 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future JICA assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

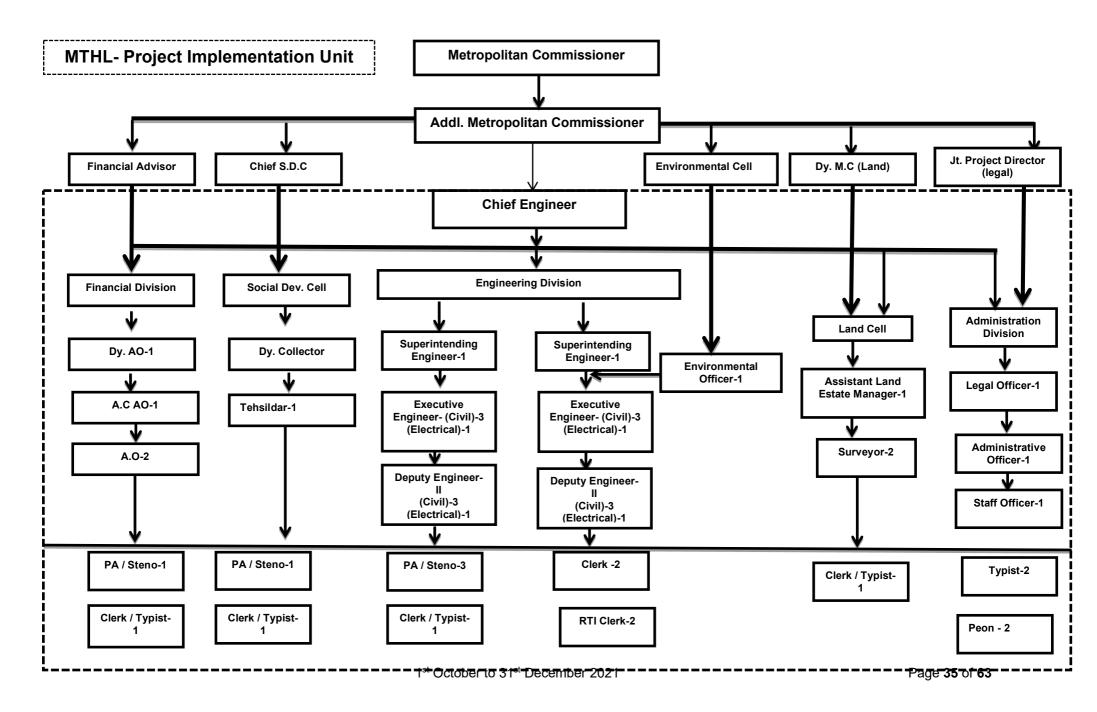
(PCR)

Attachment 1- MMRDA & PIU Organization Chart

MMRDA Organization chart



Mumbai Trans Harbour Link Project - Quarterly Progress Report No. 19 (Oct-Dec 2021)



Attachment 2- Environmental & Social Impacts Attachments

Attachment 2-3 – Envi. Monitoring Plan with Package wise Estimated Cost Attachment 2-4 – Environmental Monitoring Result Reporting Form Attachment 2-6 – MTHL Land Acquisition Status Attachment 2-8 – RAP Internal Monitoring Form Attachment 2-10 – Schedule of the RAP Implementation

Environmental Monitoring Plan with Packagewise Estimated Cost

Category	No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) - Ministry of Environment & Forest (MoEF)	Remarks
	1	Air pollution	SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , O ₃ , CO, (6 Items)	National Ambient Air Quality Standards, 2009	1. Sewri & Sewri bay area for package I	Fortnightly at all locations except 2 locations each near Batching plants	1,800,000	15,000,000	1,800,000	742,500	17,542,500	National Ambient Air Quality Standards (NAAQS) by Central Pollution Control Board (CPCB)	P1 contractor team is conducting Ambient air quality monitoring with reference to National Standards and clause 1.2 of Employer's requirement.
					2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year						(Standard for 24hrs: Industrial and Residential/ Ecological Sensitive area)	P 2 contractor Monitoring plan has been designed as per EIA of 2015
					3. Gavhan & Chirle for package III	Fortnightly only for 3 months (jan-2019 to Mar-2019). Then quarterly monitoring as per MOEF and CPCB norms						 SO₂: 80 / 80µg/m³ 	P3 contractor team is conducting Ambient air quality monitoring with reference to National Standards and clause 1.2 of Employer's requirement.
												 NO₂: 80 / 80µg/m³ РМ₁₀: 100 / 100µg/m³ РМ₂₅: 60 / 60µg/m³ 	P 1 received Consents CTE & CTO from MPCB and they are following MPCB frequency in addition to frequency set by Environment Expert from GC. The NAAQ standards are showing High rate as that is the usual procedure. The frequency of monitoring is set by us which varies for different parameters as either Statutory requirements or as required by us to ensure we have sufficient data in hands if there are additional claims for Compensation in C5 category. Summary : Although the contract conditions for all packages were same at the time of biding. Later modifications suggested by GC were not accepted by P 2. P1 and P3 accepted the modifications and hence the difference. Second point is P 1 carrying out monitoring as per the obatiend CTE and CTO. Both other packages have applied for CTE but haven't obtained it yet. So we expect the monitoring frequecy would change after obtaining CTE.
	2	Water pollution	pH, BOD, DO,	IS / AWWA	1. Sewri & Sewri bay area	Quarterly	810,000	2,400,000	810,000	0	3,210,000	 O₃: 180 / 180µg/m³ CO: 0.4 / 0.4mg/m³ Marine water quality Standards - Class SW-IV Harbour 	Water Pollution not
			Turbidity and O&G		for package I 2. Nhava temporary bridge & casting yard in Gavhan for	4 Times / Year						Waters (MPCB) pH : 6.5-9 	applicable for Pkg. 3
Ę					package II 3. Gavhan & Chirle for package III	Not applicable						 D0: 3 mg/l Turbidity: 30 NTU BOD: 5 mg/l 0 & G: 10 mg/l 	
Pollution	3	Waste	Volume of waste soil, cutting tree and domestic garbage	Volumetric	1. Sewri & Sewri bay area for package I	Daily	500,000	299,200,000	500,000	600,000	300,300,000		The cost of waste disposal for P1 includes C&D waste, Pile muck etc. from all areas like, interchange, intertidal and marine. The disposal location is at MCGM approved location Bhayandarpada, Thane.

Attachmemt 2-3

Category	No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) - Ministry of Environment & Forest (MoEF)	Remarks
					 2. Nhava temporary bridge & casting yard in Gavhan for package II 3. Gavhan & Chirle for package III 	4 Times / Year Once site clearing work/execution part of work start.						Municipal Soild Waste Management Rules, 2013 Generated waste shall be reused or disposed at designated site. Sites have been identified and the location for Pkg. 1 is at Bhayandar Pada in Thane. For Pkg. 2 & 3 is in Navi Mumbai at Pushpak Node nera "Teen Taki Junction" along the Amar Marg.	P2 contractor has considered only Domestic garbage with respect to CIDCO. Other wastes are not considered. Construction wastes will be
	4 and 8	Soil Contamination/ sedimentation	Heavy Metals & Oil & Grease (5-10 items shall be selected from Soil pollution standards)	IS / Methods Manual Soil Testing in India by Department of Agriculture and Cooperation, January 2011	 Sewri & Sewri bay area for package I Nhava temporary bridge & casting yard in Gavhan for package II 	1. Muck: 1 Time / Year 2. Sediments: 4 Times / Year	150,000	1,500,000	150,000	100,000	1,750,000	Soil Pollution Standard in India (MOEF) Cd: 0.01mg/l 	
						*If any spillage/ leakage take place from chemical, fuel storage area. *One time grab sample to be collected during Bridge Construction *Pre & Post Monsoon						Lead: 0.01mg/l Chromium (VI): 0.05mg/l Arsenic: 0.01mg/l T-Mercury: 0.0005mg/l Copper: 125mg/kg (some items shall be selected from totally 25 standards items)	
-	5	Noise and vibration	Ambient and road side noise $(dB(A)L_{Aeq})$	IS Standard	 Sewri & Sewri bay area for package I Nhava temporary bridge & casting yard in Gavhan for package II 	at Storage area only Fortnightly 2 Times / Year	150,000	54,000	150,000	369,000	573,000	-Construction Noise; 85dB(A) -Ambient Noise Standards in India (dB (A) Leq)	-
					package III	Fortnightly	75 000		PF 000		100 000	1.Industrial AreaDay Time: 75 (6-22hr)Night Time: 70 (22-6hr)2.Commercial Area:Day Time: 65 (6-22hr)Night Time: 55 (22-6hr)3.Residential Area:Day Time: 55 (6-22hr)Night Time: 45 (22-6hr)4.Silence ZoneDay Time: 50 (6-22hr)Night Time: 50 (6-22hr)Night Time: 50 (6-22hr)Night Time: 50 (6-22hr)Night Time: 50 (6-22hr)	
			Vibration (dB L10 or mm/sec)		1 Location Gavan area for package III	Half yearly	75,000	0	75,000	400,000	475,000	- Construction vibration 75dB -Vibration Standards roadside 1. Commercial /Industrial Area Day Time: 70 (7-20hr) Night Time: 65 (20-7hr) 2. Residential Area: Day Time: 65 (7-20hr) Night Time: 60 (20-7hr)	Not applicable for Pkg. 1
	9 and 10	Protected Area /Ecosystem	1.Monitoring of mudflat conditions including fauna-flora	Ocular inspection and quantitative survey	Along MTHL alignment and mangrove replant area for Package I	Quarterly during the construction Period	6,500,000	7,200,000	6,500,000	0	13,700,000		Not applicable for Pkg. 3
			2. Monitoring of Cutting Tree and replantation/ transplanting area 3.Monitoring of Mangrove Plantation	1-1. Fauna-Flora Line-Point census and record number	Along MTHL alignment and mangrove replant area for package II Not applicable for Package III	4 Times / Year						Significant impacts are not caused by the project Note)	
			area appointed by MoEF	and appeared species									

Category	No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) – Ministry of Environment & Forest (MoEF)	Remarks
Natural environment (4. Monitoring of sedimentation soil and ecological parameter (18items on Supplemental EIA Table 6.1.15 for soil and 7 items such as 1)Netprimary productivitye, 2)Chlorophyll-a, 3)Phosphate, 4)Nitrate, 5)Nitrite, 6)Particulate Organic Carbon, 7) SiO ₂)	1-2: Mangrove density and community survey								Detailed monitoring plan will be setup during basic design stage	
ž				1-3: Benthos Survey			-						
				2-1: Cutting trees			-					Standard for Soil; Supplemental EIA Table 6.1.15	
				confirmation 3-1: Mangrove								Standard for Ecological Parameter:	
				survey in the replanted area			-					Netprimary Productivity	
												<1,500 mgC/m3/day at surface	
							-					· Chlorophyll-a <4mg/m3	
												• Phosphate: 0.1-90µg/l	
							-					 Nitrate: 1.0-500µg/l Nitrite: <125µg/l 	
												Particulate Organic Carbon: 10-100mg/m ³	
	11	Hydrology	Flooding situation	Flood level	Not applicable for Package I		350,000	0	350,000	0	350,000	 SiO2: 10-5,000μg/l Project activities and structures does not cause flooding 	Not applicable for Pkg 1 & 3
	11	nyurology	Flooting situation	measurement during high precipitation periods			330,000	U	330,000	U	330,000	and impacts on tidal conditions	Not applicable for Fig. 1 & 5
					2 Locations (CRZ at Sewri and Shivaji Nagar) for	4 Times / Year							
					Package II Not applicable for Package						<u> </u>		
	12	Topography and	Conditions in embankment area		III Not applicable for Package I		115,000	0	115,000	0	115,000	Embankment shall be stabilized without any landslide and cracks	Not applicable for Pkg. 1 & 3
		Geology	embankment area	Stability of embankment	Interchange in Shivaji Nagar for Package II	4 Times / Year						anu tidiks	
\vdash	13	Local economy			Not applicable for Package Affected area		As per Actuals						
	15	such as employment and livelihood			initia alta								
ment	14	Local conflict of interests	Construction worker's township	Confirmation of workers list from	Sewri and Shivaji Nagar) for	2 Times / Year	125,000	0	125,000	0	125,000	Employment opportunity shall be provided fairly	
viron	15	Infectious	Number of infected	contractor Confirmation of		4 times / year x 4.5	525,000	0	525,000	0	525,000	Infection disease rate shall not be caused by the project	
Social environment		diseases such as HIV/AIDS	patient	health check list from contractor		years							
Soc	16	Labour Environment	Construction worker's condition	Confirmation of safety devices and conditions via interviews	2 Location (camp site in Sewri and Shivaji Nagar) for Package II	2 times / year	500,000	0	500,000	0	500,000	"Building And Other Construction Workers (Regulation of Emloyment and Conditions of Service) Act,1996", "The building and other construction worker's welfare cess Act, 1996" and international standards such as "IFC Performance Standard 2 Labor and Working Conditions"	
Other	17	Accidents	Number of accidents	Confirmation of accidents list from local government and State Traffic Police Department	2 Locations (camp site in Sewri and Shivaji Nagar) for Package II	4 Times / Year	400,000	0	400,000	0	400,000	Any accidents are not caused by construction	
				Total			8140500	325,354,000	12,000,000	2,211,500	339,565,500		

The Project for Construction of Mumbai Trans Harbour Link

Reporting Form of Environmental Monitoring during Construction Attachment 2-4

Monitoring Period - October 2021 to December 2021

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

	Υ.	r.	· ·	F			Monitoring Result		
No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4
			1. Sewri & Sewri bay area for package I	Quarterly monitoring ia conducted at all locations.	National Ambient Air Quality Standards (NAAQS)				
1	Air pollution	SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5}	2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year	(Standard for 24hrs: Industrial and Residential)	Sewri	Shivaji Nagar	Chirle	
			3. Gavhan & Chirle for package III	From march -2019 onwards monitoring is conducted quarterly as	1. SO ₂ : 80µg/m ³	10.675	BDL	10	
				per MOEF and CPCB	2. NO ₂ : 80µg/m ³	38	24	27	
				norms	3. PM ₁₀ : 100µg/m ³	191	94	53	
					4. PM _{2.5} .: 60µg/m ³	49	35	26	
					5.CO:02mg/m3 6.VOCs	1.4	1.3	0.58	
			1. Sewri & Sewri bay area for package I	Quarterly	Marine water quality Standards – Class SW-IV Harbour Waters (MPCB)	Zone I	Z.o	Zone III/ Package-03	
		U DOD DO T L'E	2. Nhava temporary bridge & casting yard in	4 Times / Year	1. pH : 6.5-9	7.1	7.5	Not applicable	
2	Water pollution	pH, BOD, DO, Turbidity and O&G	Gavhan for package II 3. Gavhan & Chirle for	Not applicable					
			package III	not applicable	2. DO: 3 mg/l	5.1	6.1	Not applicable	
					3. Turbidity: 30 NTU	15	8.9	Not applicable	
					4. BOD: 5 mg/l	BDL - 2 mg/l	BDL	Not applicable	
					5. O & G: 10 mg/l 6.COD	BDL - 2 mg/l 8-24	16	Not applicable Not applicable	
			1. Sewri & Sewri bay area for package I	Daily	Municipal Soild Waste Management Rules, 2013	0-24 Sewri Camp Site	Shivaji Nagar Camp Site	Chirle Camp Site	
			2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year	Generated waste soil (t) total -Piling muck	<u>16,651 Cu.m.</u>	App. 2000 CuM Collected in jumbo bags and Disposed off in EBB Location	NA	
3	Waste	Volume of waste soil, cutting tree and domestic garbage	3. Gavhan & Chirle for package III	Once site clearing work/execution part of work start.	Generated cutting tree (ha) total	1. 309 trees (Till March 2020) 2. Transplanting : 330 Trees 3. Root ball preparation : 330 trees	_	In Oct-Dec 2021 - Nil	
					Generated domestic waste (t/month) total	199.17	3.5 T/quarter. It is disposed through	2.1 T for the quarter	
							CIDCO daily.	2.1 1 Ioi lie quarter	
			1. Sewri & Sewri bay area for package I	1. Muck: 1 Time / Year	Confirmation of adequate disposal (visualt survey) Soil Pollution Standard in India (MOEF)	BMC authroized daily pick up Sediment sample at Sewri	Muck Testing Done on September 2021	Not applicable	
			2. Nhava temporary	Year	1. Cadmium: 0.01mg/l	BDL	and Reports submitted to GC BDL		
			hridge & casting vard in 3. Gavhan & Chirle for	*If any spillage/ leakage	2. total cyanide : not detected		<0.005		
			package III	take place from chemical,	3. Organic Carbon	0.86	8.5		
				fuel storage area. *One time grab sample to be collected during Bridge Construction *Pre & Post Monsoon at Storage area only	4. lead: 0.01mg/I	10	0.17	Not applicable for package-3	
					5. chromium (VI): 0.05mg/l	3	BDL	8	
					6. arsenic: 0.01mg/l or 15mg/kg (agri-land soil)	BDL	BDL		
	e - 1				7. total mercury: 0.005mg/l	BDL	BDL		
4	Soil Contamination/sedi	Heavy Metals & Oil &			8. alkyl mercury: not detected	BDL		Regarding	soil contamination/sed
-	mentation	Grease			9. PCBs: not detected		BDL		rds items during the Det
					10. copper: 125mg/kg (only paddy field soil)	116	DBY	JICA, and t	the rest of items shall be
					11. dichloromethane: 0.02mg/l		BDL		
					12. carbon tetrachloride: 0.002mg/l 13. 1,2-dichloroethane: 0.004mg/l		BDL BDL		
					13. 1,2-dichloroethane: 0.004mg/l 14. 1,1-dichloroethylene: 0.02mg/l	1	BDL		+
					14. 1,1-dichloroethylene: 0.02mg/l 15. cis-1,2-dichloroethylene: 0.04mg/l		BDL		
					16. 1,1,1-trichloroethane: 1mg/l	1	BDL		
					17. 1,1,2-trichloroethane: 0.006 mg/l		BDL		1
	1	1			18. trichloroethylene: 0.03mg/l	1	BDL		t
					ro: memoroeuryiene: oroenig i				
					19. tetrachloroethylene: 0.01mg/l 20. 1,3-dichloropropene: 0.002mg/l		BDL BDL		

Attachment 2-4

Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
Benzene is analysed in ambient air
Water Sampling not conducted due to monsoon season (Due to cyclone)
Both of forest and CIDCO area (234+75)= 309
Kindly check the letter No.Ref No. Mthl/ P3/L&T/GC/LT/HSE-2226/2020 dated on 12.12.2020
Hazardous Storeage is situated in low laying area at Gavan area. Due to this reason complete ground area is covered by boulders to avoid further water logging in rainy season. Therefore soil sample is impossible to taken out from in and around the Oil & chemical storage area. Same has witnessed by GC during Febrary-2020 monitoring.
ation, some items shall be selected from the total Design. Only the selected items shall be reported to ed from this form.

The Project for Construction of Mumbai Trans Harbour Link Reporting Form of Environmental Monitoring during Construction Attachment 2-4

Monitoring Period - October 2021 to December 2021

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

1. Environmental Monitoring during Construction for 4.5 years

							Monitoring Result		
No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4
					21. thiuram: 0.006mg/l		BDL		
					22. simazine: 0.003mg/l		BDL		
					23. thiobencarb: 0.02mg/l		BDL		
					24. benzene: 0.01mg/l		BDL		
					25. selenium: 0.01mg/l		BDL	1	
			1. Sewri & Sewri bay area for package I	Fortnightly	Construction area Standard 85 dB(A) daytime (Japan standard) Not constuction area : Ambient Noise Standard in India (dB(A) Laeq)	Sewri (ST 200-500) (Industrial area)	Sea Section (ST5000-5500) Migratory Bird Area (no standard on sea section)	Shivaji Nagar (Commercial area)	
			2. Nhava temporary bridge & casting yard in Gavhan for package II	2 Times / Year	Day time : 6-22 hr (continious) dB(A)	69.4	69.5	66.8	
			3. Gavhan & Chirle for	Fortnightly	Night time: 22-6 hr (continious) dB(A)	64.7	61.5	65.3	
			package III		(only sea section)			1	
ĺ –		Ambient and road side			Day time : 6-22 hr (10 min during 9-17 hrs)				
		noise (dB(A)LAeq)			Night time: 22-6 hr (10 min 22-24 hr)				
									İ
1					Note (standard values in Not construction area)				-
					1.Industrial Area				
i					Day Time: 75 (6-22hr)				
					Night Time: 70 (22-6hr)				
					2.Commercial Area:				
Noi	oise and vibration								
					Day Time: 65 (6-22hr)				
					Night Time: 55 (22-6hr)				
			1 Location Gavan area for package III	Half yearly	Construction area Standard 75 dB daytime (Japan standard) Not constuction area : Vibration Standard (Japan	Sewri (ST 200-500) (Industrial area)	Shivaji Nagar (Commercial area)	Chirle	
		Vibration			Standard along the road) Day time : 6-22 hr (continious)		Not Applicable	term monitoring	ted area (CRZ and Importar plan will be extablished dur shall be updated based on t
		(dB)			Night time: 22-6 hr (continious)			monitoring form	silali be upuateu baseu oli
		shall be converted from			Night time. 22-0 in (continious)				
		mm/s to dB			Note (standard values in Not construction area)				
					1. Commercial /Industrial Area				
					Day Time: 70 (7-20hr)				
					Night Time: 65 (20-7hr)				
				Quarterly during the construction Period	Standard is not existing, but quantity and quality should not be worsen	Sewri side (ST500-5500)	Sea Section (ST5500-16000)	Shivaji Nagar side (app. ST16000-19000)	Mangorove Replantation area appointed by State Government
			Along MTHL alignment and mangrove replant area for package II	4 Times / Year	1-1. Fauna-Flora (number of species and quantity	Lesser flamingo - 12000-15000		N/A	N/A
		1.Monitoring of mudflat conditions including fauna-			(1) Number of species of bird	52			
		flora			(2) Number of species of fish	Fishes, Crustaceans, crabs and mudskippe	T C C C C C C C C C C C C C C C C C C C		
		2. Monitoring of Cutting			(3) Estimated number of Flamingo	12000-15000	-		
		Tree and replantation/transplation			1-2: Mangrove density and community survey	Existing Avicennia protected	not required		

Attachment 2-4

	Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
_	
-	
	Noise Monitroing not conducted due to monsoon season.
_	
_	
	Bird Area) and ecosystem, detailed long-
in	Bird Area) and ecosystem, detailed long- g baseline survay of birds. This tentative e detailed long-term monitoring plan.
-	
	Kindly check the letter No.Ref No. Mthl/ P3/L&T/GC/LT/HSE-2226/2020 dated on 12.12.2020
	Testing for phytoplankton/zooplankton density and list of fauna attached in original test records available from Ultratech.
-	

The Project for Construction of Mumbai Trans Harbour Link Reporting Form of Environmental Monitoring during Construction

Attachment 2-4 1. Environmental Monitoring during Construction for 4.5 years Monitoring Period - October 2021 to December 2021

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

			g Construction for 4.5					Monitoring Resul	t	
Area	No.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Location 4
			Plantation area appointed by MoEF			(1) Number of species of mangorve	Avicennia marina	not required		
	6	Protected Area	4. Monitoring of			(2) Density of mangrove (xx trees/10m x 10m)		not required		
			sedimentation soil and			1-3: Benthos Survey	500 Numbers /Cu.m	not required		
			ecological parameter (25 items on EIA main text			(1) Number of species and quantity by species	500 Numbers /Cu.m	not required		
Natural Environment			Table 6.1.15 for soil and 7 items such as 1)Net primary productivity,			2-1: Cutting tree confirmation		not required	Approved By Both CIDCO and Forest forest Dept (both Alibaug and Uran(regional office))	
Envi			2)Chlorophyll-a,			(1) Number of cutting tree and species		not required	Submitted to authority	
ral J			3)Phosphate, 4)Nitrate, 5)Nitrite, 6)Particulate			3-1: Mangrove survey in the replant area		not required	N/A	
Vatu			Organic Carbon, 7) SiO2)			(1) Number of species of mangorve		not required		
~						(2) Density of mangrove (xx trees/10m x 10m)		not required		
						4. Ecologial Parameter				
						(1) Net primary Productivity : <1,500 mgC/m3/day at surface	1000			
						(2) Chlorophyll-a: <4mg/m3	4.2			
						(3) Phosphate: 0.1-90µg/l	Sediment - 7.0			
						(4) Nitrate: 1.0-500µg/l	Sediment - 4			
						(5) Nitrite: <125µg/l				
						(6) Particulate Organic Carbon: 10-100mg/m ³	0.8 - Sediment			
		Ecosystem				(7) SiO2: 10-5,000µg/l	33,2			
	7		191 12 54 A	Not applicable for Package I		Criteria for evaluation Project activities and structures does not cause flooding and impacts on tidal conditions	Sewri	Shivaji Nagar		
	7	Hydrology	Flooding situation	2 Locations (CRZ at Sewri and Shivaji Nagar) for Package II	4 Times / Year	Monitoring of flooding situation	No Flooding	No flooding	N/A	
				Not applicable for Package III						
				2 Locations (1. Embankment of Inter		Criteria for evaluation Embankment shall be stabilized without any landslide and cracks	Shivaji Nagar	Shivaji Nagar Camp Site	Chirle	
	8	Topography and Geology	Conditions in embankment area	Change in Shivaji Nagar and 2 Cutting area at toll gate in Chirle)	4 times / year x 4.5 years	Monitoring of embankment	In progress		Rock filling activity is carried out as per aggrement.	
	9	Local conflict of interests	Construction worker's township		4 times / year x 4.5 years	Criteria for evaluation Employment opportunity shall be provided fairly	Sewri Camp Site	Shivaji Nagar Camp Site	Chirle/ Gavan camp	
			1	Nagar)		Number of hired workers by community		125-150	150	
						Criteria for evaluation Infection disease rate shall not be caused by the project	Sewri Camp Site	Shivaji Nagar Camp Site		
	10	Infectious diseases such as HIV/AIDS	Number of infected patient	2 Locations (major camp site in Sewri and Shivaji Nagar)	4 times / year x 4.5 years	Confirmation of health check record and inspect project site . PPE provisions for work, social distancing for covid protocol at work in TBT training. Posters for awarenss at Kitchen and Labor camp. Medical camp : 71 Labor HIV Aids camp : 55 labor	Doctor on call checks site specific infections., minor and major incidents . 24x7 ambulance service , ERT team with trained first aiders available	Health Checks carried out but HIV/AIDS parameter is not there.	Regular Health check up is carried out by site Doctor.	
	11	Labour Environment	Construction worker's con	2 Locations (major camp site in Sewri and Shivaji Nagar)	2 times / year x 4.5 years	Criteria for evaluation "Building And Other Construction Workers (Regulation of Employment and Conditions of Service) Act,1996", "The building and other construction worker's welfare cess Act, 1996" and international standards such as "IFC Performance Standard 2 Labor and Working Conditions" 1. Local labor : Oct 2021 : 511 2. Local labor : Nov 2021 : 465 3. Local Labor : Dec 2021 : 495 Registeration of Labor 1. Oct 2021 : 215 2. Nov 2021 : 330 Dec 2021 : 525	4.500 labor for 3 months at 11 functional camps. One mid- day meal introduced as per BOCW act and by Maharashtra state serves more than 1000 free meals.	Shivaji Nagar Camp Site	Gavan Camp site	
				2 Locations (major camp		Site Visual Inspection Criteria for evaluation	IM 26 - for visual inspections- L&T IMS		Conforming with BOCW Act 1996	
Other	12	Accident	Number of accidents	site in Sewri and Shivaji	4 times / year x 4.5 years	Any accidents are not caused by construction	1	Shivaji Nagar Camp Site	Chirle/Other area	
0				Nagar)	1	Number of recorded accident		NIL	Nil	

Attachment 2-4

	Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
_	
_	
_	
	Functional first aid center within MTHL -1 campus. Induction, medical check up and
	authroization required to begin work for Labor.
	Biotoilets used for labor camps with biodigestors. A DRDO patented technology used for Sold waste. The bathing and kitchen water was directed to a reed bed for treatment.
	Liner rolldown and trapped the labor causing death

MTHL Land Acquisition Status (Attachment 2-6):

Total land required on Navi Mumbai side- 108.09 ha Land in possession in MMRDA – 106.345 ha Balance land acquisition- 1.745 ha

Note: The acquisition of 1.745 ha is in progress by CIDCO. The balance acquisition would be likely completed by the end of March 2022.

in	Land Required in ha Govt. Private		Land Acquired in ha		Anticipated date for Land Acquisition	Payment status (Payment made to Land Owners by CIDCO)	Remarks
Govt.	Private	Govt.	Private	Private*			
98.75	9.34	98.75	7.595	1.745	31-03-2022		The payment status to the land owners are awaited from CIDCO. The same would be communicated to JICA on receipt of the same.
	otal 8.09	98.75	7.595	1.745			

*Portions of Private Land

Sr. No.	Name of Village	Area (Hectare)	Acquired	Non-acquired	
1	Gavhan	0.15	0.15	0.00	
2	Jasai	8.72	7.306	1.414	
3	Chirle	0.47	0.139	0.331	
	Total Area	9.34	7.595	1.745	

Attachment 2-8

RAP Implementation Monitoring Form For Mumbai Trans Harbour Link Project (MTHL)

1. General Information

- a. RAP Implementation Monitoring Results:
- b. Date of Preparing This form
- c. Person Preparing This form

Progress Status Report (PSR) of 4th quarter of 2021

31-12-2021

Name: Robin Sham Position: Engineer and Team Leader

Department/Organizations: General Consultants

2. Scale of Impact

2.1 Project Affected Households (PAHs) and Project Affected Persons (PAPs) for Sewri side

Total Project Affected Households (PAHs)	297 Hhs	Titleholders: 0 Hhs
		Non-titleholders: 297 Hhs
Total PAPs	1,282 persons*	Titleholders: 0 persons
	_	Non-titleholders: 1,282 persons*
PAHs who need relocation (as residents)	231 Hhs	Titleholders: 0 persons
		Non-titleholders: 231 (1,088 persons) *
PAPs who do not need relocation (as residents)	0 persons	Titleholders: 0 persons
		Non-titleholders: 0 persons
Commercial PAPs who need relocation	66	Titleholders: 0 persons
	(194 persons) *	Non-titleholders: 66 (194 persons) *
Commercial PAPs who do not need relocation	0 persons	Titleholders: 0 persons
		Non-titleholders: 0 persons

* - Figures for number of persons do not include no. of family members of few additional PAPs.

2.2 Structures

= strattarts	
Structures	Residential: 231
	Commercial: 65
	Residential + Commercial: 1 (counted in Commercial)
	Community: 9 (Religious Properties 6, Public Toilets 3)
	Government: 16 (MbPT Structures 9, Occupants of Leased Plots 6 & Police Chowki 1)
	Total: 322

2.3 Fishery

Categories of Fisher-folks	Identifi	ed Number	Total	Remarks
	Mumbai side	Navi Mumbai side		
C1: Fishing stakes and nets in	178	54	232	Funds for 230 nos C1
RoW (250 m.)				category fishermen are
				transferred to
				Commissioner of
				Fisheries on 17.03.2020
				for payment to the
				beneficiaries.
				2. The list of balance 2
				Nos. of C1 category
				fishermen are in process
				of fund transfer to

QPR No. 19 (October to December 2021) Attachment 2-8

				Commissioner of
				Fisheries.
C2: Fishing Stakes and Nets within 500 m. of RoW (Southern side)	296	567	863	 Funds for 496 nos C2 category fishermen are transferred to Commissioner of Fisheries in the 2017-18. The list of balance 367 Nos. of C2 category fishermen are under verification of validity.
C3: Hand Pickers	1498	4051	5549	Funds for 4141 nos of C3 category fishermen are already transferred to Commissioner of Fisheries and balance 1408 Nos. of C3 category fishermen are in process of fund transfer to Commissioner of Fisheries.
C4: Commercial and Artisanal Fisher-folks (Loss of Time and Increased Operating Costs)	Will be observed during construction period	Will be observed during construction period		Nil
C5: Fisher-folks with Loss due to Turbidity	Will be observed during construction period	Will be observed during construction period		Nil
C6: Fisher-folks with Damages due to Accidents	Will be observed during construction period	Will be observed during construction period		Nil

2.4 Land Acquisition / Transfer

Location	Land Red Ha	•	Land Acquired in Ha.		Balance Land to be acquired in Ha	Remarks
	Govt.	Private	Govt.	Private		
Sewri	10.089	0	10.089	0	0	
Navi Mumbai	98.75	9.34	98.75	7.595	1.745	
Total	118.	118.179		7.595	1.745	

3. Monitoring Results

3.1 Sewri Section

Activity	Indicator	Total Target	Progress till Last Quarter	Progress during reporting Quarter	Cumulative Progress till Current Quarter	Cumulative Achievement of Total Target (%)	Remarks, If Any
Resettlement	No. of Residential PAHs provided with Allotment Letters of Alternate Tenements	231	197	29	226	97%	
	No. of Residential PAHs given possession of Alternate Tenements	231	197	29	226	97%	
	No. of Commercial/R+C PAPs provided with Allotment Letters of Alternate Shops/Tenements	66	23	38	61	92%	
	No. of Commercial R+C PAPs given possession of Alternate Shops/Tenements	66	23	38	61	92%	
	No. of Occupants of MbPT Leased Plots provided Compensation	6	5	1	6	100%	
	No. of Religious properties Relocated / Removed	6	1	5	6	100%	
	No. of Other Community properties Relocated / Removed	4	0	4	4	100%	
	No. of Structures in possession of MbPT Dismantled / Cleared	9	0	9	9	100%	
	No. of PAHs/PAPs provided Shifting Charges / Arrangement	297	0	0	0	0%	
Rehabilitation	No. of PAHs / PAPs identified for Livelihood Support in Post Resettlement Assessment						
	No. of PAHs / PAPs provided Livelihood Support under Program-I (to be identified)						
	No. of PAHs / PAPs provided Livelihood Support under Program-II (to be identified)						
	No. of PAHs / PAPs provided Livelihood Support under Program-III (to be identified)						
	No. of new enterprises started						

Activity	Indicator	Total Target	Progress till Last Quarter	Progress during reporting Quarter	Cumulative Progress till Current Quarter	Cumulative Achievement of Total Target (%)	Remarks, If Any
Grievance Redress	No. of Grievances Received by FLGRC	4					
Redress	No. of Grievances Disposed by FLGRC	4	0	4	4	100%	
	No. of Grievances Received by SLGRC	1					
	No. of Grievances Disposed by SLGRC	0					
Post Resettlement	No. of CHSs Registration helped						
Assistance	No. of CHSs provided Tenements for Social Amenities						
	No. of CHSs' Maintenance Fund Invested						
	No. of CHSs' Office Bearers provided training						

SUMMARY OF FISHER FOLKS OF MTHL PROJECT (Influence Zone of 23 villages) Up to 31-12-2021								
C -4			Total	Total	Total approved eligible family units			
Sr. No.	Village Nan	ne	number of forms Received	C1	C2	С3	Total	
1	Bamandong	ri	273	1	1	28	30	
2	Belapur		110	0	5	15	20	
3	Belpada		1185	0	7	478	485	
4	Diwale		455	12	201	52	265	
5	Ganeshpuri		276	0	37	35	72	
6	Gavhan		2162	0	14	1317	1331	
7	Jasai		926	0	0	18	18	
8	Jawale		51	0	1	0	1	
9	Kombadbhu	ija	413	1	23	134	158	
10	Kopar	*	994	2	5	228	235	
11	Karave		178	0	44	67	111	
12	Mahul		1062	129	76	604	809	
13	Moha		475	22	25	134	181	
14	Mora		818	0	102	375	477	
15	Morave		539	14	21	88	123	
16	Nhava		1646	0	32	307	339	
17	Sarsole		266	0	30	83	113	
18	Sewri		305	0	1	72	73	
19	Shelghar		241	0	0	15	15	
20	Shivajinagai		202	1	4	61	66	
21	Trombay		1208	49	219	823	1091	
22	Ulwe		218	1	3	14	18	
23	-	uman Koliwada	683	0	11	600	611	
24	Vahal		411	0	2	1	3	
	Tota	al	15097	232	864	5549	6645	
					•			
	Total applic	ations					15097	
		2428						
	Net Applicat	epeated Applicat					12669	
	Approved a						6645	
		Redressal Committ	ee (GRC) for F	isher-folk	Compense	ation		
No	o. of Cases	No. of C			f Cases		f Cases	
		referred to GRC No. of Cases No. of Cases No. of C					nsideratio	

referred to GRC			Rejected	under Consideration
	Allowed	Compensation Paid		
Nil	Nil	Nil	Nil	Nil

Implementation Schedule for Fisher-folks Compensation & Land Acquisition in Navi Mumbai

A. Implementation Schedule for Fisher-folks Compensation: -

Sr. No.	Task Designation	Approving authority	Start Date	Completion Date
1	Approval of fisher-folks' compensation	Fisher-folks Compensation	08-10-2015	23-12-2015
	Policy	Committee (FCC)		
2	Approval by MMRDA	MMRDA	10-12-2015	23-12-2015
3	Submission to JICA	MMRDA		04-01-2016
4	Detailed list of PAP and compensation plan	1. Detailed list of Fisher-folk PAP	23-12-2015	Up to 31-12-2021
		up to list 1 (1165 Nos) & 2 (1399		1. Total up to date applications scrutinized = 12669 Nos.
		Nos) are finalized by the		2. Eligible = 6645 Nos.
		Fisheries Department.		3. Rejected = 6024 Nos.
		2. From 2018, FEVC committee		
		is the approval authority of PAF		
		and approved C1- 232 Nos.		
		C2 - 368 Nos and C3- 3481 Nos		
		are approved.		
	Validation of compensation plan	Fisher-folks Compensation	23-12-2015	1. Approval to the Fisher-folk PAP list obtained from Fisheries
		Committee (FCC)		Department for Fisherfolk from Sewri, Mahul & Trombay
				(Mumbai side) – 12th September 2017 and 20th November
				2018 for C-2 & C3 Category only.

Sr. No.	Task Designation	Approving authority	Start Date	Completion Date
			23-12-2015	 Approval to the Fisher-folk PAP list obtained from Fisheries Department for Fisherfolk of Navi Mumbai of C2 & C3 on 25th April 2018. Validation of compensation is in progress and would be completed in phases.
6	Approval of compensation plan	FCC	23-11-2015	28-12-2017
7	Approval by MMRDA	MMRDA	23-11-2015	09-03-2021

B. Implementation Schedule for Land Acquisition in Navi Mumbai: -

	Land Required in Ha. Land Acquired in Ha.		La		-		uired in Ha.	Balance Land to be acquired in Ha	Anticipated date for Land Acquisition	Payment status (Payment made to Landowners by CIDCO)	Remarks
Govt.	Private	Govt.	Private	Private							
98.75	9.34	98.75	7.595	1.745	31-03-2022		 CIDCO is the land acquisition authority for land acquisition for Navi Mumbai MMRDA has paid an amount of INR 59.16 Cr to CIDCO as per their demand. The payment status to the landowners is awaited from CIDCO. The same would be communicated to JICA on receipt of the same. 				
Total	108.09	106.345		1.745							

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Implementation Schedule for SIA (Sewri Section)

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Task	Task Designation	Start Date	Completion /
No.	,		Forecast Date
1	Preparation of Final SIA		
1.1	MMRDA Approval	October 2015	January 2016
1.2	JICA Approval	November 2015	January 2016
1.3	Posting of project Information on MMRDA		
1.4	Translation and disclosure of entitlement policy in local language to all PAP's	December 2015	January 2016
2	LARP Implementation		
2.1	Grievance redress mechanism established	August 2016	August 2016
2.2	Staff deployment SIA implementation	June 2016	Dec. 2021
2.3	Staff Deployment Public Relation	June 2016	June 2016
2.4	Hiring of Independent Evaluation Agency	November 2018	November 2020
2.5	Preparation and issue of allotment letters to PAPs	June 2018	Jan. 2022
2.6	Notice of PAPs for shifting (Sewri Section)	December 2018	Nov. 2021
2.7	Allotment of dwelling units to PAP's	September 2016	Jan. 2022
2.8	Shifting of PAPs to resettlement Colony	December 2018	Nov. 2021
2.9	Transfer of compensation / allowance/ assistance to PAPs	December 2018	Jan. 2022
2.10	Creation of Community Revolving fund (within 3 months post handing over)	April 2019	Jan. 2022
2.11	Assessment of economic rehabilitation needs by individual household (within 6 months after handing over	September 2019	Jan. 2022
2.12	Registration of Co-operative housing societies transfer of maintenance funds. (6 months period)	December 2019	Jan. 2022
2.13	Signing of Civil Contract		January 2018
2.14	Notice of Civil works to proceed		March 2018
3	Monitoring & Evaluation		
3.1	Internal Monitoring- Monthly/ Quarterly	June 2016	July 2020
3.2	Independent Evaluation Mid-term and End term evaluation		
	Mid Term	May 2019	June 2020
	End Term	November 2019	Mar. 2022

Attachment 3- JICA's Concurrence Status

Status of JICA'S Cor	ncurrence
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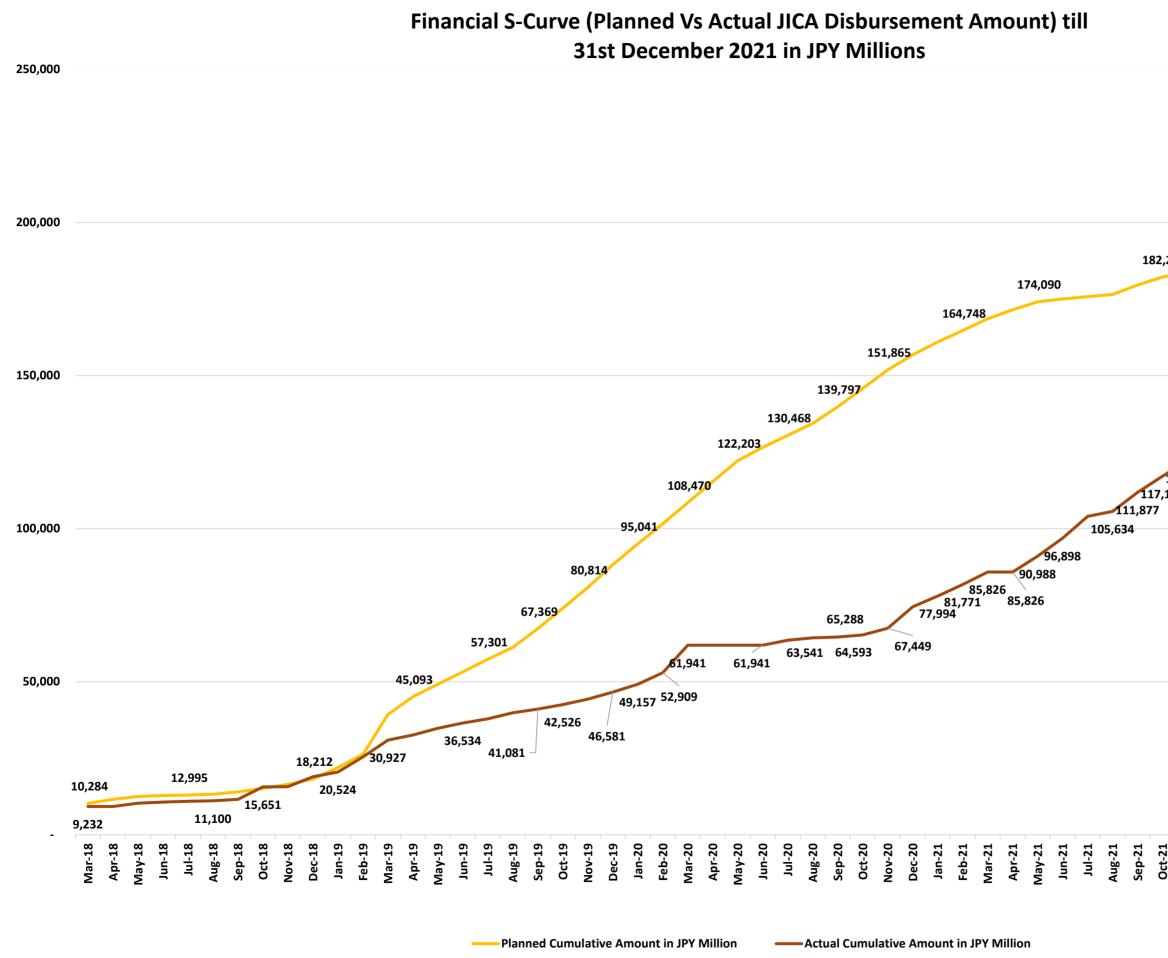
			Bid C	ost			JICA's Cond	currence on		
SI. No		Procurement procedure	Local Currency (Cr Rs.)	Total (Cr Rs)	PQ Documents	PQ Evaluation	Bid Documents	Technical Evaluation	Financial Evaluation	Contract
1.	Package-1 (CH 0+000 km to CH10+380 km)	ICB with PQ (2P)	7637.30	7637.30	JICA's Concurrence - 9th May 2016	JICA's Concurrence - 22 nd Dec 2016	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 12 th Sep 2017	JICA's Concurrence - 12 th Oct 2017	JICA's Concurrence – 15 th Feb 2018
2.	Package-2 (CH 10+380 km to CH18+187 km)	ICB with PQ (2P)	5612.61	5612.61	JICA's Concurrence - 9 th May 2016	JICA's Concurrence - 22 nd Dec 2016	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 12 th Sep 2017	JICA's Concurrence - 12 th Oct 2017	JICA's Concurrence – 15 th Feb 2018
3.	Package-3 (CH18+187 to CH21+800)	ICB with PQ (2P)	1013.79	1013.79	JICA's Concurrence - 9 th May 2016	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 15 th Sep 2017	JICA's Concurrence - 12 th Oct 2017	JICA's Concurrence – 15 th Feb 2018
4.	Package-4 Intelligent Transport System	ICB with PQ (2P)	413	413	JICA's Concurrence - 23 rd August 2019	-	JICA's Concurrence - 24 th Aug 2017	-	-	-

Attachment 4- Project Procurement and Financial Status till 31st December 2021

PROJECT PROCUREMENT AND FINANCIAL STATUS TILL 31st DECEMBER 2021

Туре	Contract	Awarded or Estimated Value (in Rs. Crore)	Current Status	Contractors	Project Commencement Date	Stipulated Project Completion Date	% of Overall Project completion (Design/ Procurement/ Construction) till 25 th December 2021	% of Overall Financial Progress (Including Mobilization Advance and excluding the Price Adjustment & Work Variation) till 31 st December 2021
	Package-1 (CH 0+000 km to CH 10+380 km)	7637.30	Awarded	L&T-IHI Consortium	March 2018	Sep 2022	66.21%	70.93%
CIVIL	Package-2 (CH 10+380 km to CH18+187 km)	5612.61	Awarded	DAEWOO- TPL JV	March 2018	Sep 2022	63.19%	75.04%
	Package-3 (CH18+187 to CH21+800)	1013.79	Awarded	L&T	March 2018	Sep 2021	66.84%	86.94%
ITS	Package-4 Intelligent Transport System (ITS)	413	Tender Stage	NA	February 2022	May 2023	NA	NA

Attachment 5- S-Curve for Cumulative Planned Vs Actual Amount in JPY Million



02			1:	86,55	53	1	88,06	19 56	2 92,5	01,77 76
12,2	26,05 40	59								

Attachment 6- Package-1's Construction Programme Updated as on 25th December 2021





(4_7) - IHI				IR LINK PACKAGE IME FOR DECEMI	•			MR				General Consultant for Mumbai Tran	
Activity Name	BL1 Duration	BL1 Start	BL1 Finish	Original Start	Finish	Schedule %		riance - BL1 Start	Variance - BL1	otal Float 201	8 2019	2020 2021 2022	2023 2024
DR45_MTHL_D1_Dec/24_Month Programs	1062	23-Mar-18	22-Sep-22	Original Start Duration 1732 23-Mar-18 A	04-Dec-24	Complete	Complete	Date	Finish Date	671 JJ	AS J A JAS J	JJAS J J JAS J J JAS J J J JAS	JUJJASUJUJJ
PR45 MTHL P1 -Dec'21 Month Progress MPR45.1 Mumbai Trans Harbour Link - Package 1		23-Mar-10	<u> </u>	1732 23-Mar-18 A	04-Dec-24	96.64%	66.21%	0	-670	-671			
M10000 Commencement Date		23-Mar-18		0 23-Mar-18 A		100%	100%	0	0	•			
MPR45.1.1 Key Milestones		19-Sep-18	22-Sep-22	2082 15-Feb-19 A	04-Dec-24	0%	0%	-148	-803	-804			
MPR45.1.2 Contractual Interface		09-Oct-18	05-Mar-22	1243 09-Oct-18 A	05-Mar-22	0%	0%	0	0	200			
MPR45.1.3 Access to Site MPR45.1.4 Document Submittals		23-Mar-18 23-Mar-18	03-Sep-18 18-Sep-18	165 23-Mar-18 A 180 23-Mar-18 A	26-Dec-21 09-Dec-19 A	0% 0%	0% 0%	0	-1210 -446	- /41			
MPR45.1.5 Survey			03-Jun-18	73 23-Mar-18 A	03-Jun-18 A	0%	0%	0	0	V			
MPR45.1.6 Geotechnical Investigation	165	23-Mar-18	03-Sep-18	165 23-Mar-18 A	23-Jul-19 A	0%	0%	0	-322				
MPR45.1.6.1 Phase 1		23-Mar-18	21-May-18	60 23-Mar-18 A	21-May-18 A	0%	0%	0	0				
MPR45.1.6.2 Phase 2		22-May-18		25 22-May-18 A		0%	0%	0	0	W			
MPR45.1.6.3 Phase 3 MPR45.1.6.4 Phase 4		16-Jun-18 21-Jul-18	04-Aug-18 03-Sep-18	50 16-Jun-18 A 45 05-Oct-18 A	30-Dec-18 A 23-Jul-19 A	0% 0%	0% 0%		-147 -322		V		
MPR45.1.7 Infrasturcture Facilities			05-Sep-18 05-Feb-19	376 23-Mar-18 A	26-Oct-20 A	0%	0%	0	-322				
MPR45.1.7.1 Project Site Office Construction (Contractor + Employer +		04-Apr-18	27-Nov-18	120 04-Apr-18 A	25-Nov-18 A	0%	0%	0	2				
MPR45.1.7.2 Casting Yard		20-Apr-18	05-Feb-19	355 20-Apr-18 A	26-Oct-20 A	0%	0%	0	-369				
MPR45.1.7.3 Fabrication Yard		23-Mar-18		133 23-Mar-18 A	26-Apr-19 A	0%	0%	0	-122				
MPR45.1.7.4 Rebar Yard MPR45.1.7.5 Batching Plant Installation - CP30 & CP60		23-Mar-18 20-Apr-18	30-Nov-18 05-Feb-19	376 23-Mar-18 A 164 08-Sep-18 A	16-Jan-20 A 08-Dec-18 A	0%	<u> </u>	0	-265 49				
MPR45.1.8 Procurement Plan		<u> </u>	07-Sep-22	2186 04-Apr-18 A	31-Oct-24	0%	0%	-47	-784	-770			· · · · · · · · · · · · · · · · · · ·
MPR45.1.8.1 Plant & Machinery Deployment Plan		04-Apr-18	07-Sep-22	2186 04-Apr-18 A	31-Oct-24	0%	0%	0	-784	-770		· · · · · · · · · · · · · · · · · · ·	
MPR45.1.8.4 Bulk Material Procurement Plan	1412	01-Sep-18	13-Jul-22	1679 31-Aug-18 A	25-Sep-24	0%	0%	0	-804	-805	V		
MPR45.1.9 Design & Engineering (Civil)		23-Mar-18	21-Sep-19	673 23-Mar-18 A	29-Dec-21	0%	0%	0	-536	-344			
MPR45.1.9.1 Initial Design (General & Preliminary Design, DBR)		23-Mar-18	09-Jun-18 18-Jun-18	79 23-Mar-18 A 88 23-Mar-18 A	29-Nov-18 A 10-Sep-18 A	0%	0%	0	-172				
MPR45.1.9.2 Finalization of Alignment MPR45.1.9.3 Detailed Design and Construction Design			21-Sep-19	673 01-May-18 A		0% 0%	0% 0%	0	-83 -536	-344			
MPR45.1.10 Design, Engineering & Material Procurement (OSD)			·	1211 23-Mar-18 A	22-Jul-21 A	0%	0%	0	-520			•••••	
MPR45.1.10.1 Initial Design	53	23-Mar-18	14-May-18	53 23-Mar-18 A	29-Nov-18 A	0%	0%	0	-198				
MPR45.1.10.3 Aerodynamic Analysis		23-Mar-18	14-Aug-18	145 23-Mar-18 A	30-Jul-19 A	0%	0%	0	-349		Y		
MPR45.1.10.4 Technical Design		15-May-18		813 15-May-18 A		0%	0%	0	-488				
MPR45.1.10.5 Construction Design MPR45.1.10.6 Material Procurement (1st Lot)		12-Oct-18	20-Sep-19 17-Feb-20	1124 02-Feb-19 A 577 15-Mar-19 A	22-Jul-21 A 19-Jan-21 A	0% 0%	0% 	-113 -13	-670 -336		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.11 Tree Cutting and Transplantation			02-Nov-18	1121 23-Mar-18 A	16-Jan-22	0%	0%	0	-1170	-816			
MPR45.1.12 Utility Diversion	210	19-Jun-18	14-Jan-19	1363 01-Oct-18 A	05-Jan-22	0%	0%	-104	-1087	-743	•	<mark>7</mark>	
MPR45.1.13 Construction		11-Jun-18	22-Jun-22	1669 11-Jun-18 A	19-Sep-24	96.57%	59.35%	0	-683	-608			
MPR45.1.13.1 Sewri Interchange Section		03-Nov-18	28-Feb-22	1466 29-Mar-19 A	13-Apr-24	96.43%	42.71%	-121	-648	-476	· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.1.1 Sewri Interchnage - Work Front - 1 MPR45.1.13.1.1.1 Sewri Interchange - Work Front - 1 - Piling			28-Feb-22 15-Dec-20	1466 16-May-19 A 889 16-May-19 A	13-Apr-24 11-Apr-22	95.03% 100%	37.93% 83.36%	-161 -161	-648 -324	-470		·····	
MPR45.1.13.1.1.1.1 Piling - Land Viaduct		13-Apr-19	16-Sep-19	298 25-Jun-19 A	16-Mar-21 A	100%	100%	-53	-376		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.1.1.1.2 Piling - Ramp A	442	03-Nov-18	17-Oct-20	880 16-May-19 A	14-Mar-22	100%	85.57%	-161	-348	-169		······································	
MPR45.1.13.1.1.1.3 Piling - Ramp E		20-Oct-20	01-Dec-20	63 02-Dec-19 A	11-Apr-22	100%	33.33%	192	-336	-169	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.1.1.4 Piling - Ramp F		02-Dec-20	15-Dec-20	12 05-Jan-21 A	30-Jun-21 A	100%	100%	-28	-151	074			
MPR45.1.13.1.1.2 Sewri Interchange - Work Front - 1 -Pile Cap		19-Nov-18 25-Apr-19	24-Mar-21 15-Oct-19	1010 21-Jun-19 A 130 06-Sep-19 A	03-Nov-22 06-Oct-21 A	100%	45.97% 100%	-175 -43	-414 -445	-274			
MPR45.1.13.1.1.2.2 Pile Cap - Ramp A		19-Nov-18	15-Jan-21	966 21-Jun-19 A	05-Oct-22	100%	38.95%	-175	-446	-329	•	······	
MPR45.1.13.1.1.2.3 Pile Cap - Ramp E	44	07-Jan-21	27-Feb-21	186 26-Jan-20 A	03-Nov-22	100%	33.33%	211	-434	-274	•	· · · · · · · · · · · · · · · · · · ·	
📕 MPR45.1.13.1.1.2.4 Pile Cap - Ramp F		01-Mar-21	24-Mar-21	20 13-Oct-21 A	08-Nov-21 A	100%	100%	-111	-112			T	
MPR45.1.13.1.1.3 Sewri Interchange - Work Front - 1 - Pier		12-Dec-18	20-May-21	662 30-Jul-19 A	20-Dec-22	100%	56.86%	-155	-405	-238			/
MPR45.1.13.1.1.3.1 Pier - Land Viaduct		29-May-19 12-Dec-18	30-Oct-19 09-Feb-21	97 21-Oct-19 A 648 30-Jul-19 A	19-Oct-21 A 25-Nov-22	100% 100%	100% 36.29%	-43 -155	-444 -468	-363	•		
MPR45.1.13.1.1.3.2 Pier - Ramp A		27-Jan-21	20-May-21	261 31-Jul-19 A	20-Dec-22	100%	81.36%	- 155 337	-400	-301	· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	/
MPR45.1.13.1.1.3.4 Pier - Ramp F		23-Dec-20	01-Apr-21	56 24-Mar-21 A	13-Oct-22	100%	84.25%	-75	-390	-189		· · · · · · · · · · · · · · · · · · ·	
📲 MPR45.1.13.1.1.4 Sewri Interchange - Work Front - 1 - Pier Cap	587	05-Jan-19	11-Jun-21	499 12-Oct-20 A	11-Jan-23	100%	49.12%	-384	-405	-93			
MPR45.1.13.1.1.4.1 Pier Cap - Land Viaduct		-		88 12-Oct-20 A	19-Nov-21 A	100%	100%	-249	-458			· · · · · · · · · · · · · · · · · · ·	,
MPR45.1.13.1.1.4.2 Pier Cap - Ramp A		05-Jan-19	26-Feb-21 11-Jun-21	455 04-Nov-20 A	16-Dec-22	100%	29.03% 73.86%	-403	-471	-381			
MPR45.1.13.1.1.4.4 Pier Cap - Ramp E		13-Feb-21 31-Dec-20	13-Apr-21	98 28-Oct-20 A 47 12-Apr-21 A	11-Jan-23 05-Nov-22	100% 100%	68.36%	90 -84	-405 -400	-186		·····	
MPR45.1.13.1.1.5 Sewri Interchange - Embankment Works - Ramp		14-Apr-21	01-Nov-21	90 08-Nov-22	21-Feb-23	0%	0%	-400	-400	-251		· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.1.6 Sewri Interchange - Work Front - 1 - Super Struct		04-May-19	28-Feb-22	810 29-Jul-20 A	13-Apr-24	87.5%	5.48%	-264	-648	-606			
MPR45.1.13.1.1.6.1 Erection - Land Viaduct		19-Nov-19	11-Mar-20	154 29-Jul-20 A	09-Apr-22	100%	50%	-176	-478	-441		v	
MPR45.1.13.1.1.6.2 Erection - Ramp A		04-May-19	· · ·	594 05-Sep-20 A	26-Jun-23	100%	0% 5.22%	-306	-625	-579			
MPR45.1.13.1.1.6.3 Erection - Ramp E		10-Apr-21 28-Dec-21	02-Dec-21 28-Feb-22	215 17-Aug-21 A 52 12-Feb-24	17-Jan-24 13-Apr-24	100% 0%	5.22% 0%	-69 -650	-650 -650	-608			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.1.2 Sewri Interchange - Work Front - 2			11-Feb-22	1155 29-Mar-19 A	06-Apr-23	97.37%	50.46%	-121	-351	-279	v		
MPR45.1.13.1.2.1 Sewri Interchange - Work Front - 2 - Piling			01-Mar-21	958 29-Mar-19 A	11-Aug-22	100%	63.65%	-121	-366	-273		······································	
												· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·





	JPDATED B	ASELINE	PROGRAM	IME FOR DECEME	BER 2021		M	MR	DA			Gene	eral Consultant for Mumbai Trans H	arbour Link Proje
Activity Name	BL1 Duration	BL1 Start	BL1 Finish	Original Start Duration	Finish	Schedule % Complete	Performance % Vari Complete	ance - BL1 Start Date	Variance - BL1 Finish Date	Total Float		2020	2021 2022	
MPR45.1.13.1.2.1.1 Piling - Ramp C2	325	03-Nov-18	27-Feb-20	586 29-Mar-19 A	24-Mar-21 A	100%	100%	-121	-246					
	140	03-Apr-19	18-Dec-19	417 12-Nov-19 A	05-Apr-22	100%	52.86%	-108	-544	-370			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.2.1.3 Piling - Ramp B	84	21-Nov-20	01-Mar-21	255 22-Nov-19 A	11-Aug-22	100%	35.71%	227	-366	-273	· · · · · · · · · · · · · · · · · · ·			
MPR45.1.13.1.2.2 Sewri Interchange - Work Front - 2 - Pile Cap		19-Nov-18	29-Apr-21	1027 05-May-19 A	05-Nov-22	100%	34.19%	-140	-386	-324				
MPR45.1.13.1.2.2.1 Pile Cap - Ramp C2		19-Nov-18	24-Apr-20	835 05-May-19 A	30-Jul-21 A	100%	100%	-140	-268	000	······································			
 MPR45.1.13.1.2.2.2 Pile Cap - Ramp C1 MPR45.1.13.1.2.2.3 Pile Cap - Ramp B 		12-Apr-19 25-Nov-20	04-Feb-20 29-Apr-21	471 14-Dec-19 A 330 16-Jan-20 A	16-Jun-22 05-Nov-22	100% 100%	20% 10.71%	-128 184	-566 -386	-328 -324		• •	· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.2.3 Sewri Interchange - Work Front - 2 - Pier		12-Dec-18	29-Apr-21 21-May-21	673 04-Sep-19 A	22-Nov-22	100%	50.95%	-155	-381	-324	· · · · · · · · · · · · · · · · · · ·			
MPR45.1.13.1.2.3.1 Pier - Ramp C2		12-Dec-18	09-May-20	476 04-Sep-19 A	16-Aug-21 A	100%	100%	-155	-256	170	· · · · · · · · · · · · · · · · · · ·			
	194	01-Apr-19	18-Feb-20	515 10-Sep-19 A	30-Jun-22	100%	38.78%	-64	-566	-320	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
Press MPR45.1.13.1.2.3.3 Pier - Ramp B	248	25-Apr-20	21-May-21	391 08-Oct-19 A	22-Nov-22	100%	43.18%	168	-381	-198	· · · · · · · · · · · · · · · · · · ·		✓	
MPR45.1.13.1.2.4 Sewri Interchange - Work Front - 2 - Pier Cap		26-Dec-18	28-May-21	598 02-Dec-19 A	29-Nov-22	100%	51.36%	-206	-381	-197			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.2.4.1 Pier Cap - Ramp C2		26-Dec-18	27-May-20	413 02-Dec-19 A	26-Aug-21 A	100%	100%	-206	-241	2/1				
 MPR45.1.13.1.2.4.2 Pier Cap - Ramp C1 MPR45.1.13.1.2.4.3 Pier Cap - Ramp B 		18-Apr-19 19-May-20	12-Mar-20 28-May-21	364 07-Aug-20 A 238 07-Jan-20 A	22-Jul-22 29-Nov-22	100% 100%	40.16% 43.18%	-277 112	-566 -381	-261 107		V	· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.2.4.3 Fiel Cap - Kallip B MPR45.1.13.1.2.5 Sewri Interchange - Embankment Works - Ramp C		23-May-19	02-Nov-19	60 17-Jan-22	29-Mar-22	0%	43.18%	-576	-301	-20			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.2.6 Sewri Interchange - Work Front - 2 - Super Structu		18-Mar-19	11-Feb-22	551 05-Dec-20 A	06-Apr-23	92.88%	50.73%	-370	-351	-279		•	· · · · · · · · · · · · · · · · · · ·	★
MPR45.1.13.1.2.6.1 Erection - Ramp C2		18-Mar-19	02-Nov-20	389 09-Dec-20 A	15-Dec-21 A	100%	100%	-373	-262				, , , , , , , , , , , , , , , , , , , 	
MPR45.1.13.1.2.6.2 Erection - Ramp C1		08-Oct-19	26-May-20	282 05-Dec-20 A	22-Aug-22	100%	48.15%	-303	-581	-282			• • • • • • • • • • • • • • • • • • •	
Press MPR45.1.13.1.2.6.3 Erection - Ramp B		28-Nov-20	11-Feb-22	190 09-Mar-21 A	06-Apr-23	85.93%	33.67%	-83	-352	-280		· · · · · · · · · · · · · · · · · · ·		V
MPR45.1.13.1.3 Sewri Interchange - Work Front - 3 (Cast in situ Spans)		28-Feb-20	01-Feb-22	603 16-May-20 A	22-Jul-23	98.46%	33.58%	-65	-451					
MPR45.1.13.1.3.1 Sewri Interchange - Work Front - 3 - Piling MPR45.1.13.1.3.1.1 Piling - Ramp B		28-Feb-20 28-Feb-20	20-Nov-20 02-May-20	261 16-May-20 A 108 27-May-21 A	09-Jun-22 19-May-22	100%	61.46% 30.56%	-65 -300	-396 -468	-325		•	· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.3.1.2 Piling - Ramp E			07-Oct-20	255 16-May-20 A	02-Jun-22	100%	77.78%	-300	-400	-325			······································	
MPR45.1.13.1.3.1.3 Piling - Ramp C1		08-Oct-20	20-Nov-20	73 23-Feb-21 A	09-Jun-22	100%	83.33%	-114	-396	-325				
MPR45.1.13.1.3.2 Sewri Interchange - Work Front - 3 - Pile Cap		07-Mar-20	15-Dec-20	206 21-Sep-20 A	21-Jul-22	100%	43.75%	-87	-411	-184		V		
💾 MPR45.1.13.1.3.2.1 Ріle Сар - Ramp В	81	07-Mar-20	10-Jun-20	144 05-Jun-21 A	30-Jun-22	100%	11.11%	-302	-471	-302			V	
MPR45.1.13.1.3.2.2 Pile Cap - Ramp E		11-May-20	17-Nov-20	187 21-Sep-20 A	16-Jun-22	100%	77.78%	-33	-405	-170			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.3.2.3 Pile Cap - Ramp C1		23-Oct-20	15-Dec-20	38 09-Apr-21 A	21-Jul-22	100%	41.67%	-140	-411	-184				
MPR45.1.13.1.3.3 Sewri Interchange - Work Front - 3 - Pier MPR45.1.13.1.3.3.1 Pier - Ramp B		18-Mar-20 18-Mar-20	05-Mar-21 27-Nov-20	220 10-Oct-20 A 201 10-Jul-21 A	06-Sep-22 06-Sep-22	100% 100%	37.5% 11.11%	-95 -301	-384 -465	-223		••••••		
MPR45.1.13.1.3.3.2 Pier - Ramp E			01-Feb-21	187 10-Oct-20 A	28-Jul-22	100%	66.67%	-301	-405	-344		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.1.3.3.3 Pier - Ramp C1		18-Nov-20	05-Mar-21	60 01-Jun-21 A	31-Aug-22	100%	33.33%	-163	-379	-218			• • • • • • • • • • • • • • • • • • • •	
MPR45.1.13.1.3.4 Sewri Interchange - Work Front - 3 - Pier Cap	196	24-Apr-20	19-Mar-21	191 27-Mar-21 A	22-Sep-22	100%	37.5%	-202	-384	-224			v	
Hereich MPR45.1.13.1.3.4.1 Pier Cap - Ramp B	115	24-Apr-20	11-Dec-20	191 24-Jul-21 A	22-Sep-22	100%	11.11%	-269	-465	-344			v	
MPR45.1.13.1.3.4.2 Pier Cap - Ramp E		08-Jun-20	15-Feb-21	122 27-Mar-21 A	11-Aug-22	100%	66.67%	-165	-378	-191				
MPR45.1.13.1.3.4.3 Pier Cap - Ramp C1		17-Dec-20	19-Mar-21	48 15-Jun-21 A	16-Sep-22	100%	33.33%	-150	-380	-231			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.1.3.5 Sewri Interchange - Work Front - 3 - Super Structu MPR45.1.13.1.3.5.1 Super Structure - Ramp B		23-May-20 23-May-20	01-Feb-22 30-Jan-21	360 19-May-22 135 19-May-22	22-Jul-23 28-Oct-22	93.62% 100%	0%	-451 -451	-451 -454	-300				
MPR45.1.13.1.3.5.2 Super Structure - Ramp E		16-Jan-21	24-Sep-21	135 10-Oct-22	21-Mar-23	100%	0%	-451	-454	-344				₹
MPR45.1.13.1.3.5.3 Super Structure - Ramp C1		09-Jun-21	01-Feb-22	120 03-Mar-23	22-Jul-23	79.05%	0%	-451	-451	-355				
PR45.1.13.2 Intertidal Section	715	11-Jun-18	23-Oct-21	1469 11-Jun-18 A	23-Jan-24	100%	94.29%	0	-687	-660				· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.2.1 Intertidal - Temporary Access Bridge Work		11-Jun-18	26-Sep-20	620 11-Jun-18 A	04-Dec-20 A	0%	0%	0	-56		X		Y	
MPR45.1.13.2.1.1 Access Bridge		11-Jun-18	12-Jun-20	528 11-Jun-18 A	27-May-20 A	0%	0%	0	14					
MPR45.1.13.2.1.2 Fingers		13-Oct-18	26-Sep-20	620 26-Sep-18 A	04-Dec-20 A	0%	0%	16	-56	((0			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.2.2 Intertidal - Main Bridge Work MPR45.1.13.2.2.1 Intertidal - Main Bridge Work - Piling		14-Dec-18 14-Dec-18	23-Oct-21 16-Mar-21	1404 14-Nov-18 A 686 14-Nov-18 A	23-Jan-24 16-Apr-21 A	100%	94.29%	26 26	-687 -26	-660				• • • • • • • • • • • • • • • • • • • •
MPR45.1.13.2.2.2 Intertidal - Main Bridge Work - Pile Cap		29-Dec-18	06-Apr-21	953 17-Jan-19 A	03-Jul-21 A	100%	100%	-15	-20					
MPR45.1.13.2.2.3 Intertidal - Main Bridge Work - Pier		17-Jan-19	25-May-21	960 29-Mar-19 A	23-Sep-21 A	100%	100%	-59	-22		· · · · · · · · · · · · · · · · · · ·			
MPR45.1.13.2.2.4 Intertidal - Main Bridge Work - Pier Cap		30-Jan-19	05-Jun-21	699 10-Aug-19 A	27-Dec-21 A	100%	100%	-115	-92				• • • • • • • • • • • • • • • • • • •	
MPR45.1.13.2.2.5 Intertidal - Main Bridge Work - Super Structure Ere		18-Apr-19	23-Oct-21	1006 29-Nov-19 A	23-Jan-24	100%	73.98%	-110	-687	-660				
MPR45.1.13.2.3 Intertidal - Finger Removal & Reuse		07-Mar-19	29-Dec-20	482 20-Jun-19 A	11-Jan-22	0%	0%	-85	-236		· · · · · · · · · · · · · · · · · · ·			
IPR45.1.13.3 Marine Section MPR45.1.13.3.1 Temporary Access Bridge Work -2 (MP70 to MP51- 21)		18-Sep-18	17-Jun-22 17-Jun-22	1629 14-Dec-18 A 1268 14-Nov-19 A	19-Sep-24 19-Sep-24	98.15% 0%	66.24% 0%	-73 -274	-687 -687					
MPR45.1.13.3.2 Marine - Main Bridge		<u> </u>	23-Feb-22	1532 14-Dec-18 A	25-May-24	98.15%	66.24%	-274	-687	-000 -666	· · · · · · · · · · · · · · · · · · ·			
MPR45.1.13.3.2.1 Marine - Piling			15-Mar-21	962 14-Dec-18 A	05-Oct-21 A	100%	100%	-34	-92					
MPR45.1.13.3.2.3 Marine - Pile Cap			12-Apr-21	1063 14-Jan-19 A	13-Jul-22	100%	92.9%	-43	-306	-177			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.3.2.4 Marine - Pier		22-Dec-18	02-Jun-21	844 12-Sep-19 A	10-Oct-22	100%	57.2%	-146	-336	-224	••••		V	
MPR45.1.13.3.2.2 Marine - Pier Cap		21-Jan-19	14-Jun-21	751 26-Dec-19 A	09-Nov-22	100%	46.61%	-206	-349	-225			·	
MPR45.1.13.3.2.5 Marine - Super Structure Erection		19-Apr-19	23-Feb-22	890 23-Jun-20 A	25-May-24	89.89%	5.36%	-276	-687 705	-666				.
PR45.1.13.4 Precast Segments MPR45.1.13.4.1 Precast Segement - Sewri Interchange		06-Feb-19	21-Aug-21	1251 07-Aug-19 A	11-Jan-24	100%	48%	-154	-735	-405				
MPR45.1.13.4.1 Precast Segement - Sewri Interchange MPR45.1.13.4.2 Precast Segement - Intertidal		06-Feb-19 28-Feb-19	24-May-21 14-Aug-21	1128 20-Feb-20 A 785 18-Oct-19 A	11-Jan-24 14-May-22	100% 100%	36.23% 90.86%	-317 -194	-812 -228	-405			.	
MPR45.1.13.4.2 Precast Segement - Marine		28-Feb-19	21-Aug-21	1217 07-Aug-19 A	20-Nov-23	100%	22.92%	-135	-220	-361	· · · · · · · · · · · · · · · · · · ·			
PR45.1.13.5 Orthotropic Steel Deck (OSD) - Fabrication, Shipping, Ass		11-Jun-19	15-Mar-22	790 23-Sep-19 A	08-May-23	96%	41.13%	-9	-351	-259				
MPR45.1.13.5.1 OSD - Fabrication		28-Sep-19	12-Oct-21	845 23-Sep-19 A	24-Jul-22	0%	0%	F	-285	120				************





			JR LINK PACKAGE MME FOR DECEMI			м	MR	1 Da			General Consultant for	r Mumbai Trans Harbour Lin	nk Project
Activity Name	BL1 Duration BL1 Start	BL1 Finish	Original Start Duration	Finish	Schedule % Complete	Performance % \ Complete	/ariance - BL1 Start Date	Variance - BL1 Finish Date	Total Float	2018 2019	2020 2021	2022 2023	20
MPR45.1.13.5.1.1 Fabrication - Factory A	720 28-Sep-19	16-Sep-21	845 23-Sep-19 A	24-Jul-22	0%	0%	5	-311	-240			J J JJAS J J JJAS	
MPR45.1.13.5.1.1.1 OSD 01 - RHS Fabrication - MP50 to MP53 (32)	330 28-Sep-19	22-Aug-20	457 23-Sep-19 A	19-Apr-21 A	0%	0%	5	-239	210		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.5.1.1.2 OSD 03 - RHS Fabrication - MP75 to MP81 (77)	450 26-Jan-20	19-Apr-21	376 19-Jan-21 A	24-Jul-22	0%	0%	-359	-461	-356		V		
n MPR45.1.13.5.1.1.3 OSD 04 - RHS Fabrication - MP124 to MP128 (360 22-Sep-20	16-Sep-21	296 25-Mar-20 A	28-Feb-22	0%	0%	181	-165	-94				
MPR45.1.13.5.1.2 Fabrication - Factory B	720 28-Sep-19	16-Sep-21	664 23-Sep-19 A	11-Dec-21 A	0%	0%	5	-85					
MPR45.1.13.5.1.2.1 OSD 01 - LHS Fabrication - MP50 to MP53 (32)	330 28-Sep-19	22-Aug-20	379 23-Sep-19 A	28-Aug-20 A	0%	0%	5	-5 005					
MPR45.1.13.5.1.2.2 OSD 02 - RHS Fabrication - MP69 to MP75 (68, MPR45.1.13.5.1.2.3 OSD 04 - LHS Fabrication - MP124 to MP128 (450 26-Jan-20 360 22-Sep-20	19-Apr-21 16-Sep-21	418 07-Sep-20 A 174 24-Jan-20 A	11-Dec-21 A 26-Feb-21 A	0% 0%	0% 0%	-225 242	-235 203					
MPR45.1.13.5.1.3 Fabrication - Factory C	660 23-Dec-19	12-Oct-21	581 27-Jan-20 A	07-May-22	0%	0%	-35	-207	-138				
MPR45.1.13.5.1.3.1 OSD 02 - LHS Fabrication - MP69 to MP75 (68:	420 23-Dec-19	14-Feb-21	314 27-Jan-20 A	26-Apr-21 A	0%	0%	-35	-70		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
HPR45.1.13.5.1.3.2 OSD 03 - LHS Fabrication - MP75 to MP81 (770	420 19-Aug-20	12-Oct-21	286 15-Jan-21 A	07-May-22	0%	0%	-149	-207	-138				
MPR45.1.13.5.2 OSD - Shipping	536 24-Jun-20	11-Dec-21	692 09-Jul-20 A	22-Sep-22	100%	54.01%	-15	-285	-188			······································	
MPR45.1.13.5.2.1 Shipping - Factory A	510 24-Jun-20	15-Nov-21	527 04-Dec-20 A	22-Sep-22	100%	36.25%	-163	-311	-188		· · · · · · · · · · · · · · · · · · ·		
 MPR45.1.13.5.2.1.1 OSD 01 - RHS Shipping - MP50 to MP53 (320m MPR45.1.13.5.2.1.2 OSD 03 - RHS Shipping - MP75 to MP81 (770m 	120 24-Jun-20 240 22-Oct-20	21-Oct-20 18-Jun-21	88 04-Dec-20 A 270 26-Dec-21	20-Apr-21 A 22-Sep-22	100% 100%	100% 0%	-163 -431	-180 -461	-300		•		
MPR45.1.13.5.2.1.3 OSD 03 - RHS Shipping - MP124 to MP128 (56)	180 20-May-21	15-Nov-21	185 15-Sep-21 A	22-3ep-22 29-Apr-22	100%	49.68%	-431	-401	-42		v		
MPR45.1.13.5.2.2 Shipping - Factory B	510 24-Jun-20	15-Nov-21	482 09-Jul-20 A	24-Feb-22	100%	71.66%	-15	-101	12				
MPR45.1.13.5.2.2.1 OSD 01 - LHS Shipping - MP50 to MP53 (320m	120 24-Jun-20	21-Oct-20	77 09-Jul-20 A	21-Oct-20 A	100%	100%	-15	1					
MPR45.1.13.5.2.2.2 OSD 02 - RHS Shipping - MP69 to MP75 (683m	240 21-Nov-20		118 19-Sep-21 A	24-Feb-22	100%	35.14%	-302	-221	-170				
MPR45.1.13.5.2.2.3 OSD 04 - LHS Shipping - MP124 to MP128 (56(180 20-May-21	15-Nov-21	111 28-Nov-20 A	08-Oct-21 A	100%	100%	173	39					
MPR45.1.13.5.2.3 Shipping - Factory C	450 18-Sep-20	11-Dec-21	554 25-Oct-20 A	24-Jun-22	100%	55.2%	-37	-195	-113		······································		
 MPR45.1.13.5.2.3.1 OSD 02 - LHS Shipping - MP69 to MP75 (683m MPR45.1.13.5.2.3.2 OSD 03 - LHS Shipping - MP75 to MP81 (770m 	210 18-Sep-20 210 16-May-21	15-Apr-21	266 25-Oct-20 A 195 15-Oct-21 A	24-Jul-21 A 24-Jun-22	100% 100%	100% 15.45%	-37 -152	-99 -195	-113		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.5.3 OSD - Custom Clearance and Inland Transport (Last N	482 07-Sep-20	01-Jan-22	722 13-Aug-20 A	22-Oct-22	98.61%	45.65%	25	-294	-197				
MPR45.1.13.5.3.1 OSD 1 - MP50 to MP53 (320m)	75 07-Sep-20	20-Nov-20	269 13-Aug-20 A	19-May-21 A	100%	100%	25	-179			· · · · · · · · · · · · · · · · · · ·		
	75 07-Sep-20	20-Nov-20	78 13-Aug-20 A	27-Oct-20 A	100%	100%	25	25			VV		
🖶 MPR45.1.13.5.3.1.2 OSD 1 - RHS	75 07-Sep-20	20-Nov-20	103 15-Jan-21 A	19-May-21 A	100%	100%	-130	-179			· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.5.3.2 OSD 2 - MP69 to MP75 (683m)	274 17-Nov-20	J	451 07-Nov-20 A	26-Mar-22	100%	50%	10	-221	-113				
HPR45.1.13.5.3.2.1 OSD 2 - LHS MPR45.1.13.5.3.2.2 OSD 2 - RHS	180 17-Nov-20	15-May-21	236 07-Nov-20 A	24-Jul-21 A	100%	100%	10	-69	170				
MPR45.1.13.5.3.3 OSD 2 - KHS MPR45.1.13.5.3.3 OSD 3 - MP75 to MP81 (770m)	210 20-Jan-21 377 21-Dec-20	17-Aug-21 01-Jan-22	90 26-Dec-21 272 10-Nov-21 A	26-Mar-22 22-Oct-22	100% 95.79%	0% 5.52%	-341 -324	-221 -294	-170		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.5.3.3.1 OSD 3 - LHS	171 15-Jul-21	01-Jan-22	182 10-Nov-21 A	24-Jul-22	91.59%	11.04%	-118	-204	-122		· · · · · · · · · · · · · · · · · · ·		
MPR45.1.13.5.3.3.2 OSD 3 - RHS	210 21-Dec-20	18-Jul-21	240 24-Feb-22	22-Oct-22	100%	0%	-431	-461	-300			· · · · · · · · · · · · · · · · · · ·	
HPR45.1.13.5.3.4 OSD 4 - MP124 to MP128 (560m)	141 19-Jul-21	06-Dec-21	319 18-Jan-21 A	20-May-22	100%	64.46%	182	-165	-42				
MPR45.1.13.5.3.4.1 OSD 4 - LHS	141 19-Jul-21	06-Dec-21	195 18-Jan-21 A	16-Jan-22	100%	82.14%	182	-41	51			V	
MPR45.1.13.5.3.4.2 OSD 4 - RHS	141 19-Jul-21	06-Dec-21	175 25-Oct-21 A	20-May-22	100%	46.79%	-98	-165	-42		V		
MPR45.1.13.5.4 OSD - Assembly MPR45.1.13.5.4.1 OSD 1 - MP50 to MP53 (320m)	337 07-Oct-20 80 07-Oct-20	16-Feb-22 11-Jan-21	510 25-Dec-20 A 43 27-Dec-21	02-Jan-23 16-Feb-22	89.37% 100%	13.99% 0%	-66 -294	-268 -257	- 1/5				
MPR45.1.13.5.4.1.1 OSD 1 - LHS	80 07-Oct-20	11-Jan-21	43 27-Dec-21	16-Feb-22	100%	0%	-294	-257	-70			-V	
MPR45.1.13.5.4.1.2 OSD 1 - RHS	80 07-Oct-20	11-Jan-21	43 27-Dec-21	16-Feb-22	100%	0%	-294	-257	-131				
MPR45.1.13.5.4.2 OSD 2 - MP69 to MP75 (683m)	252 17-Dec-20	13-Oct-21	428 25-Dec-20 A	22-Jun-22	100%	15.64%	-7	-212	-142				
HPR45.1.13.5.4.2.1 OSD 2 - LHS	172 17-Dec-20	09-Jul-21	337 25-Dec-20 A	08-Mar-22	100%	31.27%	-7	-201	-51				
MPR45.1.13.5.4.2.2 OSD 2 - RHS	199 19-Feb-21	13-Oct-21	125 25-Jan-22	22-Jun-22	100%	0%	-286	-212	-173			V	
MPR45.1.13.5.4.3 OSD 3 - MP75 to MP81 (770m)	329 20-Jan-21 155 14-Aug-21	16-Feb-22 16-Feb-22	254 05-Mar-22 181 05-Mar-22	02-Jan-23 05-Oct-22	82.85% 65.7%	0% 0%	-343 -169	-268 -194	-220			V	
MPR45.1.13.5.4.3.2 OSD 3 - EHS	196 20-Jan-21	08-Sep-21	236 26-Mar-22	02-Jan-23	65.7% 100%	0%	- 109 -361	- 194 -401	- 140				
MPR45.1.13.5.4.4 OSD 4 - MP124 to MP128 (560m)	142 18-Aug-21	· · ·	345 06-Mar-21 A	18-Jul-22	79.29%	39.2%	140	-139	-36		y		
MPR45.1.13.5.4.4.1 OSD 4 - LHS	142 18-Aug-21	04-Feb-22	241 06-Mar-21 A	17-Mar-22	79.29%	70.89%	140	-34	2		.		
MPR45.1.13.5.4.4.2 OSD 4 - RHS	142 18-Aug-21	04-Feb-22	172 05-Nov-21 A	18-Jul-22	79.29%	7.5%	-65	-139	-36		•••		
MPR45.1.13.5.5 OSD - Erection	608 11-Jun-19	15-Mar-22	346 21-Mar-22	08-May-23	76.27%	0%	-613	-351				· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.5.5.1 OSD 1 - MP50 to MP53 (320m)	157 21-May-20		91 21-Sep-22	07-Jan-23	100%	0%	-557	-491	-322			· · · · · · · · · · · · · · · · · · ·	
MPR45.1.13.5.5.1.1 Availability of Workfronts for OSD 1 MPR45.1.13.5.5.1.2 Span Erection - OSD 1	25 21-May-20 76 28-Nov-20		21 21-Sep-22 70 15-Oct-22	15-Oct-22 07-Jan-23	0% 100%	0% 0%	-557 -497	-553 -491	-2/3			····	
MPR45.1.13.5.5.2 OSD 2 - MP69 to MP75 (683m)	542 11-Jun-19	26-Feb-21 24-Dec-21	164 21-Mar-22	01-Oct-22	100%	0%	-497	-491	-185			•	
MPR45.1.13.5.5.2.1 Availability of Workfronts for OSD 2	290 11-Jun-19	26-Nov-20	90 24-Mar-22	07-Jul-22	0%	0%	-615	-415	-192			••••••••••••••••••••••••••••••••••••••	
	189 10-Feb-21	24-Dec-21	164 21-Mar-22	01-Oct-22	100%	0%	-260	-235	-185			V	
MPR45.1.13.5.5.3 OSD 3 - MP75 to MP81 (770m)	279 07-Jan-21	10-Mar-22	233 01-Aug-22	08-May-23	64.47%	0%	-401	-355	-307			•	
MPR45.1.13.5.5.3.1 Availability of Workfronts for OSD 3	137 07-Jan-21	22-Sep-21	81 01-Aug-22	09-Nov-22	0%	0%	-401	-345	-244			······································	
MPR45.1.13.5.5.3.2 Span Erection - OSD 3	208 02-Apr-21	10-Mar-22	179 06-Oct-22	08-May-23	64.47%	0%	-384	-355	-307			······································	
MPR45.1.13.5.5.4 OSD 4 - MP124 to MP128 (560m) MPR45.1.13.5.5.4.1 Availability of Workfronts for OSD 4	185 05-May-21 63 05-May-21	15-Mar-22 21-Oct-21	187 05-May-22 145 05-May-22	14-Dec-22 26-Oct-22	50% 0%	0% 0%	-228 -228	-230 -310	-138			Y V V	
MPR45.1.13.5.5.4.1 Availability of Workfronts for OSD 4	124 18-Oct-21	15-Mar-22	145 05-May-22 187 05-May-22	26-001-22 14-Dec-22	50%	0%	-228 -167	-310 -230	-138			V	
MPR45.1.13.6 Post Erection Segmental Stitch Concrete (incl. Bearing Ins	644 24-Apr-19	10-Mar-22	971 06-Feb-20 A	29-May-24	0%	0%	-163	-678	-514	,			
MPR45.1.13.6.1 Stitch Concrete - Sewri Interchange	644 24-Apr-19	10-Mar-22	787 18-Dec-20 A	19-Apr-24	0%	0%	-349	-645	-481				
MPR45.1.13.6.2 Stitch Concrete - Intertidal	475 29-Nov-19		895 06-Feb-20 A	28-Feb-24	0%	0%	-58	-666	-660	×			Y
MPR45.1.13.6.3 Stitch Concrete - Marine	563 21-Oct-19	26-Feb-22	764 25-Jun-21 A	29-May-24	0%	0%	-426	-687	-514				





G-IHI	MUMBAI TRAN UPDATED BASELINE		UR LINK PACKAGE MME FOR DECEMI	-		M	MR	1 Da			DECO et ar al-handasah their and partners Tor Mumbai Trans Harbour Link Project
ity ID Activity Name	BL1 Duration BL1 Start	BL1 Finish	Original Start Duration	Finish	Schedule % Complete	Performance % Vari Complete	ance - BL1 Start Date	Variance - BL1 Total Float Finish Date	2018	2019 2020 2021 J A J JAS J J JAS J J JAS J J JAS J J JAS	2022 2023 2024
MPR45.1.13.7 Crash Barrier Works	585 05-Oct-19	11-Mar-22	736 10-Jan-22	07-Jun-24	0%	0%	-534	-685 -522			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.7.1 Crash Barrier - Sewri Interchange	585 05-Oct-19	11-Mar-22	656 03-Mar-22	24-Apr-24	0%	0%	-578	-648 -485			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.7.2 Crash Barrier - Intertidal	470 17-Dec-19	04-Jan-22	627 21-Feb-22	12-Mar-24	0%	0%	-510	-666 -480			•
MPR45.1.13.7.3 Crash Barrier - Marine	541 26-Nov-19	09-Mar-22	736 10-Jan-22	07-Jun-24	0%	0%	-492	-687 -526			V
MPR45.1.13.7.4 Crash Barrier - Orthotropic Steel Deck	291 23-Dec-20	10-Mar-22	292 13-May-22	27-Apr-23	0%	0%	-345	-347 -188			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.8 Bridge Deck (Superstructure) Water Proofing	581 15-Oct-19	16-Mar-22	721 02-Feb-22	12-Jun-24	0%	0%	-545	-685 -526			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.8.1 Water Proofing - Sewri Interchange	579 15-Oct-19	14-Mar-22	648 12-Mar-22	24-Apr-24	0%	0%	-578	-646 -485			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.8.2 Water Proofing - Intertidal	465 28-Dec-19	10-Jan-22	622 05-Mar-22	18-Mar-24	0%	0%	-510	-666 -453			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.8.3 Water Proofing - Marine	526 18-Dec-19	14-Mar-22	721 02-Feb-22	12-Jun-24	0%	0%	-492	-687 -526			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.8.4 Water Proofing - Orthotropic Steel Deck	281 11-Jan-21	16-Mar-22	351 20-May-22	13-Jul-23	0%	0%	-336	-407 -248			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.9 Stone Mastic Asphalt Pavement	74 23-Dec-21	22-Mar-22	376 28-Mar-23	19-Jun-24	2.26%	0%	-385	-686 -588			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.9.1 Sewri Interchange	70 27-Dec-21	21-Mar-22	131 25-Nov-23	30-Apr-24	0%	0%	-584	-645 -546			▼
MPR45.1.13.9.2 Main Bridge	74 23-Dec-21	22-Mar-22	376 28-Mar-23	19-Jun-24	3.05%	0%	-385	-686 -646			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.10 Bridge Anclilaries and Misc. Works	575 31-Jan-20	22-Jun-22	729 07-Apr-22	24-Aug-24	0%	0%	-510	-663 -588			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.10.1 Bridge Ancillaries	575 31-Jan-20	22-Jun-22	729 07-Apr-22	24-Aug-24	0%	0%	-510	-663 -588			· · · · · · · · · · · · · · · · · · ·
MPR45.1.13.10.1.1 Noise Barrier, View Barrier and Safety Fence	552 31-Jan-20	26-May-22	724 07-Apr-22	19-Aug-24	0%	0%	-510	-681 -583			unininini),
MPR45.1.13.10.1.2 Traffic Signages and Marking	84 17-Mar-22	22-Jun-22	88 13-May-24	24-Aug-24	0%	0%	-659	-663 -588			· · · · · · · · · · · · · · · · · · ·
MPR45.1.15 Handing Over	148 31-Mar-22	22-Sep-22	159 27-May-24	04-Dec-24	0%	0%	-659	-670 -671			· · · · · · · · · · · · · · · · · · ·
MPR45.1.15.1 Testing and Handing Over	120 31-Mar-22	18-Aug-22	131 27-May-24	31-Oct-24	0%	0%	-659	-670 -671			
MPR45.1.15.2 Final Handing Over	28 19-Aug-22	22-Sep-22	28 31-Oct-24	04-Dec-24	0%	0%	-670	-670 -671			
MPR45.1.14 Invoice Schedule (Shows the Invoice items which are not co	ve 1062 23-Mar-18	22-Sep-22	1732 23-Mar-18 A	04-Dec-24	96.7%	71.13%	0	-670 -671			

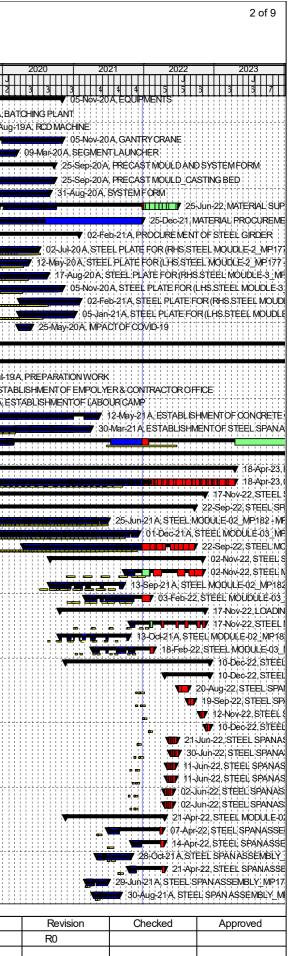
Actual Level of Effort Actual Work Critical Remaining Work summary	Page 4 of 4	Please note that
Primary Baseline Remaining Work Milestone		schedule submi

Attachment 7- Package-2's Construction Programme Updated as on 25th December 2021

	(CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHA UNDER IDENTIFICATION NO MMRDA/ENG/000753	NGE	A	ANNEXURE-5 (CONSTRUCT	ION UPDATE (PACKAGE-	D PROGRAMME 2)	_ABSTRACT						
Acti	ivity ID Activity Name	Original Duration	BL Project Star	t BL Project Finis	sh Actual Start	Actual Finish		Performance 2018 % Complete		2020 	2021			20
	MTHL-PKG2-DETAILED WORK PROGRAMME 25122021_APPROVED_MPR.45	3250	17-Nov-17	21-Sep-24	17-Nov-17		96.28%	63.19%	4					-
	PROJECT PRE-COMMENCEMENT ACTIVITY		17-Nov-17	22-Mar-18	17-Nov-17	16-Mar-18	0%	0%	KAREKRAGTA	Gerato ral) Mensic Realized to	άΩπib/h τγ			
	PRE-COMMENCEMENT ACTIVITY	55	15-Dec-17	07-Feb-18	15-Dec-17	20-Mar-18	0%	0% 🔫 20-Ma	-18A, PRE-COMME	NCEMENTACTIVITY				
	JV FORMATION AND REGISTRATION	55	15-Dec-17	07-Feb-18	15-Dec-17	20-Mar-18	0%	0% 🛒 20-Ma	-18A, JV FORMATI	ONAND REGISTRATIC	NN			
	PROJECT EVENT MILESTONE	2575	23-Mar-18	21-Mar-23	23-Mar-18		0%	0%						
	PROJECT KEY MILESTONE	2395	23-Mar-18	22-Sep-22	23-Mar-18		0%	0%		- ± - ⊑ ± - ± - ± - ± - ± - ± - ± - ± -				
_	INTERFACE MILESTONE_ERG19		19-Apr-18	21-Mar-23	03-Apr-18		0%	0%	IC COMBOOLS DIRO					
_	PHYSICAL PROGRESS AND INTERFACE DATE_ADD2-ATTACHME NT 25 KEY DATE_ADDENDUM2_NO.25_Obtain the Certificate of No Objection		18-Sep-18	22-Jun-22 22-Jun-22	31-Aug-18 31-Aug-18		0%	0%						
_	INTERFACE DATE_ADDENDUM2_NO.25		18-Sep-18 17-Dec-18	22-Jun-22 20-Sep-21	31-Aug-18		0%	0%				Designalitier	BICEMBACE	Fie
	CONSTRUCTION KEY MILESTONES	1259	03-Sep-18	06-Jul-21	25-Oct-18		0%	0%				🗸 05-Apr		
	CASTING YARD-OFFICE & CAMP DEVELOPMENT		04-Sep-18	25-Apr-19	25-Oct-18	20-Jan-20	0%	0%				THE & CAMP DE		
_	STEEL BRIDGE ASSEMBLY YARD DEVELOPMENT PERMANENT WORKS		02-Nov-18 03-Sep-18	06-Nov-19 06-Jul-21	09-Mar-20 08-Dec-18	01-Oct-20	0%	<u>0%</u> 0%			Bulgu/Debsetj/R		UNDESCIMBLY IN IN ISTAN	<i>N</i> AAIS
	MANAGEMENT		20-Jan-18	18-Aug-18	12-Jan-18	22-Aug-19	0%	0%		22-Aug-19A, MANAG	EMENT		Ύ,	
	SITE ORGANISATION	35	20-Jan-18	23-Feb-18	07-Mar-18	07-Mar-18	0%	0% 🗳 07-Mar	18A, SITE ORGAN	Iŝation				
	DEVELOPMENT OF MANAGEMENT SYSTEM	613	20-Jan-18	27-May-18	20-Jan-18	22-Aug-19	0%	0%		22-Aug-19A, DEVEL				
	COUMMUNICATION / DOCUMENT CONTROL SYSTEM		20-Jan-18	10-May-18	20-Jan-18	24-Oct-18	0%	0%	Detroit berege		GURASISEE COLURA	htsysDeMing C	ontrol Proce	ədt
	QUALITY ASSURANCE AND MANAGEMENT SYSTEM HEALTH, SAFETY AND ENVIRONMENTAL MANAGEMENT SYSTEM		23-Mar-18 23-Mar-18	10-May-18 10-May-18	23-Mar-18 23-Mar-18	24-Oct-18 22-Aug-19	0%	0%	CLANSE HICAGE	ileanighterikropjaetiita Dodlahddrigeciititatiit	n se	ang	MANMANGABIN	AEGAS
	INTERFACE MANAGEMENT SYSTEM		23-Mar-18	10-May-18	23-Mar-18	22-Aug-19 24-Oct-18	0%	0%	对 Ødiaiot-the Açen	ITERIGA GENDADIAGEDA	EcNIP (S) (SCIIE Main face	ManagementSy	/stem	
	RISK MANAGEMENT PLAN		23-Mar-18	27-May-18	23-Mar-18	24-Oct-18	0%	0%		Beandariat Andre Andread			ľ	
			23-Mar-18	24-May-18	23-Mar-18	21-Sep-18 21-Sep-18	0%			VELOPMENT OF WOR				
	CONTRACTOR'S WORK PROGRAMME OTHER CONTRACTUAL SUBMITTALS		23-Mar-18 24-Mar-18	24-May-18 20-Apr-18	23-Mar-18 24-Mar-18	21-Sep-18 23-Apr-18	0%			NTRACTUAL SUBMIT				
-	PERMIT & APPROVAL		20-Jan-18	18-Aug-18	12-Jan-18	03-Aug-19	0%	0%		03-Aug-19A, PERMIT				
	SURVEYING & GEOTECHNICAL INVESTIGATION	35	20-Jan-18	23-Feb-18	12-Jan-18	09-Feb-18	0%			GEOTECHNICAL INVE	STIGATION	1 1 <td></td> <td>: : :</td>		: : :
			20-Jan-18 06-Apr-18	30-Mar-18 18-Aug-18	25-Jan-18 06-Apr-18	23-Apr-18 28-Nov-18	<u> </u>		pr-18A, CUTTING 0	F MANGROVES SETTING UP BATCHIN	JG PLANT			: : :
	SETTING UP BATCHING PLANT PC YARD & CAMP		06-Apr-18 04-May-18	01-Jun-18	21-Mar-18	01-Oct-18	0%		🕇 01-Oct-18A, PC					
	CONNECTION FOR ELECTRICITY & WATER	63	18-May-18	20-Jul-18	06-Apr-18	03-Aug-19	0%	0%		03-Aug-19A, CONNEC	TIONFORELECT	RICITY & WATER		- 1 #
_	CUTTING OF TREES IMPORT PERMITS/LICENCES FOR EQUIPMENTS & GOODS		23-Mar-18	26-Apr-18	10-May-18 15-May-18	02-Aug-18	0% 0%		02-Aug-18A, CUTT May-18A MPORT	ING OF TREES PERMITS/LICENCES F		3& GOODS		
	NOC FOR PLANT & FACLITIES TO BE USED AT SITE		23-Mar-18 23-Mar-18	31-May-18 31-May-18	16-Aug-18	31-May-18 28-Nov-18	0%			NOCFORPLANT & FA				
	TEMPORARY ACCESS ROAD FOR MAIN BRIDGE & INTERCHANGE	58	23-Mar-18	19-May-18	23-Mar-18	28-Jul-18	0%	0%	28-Jul-18A, TEMPC	DRARYACCESS ROAD			ĢE	
	DESIGN	1321 :	20-Jan-18	04-Sep-19	01-Jan-18	02-Feb-21	100%	100%	8 8	8 8 <td>02-Feb-21/</td> <td></td> <td></td> <td></td>	02-Feb-21/			
_	EARLY STAGE DESIGN WORK / INFORMATION COLLECTION		20-Jan-18	17-Jul-18	01-Jan-18	12-Nov-19	100%			TT 12-Nov-19A, EAF		NWORK/INFOR	MATIONICC	JLI
	INDEPENDENT DESIGN CHECKER APPROVAL TOPOGRAPHIC SURVEY		20-Jan-18 20-Jan-18	23-Feb-18 16-May-18	20-Jan-18 01-Jan-18	13-Apr-18 20-Apr-18	0%	0% - 4 20-A	pr-18A, TOPOGRAF	PHICSURVEY	ΛAFFROVAL			
	BATHYMETRIC SURVEY		20-Jan-18	04-Apr-18	25-Jan-18	20-Mar-18	0%	0% 7 20-Ma	-18A, BATHYMETR	RICISURVEY	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	ADDITIONAL TIME FOR ONGC & BPCL PHYSCIAL VERIFICATION	309			21-Mar-18	05-Aug-19	0%	0%		05-Aug-19A, ADDITIO			SCIALVERI	IFIC
	GEOTECHNICAL INVESTIGATION ADDITIONAL WORKS FOR DESIGN INITIATION OF STEEL MODULE 1	548 2 63	20-Jan-18	17-Jul-18	12-Jan-18 26-Jun-19	25-Jun-19 12-Nov-19	100% 0%	100%		5-Jun-19A, GEOTECH 12-Nov-19A, ADI			TIATION OF	-s
	TEMPORARY WORK		22-Jan-18	01-Nov-18	20-Jan-18	20-Aug-20	100%	100%		<u></u>)+Aug+20:A, TEMP(
	PROJECT OFFICE LAYOUT		04-May-18	02-Jun-18	04-May-18	17-Jul-18	0%			GT OFFICE LAYOUT				
_	CASTING YARD LAYOUT		22-Jan-18 26-Feb-18	04-Apr-18 31-May-18	20-Jan-18 24-Feb-18	09-Oct-18 30-Aug-18	0%		09-Oct-18A, CA 30-Aug-18A, TEM	ŚTING YARD LAYOUT IPORARY BRIDGE				
	CASTING YARD STRUCTURE		26-Feb-18 10-May-18	10-Aug-18	24-Feb-18 20-Mar-18	20-Nov-18	0%			CASTING YARD STRU	CTURE			
	STEEL BRIDGE FABRICATION YARD	365	20-Jul-18	01-Nov-18	11-Nov-19	20-Aug-20	0%	0%)-Aug-20A, STEEL	BRIDGE FABRIC	ATIONYAR	۶D
	CONCRETE MIX DESIGN		23-Mar-18	31-Aug-18	12-May-18	15-Nov-18	0%		■▼ 15-Nov-18A,	CONCRETE MIX DESIO		A, JFE DESIGN PR		
			01-May-18	04-Sep-19	09-Apr-18	02-Feb-21	100% 100%	100%			UZ-FED-21/	111111111111	Rograimme 5-Jun-22, PF	1.1.1
_	PROCUREMENT, MANUFACTURING AND LOGISTICS		20-Jan-18	23-Aug-20	22-Dec-17	04.0		100%	r+18A, SURVEY&I	WESTIGATION	1 1	▼ 20	. او ڪري او مرجي . او او ڪري او مرجي .	
_	SURVEY & INVESTIGATION TOPOGRAPHIC SURVEY AGENT		20-Jan-18 20-Jan-18	02-Apr-18 09-Feb-18	22-Dec-17 01-Jan-18	04-Apr-18 22-Jan-18	0%	· · · · · · · · · · · · · · · · · · ·	A, TOPOGRAPHIC					
	BATHYMETRIC SURVEY / UTILITY SURVEY AGENT		20-Jan-18	09-Feb-18	01-Jan-18	23-Jan-18	0%	0% 7 23-Jan-18	A, BATHYMETRIC	SURVEY/UTILITYSUR	VEYAGENT			
	GEOTECHNICAL INVESTIGATION AGENCY	48	22-Jan-18	02-Apr-18	22-Dec-17	04-Apr-18	0%	0%	r+18A, GEOTECHN	ICAL INVESTIGATION				
	TEMPORARY WORK		20-Jan-18	20-Oct-18	20-Jan-18	11-May-20	0%	0%		11-May	-20 A, IEMPORAF		22 MAININ/	0
	MAIN WORK_SUBCONTRACT WORK	1237	23-Mar-18	20-Jul-19	23-Mar-18		0%	<mark>0%</mark> [] 				• • • • • • • • • • • • • • • • • • •	ς, ιγυ ς τιι Ν. Υ Υ Ο	<u>ې</u> ې
	Project Baseline Bar Critical Remaining Work Summary	MPLOYER:				C	ONTRACTOR:		Dat	te Rev	rision	Checked	Арр	prc
			AN REGION			-			25-Dec-21	R0				

Project Baseline Bar	EMPLOYER:	CONTRACTOR:	Date
Actual Work Milestone	MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY	DAEWOO - TPL JV	25-Dec-21
	(MMRDA)	DAEWOO-IILJV	
Remaining Work % Complete			

IΔ	ctivity ID Activity Name	Original RI	L Project Start	BL Project Finish	Actual Start	Actual Finish	Schedule %	Performance	2018	20
		Duration	2110,000,000,000				Complete	% Complete	J J J 3 9 1 1	1
	EQUIPMENTS	1097 23	3-Mar-18	12-Sep-19	23-Mar-18	05-Nov-20	100%	100%	V ⁴ .14.11	
	BATCHING PLANT		3-Mar-18	31-Jul-18	23-Mar-18	23-Mar-19	0%	0%		23
	CD MACHINE GANTRY CRANE	514 23 1097 23	3-Mar-18 3-Mar-18	11-Nov-18 08-Feb-19	23-Mar-18 23-Mar-18	24-Aug-19 05-Nov-20	0%	0% 100%		
	SEGMENT LAUNCHER	770 24		12-Sep-19	24-Jul-18	09-Mar-20	0%	0%		
	PRECAST MOULD AND SYSTEM FORM		7-Aug-18	24-Mar-19	04-Sep-18	25-Sep-20	100%	100%		
	PRECAST MOULD_CASTING BED)-Aug-18	24-Mar-19	03-Jun-19	25-Sep-20	100%	100%		\
	SYSTEMFORM MATERIAL SUPPLIERS	1484 02	7-Aug-18 2-Jun-18	04-Mar-19 15-Oct-19	04-Sep-18 20-Apr-18	31-Aug-20	0%	0% 0%		
	MATERIAL PROCUREMENT	0			08-Aug-18		0%	0%		
	PROCUREMENT OF STEEL GIRDER	673 07	7-May-19	23-Aug-20	01-Aug-19	02-Feb-21	0%	0%		· · · · · · ·
	STEEL PLATE FOR (RHS.STEEL MOUDLE-2_MP177 - MP182)		1-Jun-19	13-Jul-20	08-Aug-19	02-Jul-20	0%	0%		
	STEEL PLATE FOR (LHS.STEEL MOUDLE-2_MP177 - MP182) STEEL PLATE FOR (RHS.STEEL MOUDLE-3_MP183 - MP186)		7-May-19	16-Apr-20	01-Aug-19	12-May-20	0%	0%		
	STEEL PLATE FOR (KHS.S TEEL MOUDLE-3_MP183 - MP186) STEEL PLATE FOR (LHS.STEEL MOUDLE-3_MP183 - MP186)	315 01	1-Jul-19 4-Jun-19	10-May-20 14-Apr-20	01-Nov-19 01-Oct-19	17-Aug-20 05-Nov-20	0% 0%	0% 0%		
	STEEL PLATE FOR (RHS.STEEL MOUDLE-1_MP176 - MP171))-Jul-19	23-Aug-20	01-Apr-20	02-Feb-21	0%	0%		
	STEEL PLATE FOR (LHS.STEEL MOUDLE-1_MP176 - MP171)		2-Jul-19	26-Jul-20	29-Mar-20	05-Jan-21	0%	0%		
	IMPACT OF COVID-19	51			22-Mar-20	25-May-20	0%	0%		
	CONSTRUCTION	2264 02	2-Apr-18	21-Jun-22	02-Apr-18		96.79%	63.61%		
	TEMPORARYWORK	2207 02	<u> </u>	21-Jun-22	02-Apr-18		99%	<mark>97.95%</mark>	Y	
	PREPARATION WORK		2-Apr-18	16-Jan-19	02-Apr-18	25-Jul-19	0%	0%		/ 18-Ja
	ESTABLISHMENT OF EMPOLYER & CONTRACTOR OFFICE ESTABLISHMENT OF LABOUR CAMP)-Jun-18)-Jun-18	27-Nov-18 05-Apr-19	27-Jun-18 03-Jul-18	18-Jan-19 04-Apr-19	100% 0%	<u>100%</u> 0%		18-Ja
	ESTABLISHMENT OF EABOOR GAWP ESTABLISHMENT OF CONCRETE CASTING YARD		4-May-18	25-Apr-19	14-Jun-18	12-May-21	100%	100%		
	ESTABLISHMENT OF STEEL SPAN ASSEMBLY YARD	584 02	2-Nov-18	06-Mar-20	01-Nov-19	30-Mar-21	0%	0%		> + + + +
	TEMPORARY BRIDGE	2155 20	,	21-Jun-22	27-Jul-18		98.28%	96.49%	-	
	PERMANENT WORK PRE-FABRICATION AND ASSEMBLY	1159 18	3-Sep-18	24-May-22 19-Feb-22	08-Dec-18 16-Oct-19		96.5% 97.56%	59.12% 70.84%		
	CONCRETE PRE-FABRICATIONAT THE CASTING YARD		3-Apr-19	15-Sep-21	06-Nov-19		100%	43.14%		
	STEEL SPAN FABRICATION AT THE SUPPLIER'S WORK SHOP INCLUDING LOGISTIC	1007 02	2-Jun-19	24-Jan-22	16-Oct-19		97.55%	78.91%		
	STEEL SPAN FABRICATIONAT THE SUPPLIER'S WORK SHOP		2-Jun-19	29-Nov-21	16-Oct-19	05 hm 04	100%	100%		
	STEEL MODULE-02_MP182 - MP177 (FABRICATION AT JFE) STEEL MODULE-03 MP186 - MP183 (FABRICATION AT JFE)		2-Jun-19 9-Jun-19	29-Jun-21 25-Sep-21	24-Oct-19 16-Oct-19	25-Jun-21 01-Dec-21	100% 100%	100%		
	STEEL MODULE-01_MP176 - MP171 (FABRICATION AT JFE)		6-Jul-19	29-Nov-21	16-Apr-20		100%	100%		
	STEEL SPAN MATERIAL OCEAN FREIGHT TO THE MUMBAI PORT INCLUDING CUSTOM CLEARANCE	780 10		09-Jan-22	01-Sep-20		98.71%	70%		
	STEEL MODULE-01_MP176 - MP171 (OCEAN FREIGHT) STEEL MODULE-02_MP182 - MP177 (OCEAN FREIGHT)	374 23 417 10	3-Nov-20	09-Jan-22 09-Aug-21	28-Sep-21 01-Sep-20	13-Sep-21	96.13% 100%	20% 100%		
	STEEL MODULE-02_MP182 - MP183 (OCEAN FREIGHT) STEEL MOUDULE-03_MP186 - MP183 (OCEAN FREIGHT)		9-Nov-20	05-Nov-21	01-Sep-20 06-Mar-21	10-0ep-21	100%	87.5%		
	LOADING AND DELIVERY TO THE CONTRACTOR'S ASSEMBLY YARD	717 20)-Aug-20	24-Jan-22	21-Oct-20		96.03%	70%		
	STEEL MODULE-01_MP176 - MP171 (DELIVERY TO ASSEMBLY YARD)		2-Jan-21	24-Jan-22	26-Oct-21	40.0.104	88.08%	20%		
	STEEL MODULE-02_MP182 - MP177 (DELIVERY TO ASSEMBLY YARD) STEEL MODULE-03_MP186 - MP183 (DELIVERY TO ASSEMBLY YARD))-Aug-20 9-Jan-21	19-Aug-21 20-Nov-21	21-Oct-20 14-Apr-21	13-Oct-21	100% 100%	100% 87.5%		
	STEEL GIRDERASSEMBLY AT THE CONTRACTOR'S ASSEMBLY YARD		5-Sep-20	17-Feb-22	23-Nov-20		86.57%	30%		
	STEEL MODULE-01_MP176 - MP171 (ASSEMBLY WORKS)		3-Oct-21	17-Feb-22			59.72%	0%		
	STEEL SPAN ASSEMBLY_MP171 - MP172_G1 STEEL SPAN ASSEMBLY_MP171 - MP172_G2)-Nov-21)-Nov-21	06-Jan-22 08-Jan-22			38.89% 0%	0% 0%		
	STEEL SPANASSEMBLY_MP172-MP173_G1		3-Dec-21	19-Jan-22			0%	0%		
	STEEL SPAN ASSEMBLY_MP172 - MP173_G2	20 25	5-Jan-22	17-Feb-22			0%	0%		
	STEEL SPAN ASSEMBLY_MP173 - MP174_G1		9-Nov-21	21-Dec-21			100%	0%		
	STEEL SPAN ASSEMBLY_MP173 - MP174_G2		I-Nov-21 3-Oct-21	30-Dec-21 11-Dec-21			58.33% 100%	0% 0%		
-	STEEL SPAN ASSEMBLY MP174 - MP175 G1	00 20	2-Nov-21	11-Dec-21			100%	0%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G1 STEEL SPAN ASSEMBLY_MP174 - MP175_G2	36 02	0 0 -+ 21	02-Dec-21			100%	0%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1	36 13					100% 100%	0%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2	36 13 36 23	3-Oct-21	02-Dec-21	22 May 20			750/		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2 STEEL MODULE-02_MP182 - MP177 (ASSEMBLY WORKS)	36 13 36 23 310 05		18-Sep-21	23-Nov-20 03-Jul-21		100%	75% 0%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2	36 13 36 23 310 05 141 03	3-Oct-21 5-Sep-20							
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2 STEEL MODULE-02_MP182 - MP177 (ASSEMBLY WORKS) STEEL SPAN ASSEMBLY_MP176 - MP177_G1 STEEL SPAN ASSEMBLY_MP176 - MP177_G2 STEEL SPAN ASSEMBLY_MP177 - MP178_G1	36 13 36 23 310 05 141 03 43 25 68 26	3-Oct-21 5-Sep-20 3-May-21 5-Jun-21 3-Jun-21	18-Sep-21 26-May-21 28-Jul-21 09-Aug-21	03-Jul-21 02-Nov-21 05-May-21	28-Oct-21	100% 100% 100%	0% 0% 100%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2 STEEL MODULE-02_MP182 - MP177 (ASSEMBLY WORKS) STEEL SPAN ASSEMBLY_MP176 - MP177_G1 STEEL SPAN ASSEMBLY_MP176 - MP177_G2 STEEL SPAN ASSEMBLY_MP177 - MP178_G1 STEEL SPAN ASSEMBLY_MP177 - MP178_G2	36 13 36 23 310 05 141 03 43 25 68 26 49 20	3-Oct-21 5-Sep-20 3-May-21 5-Jun-21 3-Jun-21)-Aug-21	18-Sep-21 26-May-21 28-Jul-21 09-Aug-21 18-Sep-21	03-Jul-21 02-Nov-21 05-May-21 18-Oct-21		100% 100% 100% 100%	0% 0% 100% 0%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2 STEEL MODULE-02_MP182 - MP177 (ASSEMBLY WORKS) STEEL SPAN ASSEMBLY_MP176 - MP177_G1 STEEL SPAN ASSEMBLY_MP176 - MP177_G2 STEEL SPAN ASSEMBLY_MP177 - MP178_G1 STEEL SPAN ASSEMBLY_MP177 - MP178_G2 STEEL SPAN ASSEMBLY_MP178 - MP179_G1	36 13 36 23 310 05 141 03 43 25 68 26 49 20 71 05	3-Oct-21 5-Sep-20 3-May-21 5-Jun-21 3-Jun-21 0-Aug-21 5-Mar-21	18-Sep-21 26-May-21 28-Jul-21 09-Aug-21 18-Sep-21 27-Mar-21	03-Jul-21 02-Nov-21 05-May-21 18-Oct-21 09-Mar-21	29-Jun-21	100% 100% 100%	0% 0% 100% 0% 100%		
	STEEL SPAN ASSEMBLY_MP174 - MP175_G2 STEEL SPAN ASSEMBLY_MP175 - MP176_G1 STEEL SPAN ASSEMBLY_MP175 - MP176_G2 STEEL MODULE-02_MP182 - MP177 (ASSEMBLY WORKS) STEEL SPAN ASSEMBLY_MP176 - MP177_G1 STEEL SPAN ASSEMBLY_MP176 - MP177_G2 STEEL SPAN ASSEMBLY_MP177 - MP178_G1 STEEL SPAN ASSEMBLY_MP177 - MP178_G2	36 13 36 23 310 05 141 03 43 25 68 26 49 20 71 05	3-Oct-21 5-Sep-20 3-May-21 5-Jun-21 3-Jun-21)-Aug-21	18-Sep-21 26-May-21 28-Jul-21 09-Aug-21 18-Sep-21	03-Jul-21 02-Nov-21 05-May-21 18-Oct-21		100% 100% 100% 100% 100%	0% 0% 100% 0%		



]	MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION (CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753		Al	ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)							
#	Activit	y ID Activity Name	Original Duration	BL Project Start	BL Project Finish	Actual Start	Actual Finish	Schedule % Complete	Performance %Complete	2018	ШĻ
120		STEEL SPAN ASSEMBLY_MP179 - MP180_G1	77	02-Jan-21	25-Jan-21	19-Jan-21	28-May-21	100%	100%		
121		STEEL SPAN ASSEMBLY_MP179-MP180_G2	184	25-Feb-21	20-Mar-21	08-Feb-21	27-Oct-21	100%	100%		
122		STEEL SPAN ASSEMBLY_MP180-MP181_G1	73	02-Nov-20	25-Nov-20	15-Jan-21	03-May-21	100%	100%		
123		STEEL SPAN ASSEMBLY_MP180-MP181_G2	55	19-Dec-20	11-Jan-21	28-Dec-20	04-Jun-21	100%	100%		
124		STEEL SPAN ASSEMBLY_MP181 - MP182_G1	72	05-Sep-20	29-Sep-20	23-Nov-20	23-Mar-21	100%	100%		
125		STEEL SPAN ASSEMBLY_MP181 - MP182_G2	78	22-Oct-20	14-Nov-20	08-Dec-20	31-Mar-21	100%	100%		
126		STEEL MODULE-03_MP186 - MP183 (ASSEMBLY WORKS)	197	06-Jul-21	23-Nov-21	25-May-21		100%	0%		
127		STEEL SPAN ASSEMBLY_MP182-MP183_G1	38	09-Aug-21	18-Oct-21			100%	0%		
128		STEEL SPAN ASSEMBLY_MP182-MP183_G2	36	24-Aug-21	28-Oct-21			100%	0%		
129		STEEL SPAN ASSEMBLY_MP183 - MP184_G1	36	04-Oct-21	28-Oct-21			100%	0%		
130		STEEL SPAN ASSEMBLY_MP183 - MP184_G2	36	01-Nov-21	23-Nov-21			100%	0%		
131		STEEL SPAN ASSEMBLY_MP184 - MP185_G1	161	24-Jul-21	08-Oct-21	10-Jul-21		100%	0%		
132		STEEL SPAN ASSEMBLY_MP184 - MP185_G2	36	05-Aug-21	08-Oct-21			100%	0%		
133		STEEL SPAN ASSEMBLY_MP185-MP186_G1	165	06-Jul-21	16-Aug-21	25-May-21		100%	0%		
134		STEEL SPAN ASSEMBLY_MP185-MP186_G2	163	10-Jul-21	28-Sep-21	29-May-21		100%	0%		
135	_	STEEL SPAN LOADING AND TRANSPORTING TO THE ERECTION AREA	169	30-Sep-20	19-Feb-22			83.33%	0%		
136		STEEL MODULE-01_MP176 - MP171 (LOAD OUT AND TRANSPORT)		03-Dec-21	19-Feb-22			50%	0%		
137		STEEL MODULE-02_MP182 - MP177 (LOAD OUT AND TRANSPORT)	26	30-Sep-20	21-Sep-21			100%	0%		
138		STEEL MODULE-03_MP186 - MP183 (LOAD OUT AND TRANSPORT)		01-Sep-21	25-Nov-21			100%	0%		
139		MAIN BRIDGE		03-Sep-18	24-May-22	08-Dec-18		94.67%	50.46%		
140	_	MAIN BRIDGE FOUNDATION		03-Sep-18	23-Mar-21	08-Dec-18		100%	79.79%		
141		MAIN BRIDGE PILE FOUNDATION		03-Sep-18	23-Jan-21	08-Dec-18		100%	96.84%		
142		PILE LOAD TEST		03-Sep-18	19-Nov-18	08-Dec-18	11-Nov-19	100%	100%		
143		MAIN BRIDGE PILE FOUNDATION_LAND 17+414~18+187 FROM MP250 TO MP266		30-Nov-18	15-May-19	17-Jan-19	11-Jun-20	100%	100%		
144		MODULE-21_MP261 - MP257		30-Nov-18	05-Mar-19	23-Aug-19	06-Mar-20	100%	100%		
145		MODULE-22_MP266 - MP262		06-Mar-19	15-May-19	17-Jan-19	28-Jan-20	100%	100%		
146		MODULE-20_MP256 - MP255		05-Dec-18	10-Jan-19	25-Sep-19	19-Mar-20	100%	100%		-
147		MODULE-19_MP254 - MP250		11-Jan-19	16-Apr-19	05-Oct-19	11-Jun-20	100%	100%		-
148	_	MAIN BRIDGE PILE FOUNDATION_CRZ15+890~17+414 FROM MP226 TO MP250		20-Dec-18	27-Nov-19	12-Jun-19	21-Feb-20	100%	100%		
149		MODULE-14_MP231 - MP227		17-Aug-19	27-Nov-19	08-Nov-19	21-Feb-20	100%	100%		
150	_	MODULE-15_MP236 - MP232		08-Mar-19	26-Aug-19	08-Aug-19	25-Dec-19	100%	100%		
151	_	MODULE-16_MP240 - MP237		20-Dec-18	08-Mar-19	12-Jun-19	11-Nov-19	100%	100%		
152		MODULE-17_MP245 - MP241		20-Mar-19	17-Jun-19	09-Oct-19	04-Jan-20	100%	100%		
153				21-Jan-19	26-Mar-19	15-Oct-19	09-Feb-20	100%	100%		•
154		MAIN BRIDGE PILE FOUNDATION_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225		27-Feb-19	06-Jun-20	15-Oct-19	26-Aug-20	100%	100%		
155		MODULE-10_MP211 - MP207		12-Mar-20	06-Jun-20	01-Nov-19	18-Feb-20	100%	100%		
156		MODULE-11_MP216 - MP212		27-Feb-19	03-Apr-20	15-Oct-19	24-Feb-20	100%	100%		
157		MODULE-12_MP221 - MP217		06-Apr-19	30-Oct-19	25-Feb-20	26-Aug-20	100%	100%		
158		MODULE-13_MP226 - MP222	313	30-Oct-19	06-Feb-20	24-Jan-20	16-Jun-20	100%	100%		

MODULE-13_MP226 - MP222 313 30-Oct-19 06-Feb-20 24-Jan-20 16-Jun-20 100% 100% MAIN BRIDGE PILE FOUNDATION_MARINE 13+610~14+800 FROM MP187 TO MP205 99.37% 531 12-Dec-19 01-Oct-19 100% 28-Nov-20 13-Oct-20 MODULE-09_MP206 - MP202 340 12-Dec-19 06-Mar-20 01-Oct-19 100% 100% MODULE-08_MP201 - MP197 262 22-Feb-20 19-Feb-20 100% 19-May-20 25-Dec-20 100% 97.74% MODULE-07_MP196 - MP192 146 02-May-20 08-Sep-20 12-Oct-20 100% MODULE-06_MP191 - MP187 82 21-Aug-20 28-Nov-20 31-Aug-20 10-Dec-20 100% 100% MAIN BRIDGE PILE FOUNDATION_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186 652 27-Nov-19 17-Mar-20 100% 82.81% 23-Jan-21 STEEL MODULE-03_MP186 - MP183 80 30-May-20 21-Nov-20 08-Oct-20 15-Feb-21 100% 100% STEEL MODULE-02_MP182 - MP177 336 27-Nov-19 100% 10-Sep-20 17-Mar-20 25-Jan-21 100% STEEL MODULE-01_MP176 - MP171 164 30-Jul-20 23-Jan-21 19-Apr-21 100% 54.15% MAIN BRIDGE PILE FOUNDATION_MARINE 10+380~11+880 FROM MP146 TO MP170 723 24-Nov-18 19-Feb-19 21-Dec-21 100% 100% 28-Dec-19 MODULE-05_MP171 - MP167 193 19-Jun-19 16-Oct-19 24-Feb-21 21-Dec-21 100% 100% MODULE-04_MP166 - MP162 100% 507 24-Nov-18 18-Feb-19 19-Feb-19 20-Feb-21 100% 100% MODULE-03_MP161 - MP157 393 22-Jan-19 18-Apr-19 03-Apr-19 25-Mar-21 100% MODULE-02_MP156 - MP152 94 16-Apr-19 27-Jul-19 21-Dec-20 27-Mar-21 100% 100% 100% MODULE-01 MP151 - MP146 107 04-Oct-19 28-Dec-19 23-Dec-20 03-Apr-21 100% MAIN BRIDGE PILE CAP INSTALLATION 1101 22-Dec-18 23-Mar-21 01-May-19 100% 61.99% MAIN BRIDGE PILE CAP BOTTOM SLAB INSTALLATION 1007 22-Dec-18 17-Feb-21 19-Aug-19 0% 0% MAIN BRIDGE PILE CAP BOTTOM SLAB_CRZ 15+890~17+414 FROM MP226 TO MP250 356 17-Jan-19 12-Dec-19 19-Aug-19 28-May-20 0% 0% MODULE-14_MP231 - MP227 168 28-Sep-19 12-Dec-19 24-Dec-19 28-May-20 0% 0% MODULE-15_MP236 - MP232 71 05-Apr-19 21-Feb-20 11-Sep-19 02-Nov-19 0% 0% MODULE-16_MP240 - MP237 142 17-Jan-19 20-Mar-19 19-Aug-19 23-Feb-20 0% 0% MODULE-17_MP245 - MP241 44 17-Apr-19 03-Jul-19 22-Oct-19 04-Jan-20 0% 0% MODULE-18_MP249 - MP246 08-Nov-19 0% 0% 63 19-Feb-19 12-Apr-19 10-Feb-20 MAIN BRIDGE PILE CAP BOTTOM SLAB_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225 186 06-Apr-19 18-Jul-20 30-Dec-19 30-Nov-20 0%

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Date Project Baseline Bar EMPLOYER: Critical Remaining Work CONTRACTOR: Summary 25-Dec-21 MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY DAEWOO - TPL JV Actual Work • Milestone (MMRDA) Remaining Work Complete

				3 of 9
			4 4 5 5 28-May-21A, STEEL SF 3-May-21A, STEEL SF 04-Jun-21A, STEEL SF Mar-21A, STEEL SF Mar-21A, STEEL SFAN Mar-21A, STEEL SPAN War-21A, STEEL SPAN 07-Mar-21A, STEEL SFAN War-21A, STEEL SFAN War-21A, STEEL SFAN War-21A, STEEL SFAN War-21A, STEEL SFAN War-21A, STEEL SFAN War-21A, STEEL SFAN	EEL SPANASSEMBLY NASSEMBLY_MP180 ANASSEMBLY_MP180
			₩ 30-Ap 05-Me 16-Ap 12-Ap 12-Ap 12-Ap 12-Ap 12-Ap	by:22, STEEL SPANAS r-22, STEEL SPANASSE ay-22, STEEL SPANASSE r-22, STEEL SPANASSE r-22, STEEL SPANASSE r-22, STEEL SPANASSE r-22, STEEL SPANASSE r-22, STEEL MODULE-0, tay-22, STEEL STA, tay-22, STEEL STERL STA, tay-22, STEEL STERL STA, tay-22, STEEL STERL STA, tay-22, STEEL STA, tay-23, STEEL STERL STA, tay-23, STEEL STERL STA, tay-23, STEEL STERL STA, tay-23, STEEL STERL STA, tay-23, STEEL STA, tay-23, STEEL STA, tay-23,
V V V	💓 11-Nd	vv-19,A, PILE LOAD TES ▼. 11-Jun-20,A, MAIN	₩ 07-Mar-2 T	23-Sep-22, MAINBRID 2, MAINBRIDGE PILE FI
		06-Mar-20A, MODULE- 8-Jah-20A, MODULE-22 19-Mai-20A, MODULE-22 19-Mai-20A, MODULE-22 11-Jun-20A, MODULE-12 19-Keb-20A, MODULE-15 -00-19A, MODULE-16_M -Jah-20A, MODULE-16_M -Jah-20A, MODULE-16_M -Jah-20A, MODULE-17 -19-Feb-20A, MODULE-17 -26-Aug-20A, MO	21 _ MP261 - MP257 _ MP266 - MP252 JUE - 19 _ MP254 - MP255 JUE - 19 _ MP254 - MP255 JUE - 19 _ MP254 - MP255 JUE - 19 _ MP254 - MP255 GE PILE FOUNDATION 4 _ MP231 - MP227 MP245 - MP232 P240 - MP237 MP245 - MP241 8 _ MP249 - MP241 8 _ MP249 - MP246 A INBRIDGE PILE FOUN 0 _ MP211 - MP207 1 _ MP216 - MP212 MD212 - MP246 A INBRIDGE PILE FOUN 0 _ MP211 - MP207 1 _ MP216 - MP212 MD216 - MP212 MD216 - MP212 MD216 - MP246 MP26 - MP226 MP26 - MP226 MP26 - MP227 MD20LE - 09 _ MP206 20 A, MODULE - 09 _ MP206 20 A, MODULE - 08 _ MP2 07 - Mar2 20 A, MODULE - 08 _ MP2 07 - Mar2 4 _ 21 - Dec - 21 A Mar-21 A, MODULE - 04 _ M Mar-21 A, MAR-21 A, MODULE - 04 _ M Mar-21 A, MAR-21 A, MAR-21 _ M MAR-21 _ M MAR-21 A, MAR-21 _ M MAR-21 _ M MAR-21 _ M MAR-21 _ M MAR-21 _ M MAR-21 _ M M	CRZ 15+890+17+414 F CRZ 15+890+17+414 F VDATION_INTERTIDAL : P217 2: AIN BRIDGE PILE FOUN WP202 01-MP197 IODULE-07_MP196 - MF 13-MP186 - MP183 02_MP182 - MP177 2; STEEL WODULE-01_ MODULE-05_MP187 MP186 - MP182 MP186 - MP182 MP186 - MP182 MP186 - MP182 MP186 - MP182 MP151 - MP146 23-Sep-22; MAINBRID 22; MAINBRIDGE PILE F TOM SLAB_ORZ15+89
	Date	Revision	0A, MAIN BRIDGE PILE	CAP BOTTOM SLAB_N Approved
	25-Dec-21	R0		

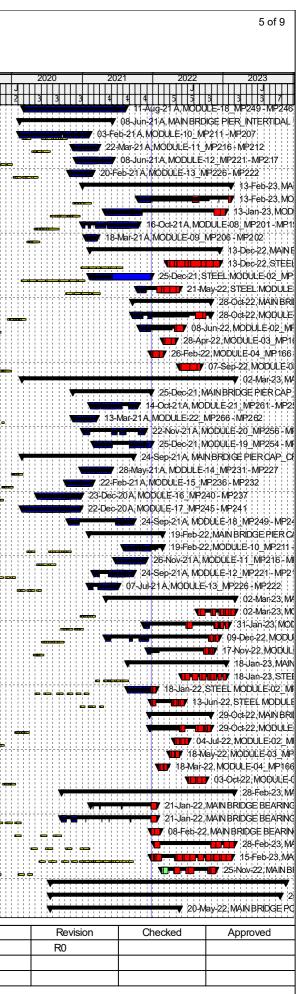
ID Activity Name	Original BL Duration	Project Start BL	. Project Finisł	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete
MODULE-10_MP211 - MP207	95 15-		-Jul-20	30-Dec-19	30-Sep-20	0%	0%
MODULE-11_MP216 - MP212 MODULE-12_MP221 - MP217	128 06- 74 10-		-Apr-20 -Nov-19	09-Mar-20 11-Sep-20	19-Oct-20 30-Nov-20	0%	<u> 0%</u> 0%
MODULE-13_MP226 - MP222	59 03-	Dec-19 18	-Feb-20	27-Apr-20	26-Oct-20	0%	0%
MAIN BRIDGE PILE CAP BOTTOM SLAB_MARINE 13+610~14+800 FROM MP187 TO MP205 MODULE-09_MP206 - MP202	420 21- 289 21-		-Dec-20 -Mar-20	16-Nov-19 16-Nov-19	11-Nov-20	0%	0% 0%
MODULE-08_MP201 - MP197	50 23-		-May-20	11-Nov-20	25-Feb-21	0%	0%
MODULE-07_MP196 - MP192 MODULE-06_MP191 - MP187	153 30- 77 08-		-Oct-20 -Dec-20	15-Oct-20 20-Nov-20	26-Jan-21	0%	<u>0%</u> 0%
MAIN BRIDGE PILE CAP PRECAST SHELL_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186	365 08-		-Feb-21	11-Oct-20		0% 0%	0%
STEEL MODULE-01_MP176 - MP171 STEEL MODULE-02_MP182 - MP177	110 02- 118 08-		-Feb-21 -Sep-20	05-Nov-21 11-Oct-20	26-Feb-21	0%	<u>0%</u> 0%
STEEL MODULE-03_MP186 - MP183 MAIN BRIDGE PILE CAP BOTTOM SLAB MARINE 10+380~11+880 FROM MP146 TO MP170	194 07- 220 22-		-Dec-20 -Jan-20	19-Jan-21 28-Jan-21		0%	0%
MAIN BRIDGE FILE CAP BOTTOM SLAB_MARINE 104380~114880 PROMINE 146 TO MP 170 MODULE-05_MP171 - MP167	107 24-		-Oct-19	26-Mar-21		0%	<mark>0%</mark> 0%
MODULE-04_MP166 - MP162 MODULE-03_MP161 - MP157	199 22- 111 01-		-Mar-19 -May-19	15-Feb-21 28-Jan-21	20-Oct-21	0%	<u>0%</u> 0%
MODULE-03_MP161 - MP157 MODULE-02_MP156 - MP152	53 15-		-May-19 -Aug-19	28-Jan-21 15-Feb-21	17-May-21	0%	0%
MODULE-01_MP151 - MP146 MAIN BRIDGE PILE CAP INSTALLATION	88 01- 1085 27-		-Jan-20 -Mar-21	11-Feb-21 01-May-19		0%	0% 61.99%
MAIN BRIDGE FILE CAP_INS IALLATION MAIN BRIDGE FILE CAP_LAND 17+414~18+188 FROM MP251 TO MP266	377 27-	Dec-18 13	Jun-19	01-May-19	27-Jun-20	100%	100%
MODULE-21_MP261 - MP257 MODULE-22 MP266 - MP262	248 27- 207 02-		-Mar-19 -Jun-19	15-Oct-19 01-May-19	27-Jun-20 16-May-20	100%	100% 100%
MODULE-20_MP256 - MP255	54 01-	Jan-19 06	-Feb-19	29-Nov-19	23-May-20	100%	100%
MODULE-19_MP254 - MP250 MAIN BRIDGE PILE CAP_CRZ15+890~17+414 FROM MP226 TO MP250	218 08- 328 04-		-May-19 -Jan-20	23-Nov-19 28-Aug-19	20-Jun-20 19-Sep-20	100%	100% 100%
MODULE-14_MP231 - MP227	230 24-	Oct-19 08	-Jan-20	11-Jan-20	19-Sep-20	100%	100%
MODULE-15_MP236 - MP232 MODULE-16_MP240 - MP237	201 02- 146 02-		-Nov-19 -Sep-19	16-Nov-19 28-Aug-19	18-Sep-20 05-Mar-20	100%	<u>100%</u> 100%
MODULE-17_MP245 - MP241	98 29-	Apr-19 16	-Aug-19	17-Nov-19	24-Jan-20	100%	100%
MODULE-18_MP249 - MP246 MAIN BRIDGE PILE CAP_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225	84 04- 199 18-		-May-19 -Sep-20	13-Nov-19 29-Jan-20	14-Feb-20 07-Dec-20	100%	100% 100%
MODULE-10_MP211 - MP207	96 27-	Apr-20 05	-Sep-20	29-Jan-20	07-Oct-20	100%	100%
MODULE-11_MP216 - MP212 MODULE-12_MP221 - MP217	157 18- 111 22-		-May-20 -Dec-19	31-Aug-20 17-Sep-20	24-Oct-20 07-Dec-20	100%	<u>100%</u> 100%
MODULE-13_MP226 - MP222	94 14-		-Mar-20	16-Sep-20	19-Nov-20	100%	100%
MAIN BRIDGE PILE CAP_MARINE 13+610~14+800 FROM MP187 TO MP205 MODULE-09 MP206 - MP202	413 01- 288 01-		-Jan-21 -Apr-20	13-Jan-20 13-Jan-20	20-Nov-20	100% 100%	95.24% 100%
MODULE-08_MP201 - MP197	63 03-	Apr-20 06	-Jul-20	23-Nov-20	04-Mar-21	100%	100%
MODULE-07_MP196 - MP192 MODULE-06_MP191 - MP187	90 15-		-Nov-20 -Jan-21	01-Dec-20 14-Dec-20	30-Jan-21	100%	83.33% 100%
MAIN BRIDGE PILE CAP_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186	459 20-	Jan-20 23	-Mar-21	18-Nov-20		100%	10.15%
STEEL MODULE-01_MP176 - MP171 STEEL MODULE-02_MP182 - MP177	152 21- 158 20-		-Mar-21 -Nov-20	13-Dec-21 18-Nov-20	08-Mar-21	100%	4.17% 100%
STEEL MODULE-03_MP186 - MP183	229 27-	Aug-20 07	-Jan-21	28-Jan-21		100%	1.68%
MAIN BRIDGE PILE CAP_MARINE 10+380~11+880 FROM MP146 TO MP170 MODULE-05_MP171 - MP167	253 03- 119 10-		-Feb-20 -Nov-19	08-Feb-21 13-Apr-21		100%	93.75% 75%
MODULE-04_MP166 - MP162	222 03-	Jan-19 29	-Mar-19	01-Mar-21		100%	90%
MODULE-03_MP161 - MP157 MODULE-02_MP156 - MP152	141 14- 54 27-		-Jun-19 -Sep-19	08-Feb-21 06-Mar-21	28-Oct-21 27-May-21	100%	<u>100%</u> 100%
MODULE-01_MP151 - MP146	122 14-	Nov-19 17	-Feb-20	22-Feb-21		100%	100%
MAIN BRIDGE SUB-STRUCTURE MAIN BRIDGE PIER INSTALLATION	1242 09- 1242 09-		-Sep-21 -Jul-21	04-Nov-19 04-Nov-19		100%	63.9% 76.32%
MAIN BRIDGE PIER_LAND 17+414~18+188 FROM MB251 TO MB266	681 09-	Jan-19 08	-Nov-19	06-Nov-19	27-Aug-21	100%	100%
MODULE-21_MP261 - MP257 MODULE-22_MP266 - MP262	301 14- 315 04-		-Jul-19 -Nov-19	27-May-20 06-Nov-19	03-May-21 02-Feb-21	100% 100%	100% 100%
MODULE-20_MP256 - MP255	225 09-	Jan-19 17	-May-19	11-May-20	21-Jun-21	100%	100%
MODULE-19_MP254 - MP250 MAIN BRIDGE PIER_CRZ 15+890~17+414 FROM MB226 TO MB250	336 28- 393 26-		-Sep-19 -Feb-20	15-Jun-20 04-Nov-19	27-Aug-21 11-Aug-21	100% 100%	100% 100%
MODULE-14_MP231 - MP227	228 05-	Dec-19 06	-Feb-20	02-Feb-20	22-Jan-21	100%	100%
MODULE-15_MP236 - MP232 MODULE-16_MP240 - MP237	134 16- 85 13-		-Dec-19 -Oct-19	06-Jan-20 04-Nov-19	06-Nov-20 27-Jun-20	100% 100%	100% 100%
MODULE-17_MP245 - MP241	171 22-	-	-Sep-19	24-Dec-19	23-Jun-20	100%	100%

4 of 9 2022 2022 2023 2 2 3 3 3 3 4 4 4 4 5 3 3 3 3 3 7 2 2 3 3 5 6 20, MODULE 10_MP211 -MP207 19-Oct-20A, MODULE-11_MP216-MP212 -30-Nov-20A, MODULE-12_MP221-MP217 26-Oct-20A, MODULE-13 MP226 + MP222 12-Jan-22, MAIN BRIDGE PILE CAP T1-Nov-20 A, MODULE-09 MP206 - MP202 25-Feb-21A, MODULE-08_MP201-MP197 . 12-Jan-22, MODULE-07_MP196 - M 26 Jan 21 A, MODULE-06_MP191 - MP187 T 11-Apr-22, MAIN BRIDGE PILE THE 11-Apr-22, STEEL MODULE-01 26-Feb-21A, STEEL MODULE-02_MP182 - MP177 T 11-Jan-22, STEEL MODULE-03_MP 11-Jan-22, MAIN BRIDGE PILE CAP 25-Dec-21, MUUUULLE-03, MP161-MP1 25-Dec-21, MODULE-04_MP166 - MF 17-May-21A, MODULE-02_MP156 - MP152 11-Jan-22, MODULE-01_MP151-M 23-Sep-22, MAIN BRID ▼ 27-Juh-20 A, MAIN BRIDGE PILE CAP_LAND 17+414~18+188 FR 27 Jun-20 A, MODULE-21_MP261 - MP257 16-May-20A, MODULE-22_MP266 - MP262 23-May-20A, MODULE-20_MP256 - MP255 20-Jun-20A, MODULE-19_MP254 + MP250 ▼ 19-Sep-20A, MAINBRIDGE PILE CAP_CRZ 15+890~17+414 💓 19-Sep-20A, MODULE-14_MP231 - MP227 ▼ 18-Sep-20A, MODULE-15 MP236 - MP232 05-Mar-20A, MODULE-16_MP240 - MP237 24-Jan-20A, MODULE-17_MP245-MP241 14-Feb-20A, MODULE-18_MP249-MP246 🔫 07-Dec-20A, MAIN BRIDGE PILE CAP_INTERTIDAL 14+8 07-Oct-20A, MODULE-10_MP211 - MP207 24-Oct-20 A, MODULE-11_MP216 - MP212: 12 07-Dec-20A, MODULE-12: MP221 - MP217 19-Nov-20 A, MODULE-13_MP226 - MP222 😽 14-Mar-22, MAIN BRIDGE PILE C 🐨 20-Nov-20 A. MODULE-09_MP206 - MP202 04-Mar-21:A, MODULE-08 MP201-MP197 14-Mat-22, MODULE-07_MP196 30-Jan-21A, MODULE-06_WP191-MP187 23-Sep-22; MAIN BRID 08-Mar-22, STEEL MODULE-03_ 18-Feb-22, MAIN BRIDGE PILE CA 21-Jan-22, MODULE-05_MP171-I 15-Jan-22, MODULE-04_MP166 - M 28-0ct-21A,MODULE-03_MP161+MP1 27-May-21:A, MODULE-02_MP156-MP152 ₩ 18-Feb-22,MODULE-01_MP151 🛡 02-Mar-23, M4 🔻 13-Feb-23, MA 27: Aug-21: A, MAIN BRIDGE PIER_LAND 17 03-May-21A, MODULE-21_MP261 - MP257 02-Feb-21A, MODULE-22_MP266 - MP262 21-Jun-21 A, MODULE-20_MP256 - MP255 27-Aug-21A, MODULE-19_MP254-MP25(11-Aug-21 A, MAIN BRIDGE PIER_CRZ 15+8 22-Jan-21 A, MODULE-14 MP231 - MP227 06-Nov-20A, MODULE-15_MP236 - MP232 27-Jun-20A, MODULE-16 MP240 - MP237 23-Jun-20A, MODULE-17_MP245 - MP241 Revision Checked Approved R0

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION
(CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE
UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

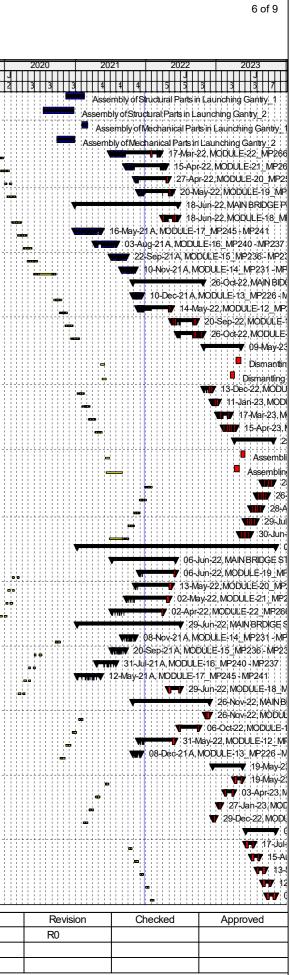
	Activity Name	Duration	BL Project Sta	,	sh Actual Start	Actual Finish	Schedule % Complete	Performance % Complete		J
MODULE-18_MP249 - MP24	6	238	26-Mar-19	06-Jun-19	02-Mar-20	11-Aug-21	100%	100%	[5] [9] [1	
	AL 14+800~15+890 FROM MB206 TO MB225		11-May-19	16-Oct-20	10-Feb-20	08-Jun-21	100%	100%		
MODULE-10_MP211 - MP20	7	338	24-Feb-20	16-Oct-20	10-Feb-20	03-Feb-21	100%	100%		
MODULE-11_MP216-MP21	2	386	11-May-19	17-Jul-20	13-Nov-20	22-Mar-21	100%	100%		-
MODULE-12_MP221 - MP21			17-Jun-19	03-Jan-20	30-Nov-20	08-Jun-21	100%	100%		
			06-Jan-20	15-May-20	29-Oct-20	20-Feb-21	100%	100%		
MAIN BRIDGE PIER_MARINE MODULE-06 MP191-MP18	13+610~14+800 FROM MB187 TO MB205		19-Mar-20	18-Feb-21	04-Jan-21		100%	87.6%		
MODULE-07 MP196 - MP19			13-Nov-20 17-Jul-20	18-Feb-21 19-Dec-20	19-Oct-21 28-Apr-21		100%	75.5%		
MODULE-07_WP 198 - WP 19 MODULE-08_MP201 - MP19			25-Apr-20	03-Sep-20	04-Jan-21	16-Oct-21	100%	100%		
MODULE-09_MP206 - MP20			19-Mar-20	23-May-20	18-Jan-21	18-Mar-21	100%	100%	*********	
	STEEL) 11+880~13+610 FROM MB1 71 TO MB186	460	17-Feb-20	28-Jul-21	08-Feb-21		100%	35.28%		
STEEL MODULE-01_MP176	-MP171	194	23-Dec-20	28-Jul-21			100%	0%		
STEEL MODULE-02_MP182	- MP177	170	17-Feb-20	15-Jan-21	08-Feb-21		100%	77.42%		
STEEL MODULE-03_MP186			06-Oct-20	03-Apr-21	12-Oct-21		100%	25%		· · · · · · · · · · · ·
	10+380~11+880 FROM MB146 TO MB170		07-Feb-19	13-Mar-20	20-Sep-21		100%	34.5%		
			10-Dec-19	13-Mar-20	20-Sep-21		100%	86.6%		
MODULE-02_MP156 - MP15			11-Jul-19	04-Nov-19	25-Oct-21		100%	79%		
MODULE-03_MP161 - MP15			22-Apr-19 07-Feb-19	01-Aug-19			100%	0% 0%		
MODULE-04_MP166 - MP16 MODULE-05_MP171 - MP16			10-Oct-19	06-May-19 31-Dec-19		-	100%	0%		
MAIN BRIDGE PIER CAP INSTA			08-Feb-19	27-Aug-21	25-Feb-20		100%	54.79%		
	D17+414~18+188 FROM MB251 TO MB266		08-Feb-19	23-Nov-19	13-Nov-20		100%	98.48%		
MODULE-21_MP261 - MP25			13-Feb-19	05-Aug-19	11-Feb-21	14-Oct-21	100%	100%		
MODULE-22_MP266 - MP26		114	03-Jun-19	23-Nov-19	13-Nov-20	13-Mar-21	100%	100%		
MODULE-20_MP256 - MP25	5	182	08-Feb-19	01-Jun-19	07-Jan-21	22-Nov-21	100%	100%		
MODULE-19_MP254 - MP25	0	212	30-Mar-19	09-Oct-19	01-Mar-21		100%	94.44%		
MAIN BRDIGE PIER CAP_CR2	15+890~17+414 FROM MB226 TO MB250	405	19-Apr-19	25-Feb-20	25-Feb-20	24-Sep-21	100%	100%		
MODULE-14_MP231 - MP22			30-Dec-19	25-Feb-20	27-Dec-20	28-May-21	100%	100%		
MODULE-15_MP236 - MP23			11-Nov-19	07-Jan-20	12-Oct-20	22-Feb-21	100%	100%		·
MODULE-16MP240 - MP23			21-Sep-19	19-Nov-19	14-May-20	23-Dec-20	100%	100%		
MODULE-17_MP245 - MP24			05-Jul-19	16-Oct-19	25-Feb-20	22-Dec-20	100%	100%		
MODULE-18_MP249 - MP24	。 RTIDAL 14+800~15+890 FROM MB206 TO MB225		19-Apr-19 06-Jun-19	02-Jul-19 05-Nov-20	22-Oct-20 04-Feb-21	24-Sep-21	100%	100% 95.8%		
MODULE-10_MP211 - MP20			20-Mar-20	05-Nov-20	02-Aug-21		100%	86.79%		
MODULE-11_MP216 - MP21			06-Jun-19	18-Aug-20	21-Jun-21	26-Nov-21	100%	100%	<u></u>	****
MODULE-12_MP221 - MP21			24-Jul-19	22-Jan-20	01-Mar-21	24-Sep-21	100%	100%		
MODULE-13_MP226 - MP22	2	187	30-Jan-20	04-Jun-20	04-Feb-21	07-Jul-21	100%	100%		
MAIN BRIDGE PIER CAP_MAI	RINE 13+610~14+800 FROM MB187 TO MB205	187	23-Apr-20	10-Mar-21	03-May-21		100%	16.46%		
MODULE-06_MP191 - MP18			18-Dec-20	10-Mar-21			100%	0%		
MODULE-07_MP196 - MP19			10-Sep-20	07-Jan-21	18-Nov-21		100%	16.3%		
			01-Jun-20	29-Sep-20	03-May-21		100%	40%		
MODULE-09_MP206 - MP20			23-Apr-20 30-Apr-20	15-Jun-20	09-Dec-21 23-Aug-21		100% 100%	5% 16.09%		
STEEL MODULE-01 MP176	RINE (STEEL) 11+880~13+610 FROM MB171 TO MB186		08-Mar-21	27-Aug-21 27-Aug-21	23-Aug-21		100%	0%		
STEEL MODULE-02_MP182			30-Apr-20	04-Feb-21	23-Aug-21		100%	42.92%		
STEEL MODULE-03_MP186			19-Dec-20	22-Apr-21			100%	0%		
	RINE 10+380~11+880 FRO MMB146 TO MB170		15-Mar-19	01-Apr-20	17-Dec-21		100%	1.15%		
MODULE-01_MP151 - MP14		102	14-Jan-20	01-Apr-20	17-Dec-21		100%	5.5%		
MODULE-02_MP156 - MP15	2	51	05-Sep-19	23-Nov-19			100%	0%		
MODULE-03_MP161 - MP15	7	40	28-May-19	31-Aug-19			100%	0%		
MODULE-04_MP166 - MP16			15-Mar-19	24-May-19			100%	0%		
MODULE-05_MP171 - MP16			15-Nov-19	18-Jan-20			100%	0%		
			22-Feb-19	24-Sep-21	14-Sep-20		100%	2.67%		
	D 17+414~18+188 FROM MB251 TO MB266 15+890~17+414 FROM MB226 TO MB250		22-Feb-19	22-Aug-19 20-Feb-20	11-Feb-21 14-Sep-20		100% 100%	50% 60%		
	RTIDAL 14+800~15+890 FROM MB206 TO MB225		08-May-19 29-Jun-19	14-Sep-20	14-3ep-20		100%	0%		
	INE 13+610~14+800 FROM MB187 TO MB205		07-Apr-20	09-Feb-21			100%	0%		
	INE (STEEL) 11+880~13+610 FROM MB171 TO MB186		19-May-20	24-Sep-21			100%	0%		
	INE 10+380~11+880 FROM MB146 TO MB170		25-Apr-19	18-Apr-20			100%	0%		
	IRE BOX GIRDER INSTALLATION		12-Sep-19	01-Mar-22	20-Jul-20		91.36%	28.91%		and f
MAIN BRIDGE CONCRETE GIR			12-Sep-19	02-Feb-22	20-Jul-20		94.31%	33.86%		
MAIN BRIDGE PC GIRDER_L/	ND 15+890~17+414 FROM MP251 TO MP266	626	12-Sep-19	27-Feb-20	20-Jul-20		100%	50.31%		
						1				
Project Baseline Bar	Critical Remaining Work V Summary	EMPLOYER:				<u>CO</u>	NTRACTOR:			
Actual Work 🔶	♦ Milestone	MUMBAI METROPOLIT	AN REGIO	N DEVELOPM	ENT AUTHOR	RITY DA	AEWOO -	TPL JV		25-De
		(MMRDA)								1



MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION (CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

#	Λ <i>α</i> ίι	D	Activity Namo		PI Decident Chart		Actual Start	Actual Finish	Cohodula 0/1	Dorformerer	2018	2019
#	Activity	U	Activity Name	Duration	BL Project Start	BL Project Finish	Actual Start	Actual Finish	Schedule % Complete	Performance %Complete		
309		CN.LGA.1000	Assembly of Structural Parts in Launching Gantry_1	35	12-Sep-19	17-Oct-19	12-Nov-20	17-Feb-21	100%	100%		
310		CN.LGA.1010	Assembly of Structural Parts in Launching Gantry_2	35	12-Sep-19	17-Oct-19	20-Jul-20	25-Dec-20	100%	100%		
311		CN.LGA.1005	Assembly of Mechanical Parts in Launching Gantry_1	15	17-Oct-19	01-Nov-19	05-Feb-21	06-Mar-21	100%	100%		
312		CN.LGA.1015	Assembly of Mechanical Parts in Launching Gantry_2	15	17-Oct-19	01-Nov-19	28-Sep-20	30-Dec-20	100%	100%		
313		MODULE-22_MP266 - MP2			01-Nov-19	25-Dec-19	02-Jul-21		100%	60%		
314		MODULE-21_MP261 - MP2			02-Dec-19	23-Jan-20	18-Sep-21		100%	50%		
315 316		MODULE-20_MP256 - MP2 MODULE-19 MP254 - MP2			31-Dec-19 11-Jan-20	04-Feb-20 27-Feb-20	06-Nov-21 26-Nov-21		100% 100%	50% 38.75%		
317			RDER_CRZ15+890~17+414 FROM MP226 TO MP250		04-Feb-20	25-Sep-20	30-Dec-20		100%	80%		
318		MODULE-18_MP249 - MP2	—		04-Feb-20	28-Mar-20	00 200 20		100%	0%		
319		MODULE-17_MP245 - MP2	241	74	05-Mar-20	27-Apr-20	30-Dec-20	16-May-21	100%	100%		
320		MODULE-16_MP240 - MP2			03-Apr-20	21-May-20	13-Apr-21	03-Aug-21	100%	100%		· · · · · · · · · · · · · · · · · · ·
321		MODULE-15_MP236 - MP2			27-Apr-20	19-Jun-20	06-Jul-21	22-Sep-21	100%	100%		
22		MODULE-14_MP231 - MP2	227 DER_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225		27-May-20 12-Sep-20	25-Sep-20 23-Jan-21	27-Aug-21 25-Oct-21	10-Nov-21	100%	100% 38.25%		
23		MODULE-13_MP226 - MP2			12-Sep-20	21-Oct-20	25-Oct-21	10-Dec-21	100%	100%		
25		MODULE-12_MP221 - MP2			08-Oct-20	20-Nov-20	20-Nov-21	10 200 21	100%	73%		
26				55	09-Nov-20	19-Dec-20			100%	0%		****
27		MODULE-10_MP211 - MP2	207	60	08-Dec-20	23-Jan-21			100%	0%		
28			RDER_MARINE 13+610~14+800 FROM MP187 TO MP205		12-Jan-21	10-Jun-21			100%	0%		
9		CN.LGD.1010	Dismantling of Launching Gantry_2		12-May-21	03-Jun-21			100%	0%		
0		CN.LGD.1000	Dismantling of Launching Gantry_1		18-May-21	10-Jun-21			100%	0%		
81		MODULE-09_MP206 - MP2			12-Jan-21	17-Feb-21			100%	0%		
2 3		MODULE-08_MP201 - MP1 MODULE-07_MP196 - MP1			05-Feb-21 08-Mar-21	19-Mar-21 17-Apr-21			100% 100%	0% 0%		
34 34		MODULE-06 MP191 - MP1			12-Apr-21	18-May-21			100%	0%		
35			RDER_MARINE 10+380~11+880 FROM MP146 TO MP170		04-Jun-21	02-Feb-22			76.01%	0%		
36		CN.LGA.1030	Assembling of Launching Gantry_2	20	04-Jun-21	26-Jun-21			100%	0%		
7		CN.LGA.1020	Assembling of Launching Gantry_1	20	10-Jun-21	03-Sep-21			100%	0%		
3		MODULE-05_MP171 - MP1	167	52	28-Dec-21	02-Feb-22			0%	0%		
9		MODULE-04_MP166 - MP1			29-Nov-21	03-Jan-22			80.06%	0%		
0		MODULE-03_MP161 - MP1			30-Oct-21	04-Dec-21			100%	0%		
1		MODULE-02_MP156 - MP1			29-Sep-21	05-Nov-21			100%	0%		
12 13		MODULE-01_MP151 - MP1 STITCH JOINT CASTING	140		28-Jun-21 07-Dec-19	06-Oct-21 12-Feb-22	12-Jan-21		100% 0%	0% 0%		
4			T CASTING LAND 15+890~17+414 FROM MP251 TO MP266		07-Dec-19	16-Mar-20	08-Jul-21		0%	0%		
45		MODULE-19_MP254 - MP2		38	10-Feb-20	16-Mar-20	29-Nov-21		0%	0%		
46		MODULE-20_MP256 - MP2	255	94	17-Jan-20	20-Feb-20	10-Nov-21		0%	0%		
47		MODULE-21_MP261 - MP2			06-Jan-20	08-Feb-20	23-Sep-21		0%	0%		••
.8 .9		MODULE-22_MP266 - MP2	262 T CASTING_CRZ 15+890~17+414 FROM MP226 TO MP250		07-Dec-19 11-Mar-20	10-Jan-20 13-Oct-20	08-Jul-21 12-Jan-21		0% 0%	0% 0%		
+9 50		MODULE-14 MP231 - MP2			19-Sep-20	13-Oct-20	02-Sep-21	08-Nov-21	0%	0%		
51		MODULE-15_MP236 - MP2			02-Jun-20	09-Jul-20	10-Jul-21	20-Sep-21	0%	0%	L L L L L L L L	
2		MODULE-16_MP240 - MP2		19	04-May-20	06-Jun-20	23-Apr-21	31-Jul-21	0%	0%		
3		MODULE-17_MP245 - MP2	241	41	09-Apr-20	14-May-20	12-Jan-21	12-May-21	0%	0%		
54		MODULE-18_MP249 - MP2			11-Mar-20	14-Apr-20			0%	0%		
55 56			T CASTING_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225		14-Oct-20	10-Feb-21	27-Oct-21		0%	0%		
6 7		MODULE-10_MP211 - MP2 MODULE-11_MP216 - MP2			18-Jan-21 14-Dec-20	10-Feb-21 05-Jan-21			0% 0%	0% 0%		1 0 1
8		MODULE-11_MP216 - MP2 MODULE-12_MP221 - MP2			14-Dec-20 14-Nov-20	05-Jan-21 07-Dec-20	24-Nov-21		0%	0%		
i9		MODULE-13_MP226 - MP2			14-Oct-20	06-Nov-20	27-Oct-21	08-Dec-21	0%	0%		. .
)			T CASTING_MARINE 13+610~14+800 FROM MP187 TO MP205		11-Feb-21	21-Jun-21			0%	0%		
1		MODULE-06_MP191 - MP1			04-Jun-21	21-Jun-21			0%	0%		
2		MODULE-07_MP196 - MP1			17-Apr-21	05-May-21			0%	0%		· ·
3		MODULE-08_MP201 - MP1			13-Mar-21	05-Apr-21			0%	0%		1 1
4 5		MODULE-09_MP206 - MP2 MAIN BRIDGE STITCH. JOIN	202 T CASTING_MARINE 10+380~11+880 FROM MP146 TO MP170		11-Feb-21 06-Oct-21	06-Mar-21 12-Feb-22			0% 0%	0% 0%		
6		MODULE-01_MP151 - MP1			06-Oct-21	23-Oct-21			0%	0%		
67 67		MODULE-02_MP156 - MP1			05-Nov-21	22-Nov-21			0%	0%		
8		MODULE-03_MP161 - MP1			04-Dec-21	21-Dec-21			0%	0%		
9 0		MODULE-04_MP166 - MP1			03-Jan-22	19-Jan-22			0%	0%		• •
		MODULE-05_MP171 - MP1	167	36	27-Jan-22	12-Feb-22			0%	0%		
	D	ioct Basolina Par	Critical Pomaining Work					00	NTDACTOR			Date
		iectBaselineBar	Critical Remaining Work Summary	EMPLOYER: MUMBAI METROPOLIT					NTRACTOR:			25-Dec-21
		ual Work	◆ Milestone	(MMRDA)			NUR	D A	AEWOO -	IPL JV		
	Rem	naining Work	% Complete									

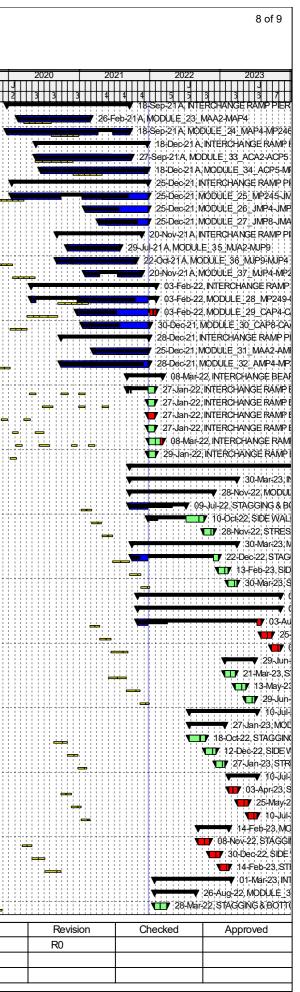


	UR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM H 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR IN UNDER IDENTIFICATION NO MMRDA/ENG/000753			ANNEXURE-5 (ON UPDATE (PACKAGE-2	D PROGRAMME_ 2)	ABSTRACT					7
Activity ID	Activity Name	Original E Duration	BL Project Star	rt BL Project Finis	sh Actual Start	Actual Finish		6 Complete		TITIJITT		IIIIIIIIIIII	
MAIN BRIDGE STEE	L GIRDER INSTALLATION	462 0)3-Oct-20	01-Mar-22			74.17%	0%]]]]]]]]]]]]]]]]		3 1 3 1 4		
	L GIRDER INSTALLATION_MARINE 11+880~13+610 FROM MP171 TOMP 186)3-Oct-20	01-Mar-22			74.17%	0%	1 1 <td></td> <td></td> <td></td> <td></td>				
	01_MP176 - MP171 (INSTALLATION))7-Dec-21	01-Mar-22			22.5%	0%					T
	02_MP182 - MP177 (INSTALLATION))3-Oct-20	30-Sep-21			100%	0%			þ oþ oþ oþ oþ		19-Sep-22,ST
STEEL MODULE MISCELLANEOUS &	03_MP186 - MP183 (INSTALLATION)		0-Sep-21 6-May-19	07-Dec-21 24-May-22	30-Mar-21		100% 73.86%	0% 0%					
CRASH BARRIER &			0-Way-19 20-Feb-20	07-Mar-22	30-Ivia1-2 1		70.83%	0%	1 1 <td></td> <td></td> <td></td> <td>,</td>				,
WATER PROOFING		451 2	26-Mar-20	17-Mar-22			66.67%	0%					,
PAVEMENT		550 1	6-Mar-20	24-May-22			65.79%	0%			╪╪┿┉┝┻┿┽╤╕┉╋╍╞╸	TTO TT T T	
EXPANSION JOINT			27-May-20	21-Apr-22			46.67%	0%			÷		-May-22, SUB ST
SUB STATION NOISE BARRIER			6-May-19 6-Mar-20	15-Apr-21 14-Sep-21	30-Mar-21		100%	0% 0%				<mark> </mark>	-way-zz, 300 3 %
FENDER INSTALLA	'ION		24-Jul-21	24-Nov-21			100%	0%					18-Fe
DRAINAGE WORKS			6-Mar-20	09-Mar-22			70.37%	0%				, , , , , , , , , , , , , , , , , , ,	U
SIGN BOARDS		60 1	2-Feb-22	23-Apr-22			0%	0%					
INTERCHANGE			24-Dec-18	28-Apr-22	09-Oct-19		97.73%	39.36%		V			
	NDATION IP PILE FOUNDATION		24-Dec-18	22-Oct-20 05-Mar-20	09-Oct-19	26-May-21	100%	100% 100%				26-May-21 A, NTERC 13-May-21 A, NTERC	
			24-Dec-18 05-Aug-19	05-Mar-20 03-Jan-20	09-Oct-19 09-Oct-19	13-May-21 13-May-21	100% 100%	100%		V		13-May-21A, NTERC	
MODULE_23_MA)5-Aug-19	02-Nov-19	13-Jan-20	28-Jun-20	100%	100%				DULE_23_MAA2-MAF	
MODULE_24_M4)2-Nov-19	03-Jan-20	09-Oct-19	13-May-21	100%	100%	****************	V		13-May-21A, MODULI	
INTERCHANGE RA		107 0)1-Oct-19	05-Mar-20	25-Oct-19	16-Aug-20	100%	100%				NTERCHANGE RAMP	
MODULE_33_AC			1-Oct-19	19-Dec-19	25-Oct-19	16-Aug-20	100%	100%				VODULE_33_ACA2-A 34:ACP5-MP256	VCP5
MODULE_34_AC			9-Dec-19)3-Jan-19	05-Mar-20 05-Aug-19	02-Nov-19 26-Nov-19	25-Feb-20 07-May-21	100%	100% 100%		,23+Fe		_34ACF5-MF256 07-May-21A, NTERCH	ANGE RAMP PI
MODULE_25_MF	-		2-Apr-19	05-Aug-19	26-Nov-19	23-Apr-21	100%	100%				3-Apr-21A, MODULE	
MODULE_26_JN			9-Feb-19	20-Apr-19	01-Dec-20	17-Feb-21	100%	100%			17-F	eb-21A,MODULE_26	JMP4-JMP8
MODULE_27_JN	P8-JMA2	64 0)3-Jan-19	18-Feb-19	23-Mar-21	07-May-21	100%	100%				07-May-21A, MODULE	
INTERCHANGE RA	-)3-Jan-19	01-Oct-19	04-Dec-19	27-Nov-20	100%	100%				20A, INTERCHANGE R	
MODULE_35_MJ)3-Jan-19	21-Mar-19	16-Sep-20	27-Nov-20	100%	100%				0A, MODULE_35_MJ MODULE_36_MJP9-N	
MODULE_36_MJ MODULE_37_MJ			2-Mar-19	10-Jun-19 01-Oct-19	15-Jan-20 04-Dec-19	26-Aug-20 20-Mar-20	100%	100% 100%					
INTERCHANGE R			28-May-19	23-Jan-20	04-Dec-19 01-Nov-19	20-iviar-20 27-Apr-21	100%	100%				7-Apr-21A, INTERCH	ANGE RAMP PILI
MODULE_28_MF	-		8-Nov-19	23-Jan-20	01-Nov-19	27-Apr-21	100%	100%				7-Apr-21 A, MODULE	
MODULE_29_CA			4-Aug-19	08-Nov-19	21-Nov-20	19-Mar-21	100%	100%		÷÷÷		Mar-21A,MODULE_2	
MODULE_30_CA			28-May-19	14-Aug-19	05-Jan-21	24-Feb-21	100%	100%		•		eb-21A, MODULE_30	— · · · · · · · · · ·
INTERCHANGE RA MODULE_31_MA	-		24-Dec-18	27-May-19 26-Mar-19	06-Feb-20 07-Feb-20	04-Jan-21 10-Sep-20	100%	100% 100%				MODULE_31_MAA2	
MODULE_31_W			24-Dec-18 27-Mar-19	27-May-19	07-Feb-20 06-Feb-20	04-Jan-21	100%	100%			• 04-lan	-21A MODULE 32 A	MP4-MP259
	IP PILE CAP INSTALLATION)8-Jan-19	22-Oct-20	22-Oct-19	26-May-21	100%	100%	· · · · · · · · · · · · · · · · · · ·			26-May-21A, NIERC	HANGE RAMPP
INTERCHANGE RA	MP PILE CAP_MA	182 0	6-Dec-19	15-May-20	22-Oct-19	26-May-21	100%	100%				26-May-21A, INTERG	HANGE KAMP F
MODULE_23_MA MODULE_24_MA			6-Dec-19	24-Feb-20	22-Jan-20	24-Jul-20	100%	100%			24-Jul-20A, MO		H4
MODULE_24_MA			24-Feb-20	15-May-20	22-Oct-19 02-Nov-19	26-May-21	100%	100% 100%	<th< td="" tr<=""><td></td><td>• 07-Sen-20A</td><td>26-May-21 A, MODUL NTERCHANGE RAM</td><td>~[VIIN-F++1VII P.PILE CAP AC</td></th<>		• 07-Sen-20A	26-May-21 A, MODUL NTERCHANGE RAM	~[VIIN-F++1VII P.PILE CAP AC
MODULE_33_AC	——————		5-Jan-20 5-Jan-20	22-Oct-20 24-Apr-20	18-Nov-19	07-Sep-20 07-Sep-20	100%	100%	- - <td></td> <td>7 07-Sep-20A.</td> <td>MODULE_33_ACA2-</td> <td>ACP5</td>		7 07-Sep-20A.	MODULE_33_ACA2-	ACP5
MODULE_34_AC			24-Apr-20	22-Oct-20	02-Nov-19	09-Mar-20	100%	100%		09-M	ar-20 A, MODULE	34 ACP5-MP256	191101010101010
INTERCHANGE RA	MP PILE CAP_JM	136 1	8-Jan-19	06-Dec-19	11-Dec-19	25-May-21	100%	100%	1 1	<u>v</u>	••••••	25-May-21 A, NTERC	HANGE RAMP P
MODULE_25_MF			8-Jun-19	06-Dec-19	11-Dec-19	15-May-21	100%	100%				15-May-21 A, MODULI	⊑_25_MP245-JN
MODULE_26_JN			21-Mar-19	17-Jun-19	23-Dec-20	23-Feb-21	100%	100%	· · · · · · · · · · · · · · · · · · ·			eb-21 A, MODULE_26 25-May-21 A, MODUL	· · · · · · · · · · · ·
MODULE_27_JN			8-Jan-19 8-Jan-19	20-Mar-19 15-Jan-20	02-Apr-21 16-Dec-19	25-May-21 19-Dec-20	100%	100% 100%	· · · · · · · · · · · · · · · · · · ·			20A, INTERCHANGE	
MODULE_35_MJ			8-Jan-19	29-Apr-19	08-Oct-20	19-Dec-20	100%	100%		· ·		20A, MODULE_35_N	
MODULE_36_MJ	P9-MJP4	62 3	80-Apr-19	26-Oct-19	03-Mar-20	03-Sep-20	100%	100%				MODULE_36_MUP9-1	
MODULE_37_MJ			26-Oct-19	15-Jan-20	16-Dec-19	01-Jun-20	100%	100%)1-Jun-20:A, MOD	ULE_37_MJP4-MP25	
	-		5-Oct-19	27-Jun-20	02-Dec-19	05-May-21	100%	100% 100%				05-May-21A, INTERCH 05-May-21A, MODULE	
MODULE_28_MF MODULE_29_CA			5-Mar-20 6-Dec-19	27-Jun-20 05-Mar-20	02-Dec-19 30-Nov-20	05-May-21 30-Mar-21	100% 100%	100%				-Mar-21A, MODULE_	T
MODULE_30_CA			5-Oct-19	16-Dec-19	19-Jan-21	02-Mar-21	100%	100%	- - <td></td> <td></td> <td>Var-21A, MODULE_30</td> <td>: . : : : : : : : : :</td>			Var-21A, MODULE_30	: . : : : : : : : : :
INTERCHANGE R/)8-Jan-19	15-Oct-19	15-Feb-20	13-Jan-21	100%	100%	1 1 <td></td> <td></td> <td>1-21 A, INTERCHANGE</td> <td></td>			1-21 A, INTERCHANGE	
MODULE_31_MA)8-Jan-19	09-May-19	15-Feb-20	21-Sep-20	100%	100%				, MODULE_31_MAA2	
MODULE_32_AN			0-May-19	15-Oct-19	07-Mar-20	13-Jan-21	100%	100%				1-21A,MODULE_32_/ ▼ 08-Ma	
	STRUCTURE & BEARING		29-Jan-19 29-Jan-19	31-May-21 27-Apr-21	24-Dec-19 24-Dec-19		100%	78.9% 78.9%				vo-Ma v 03-Feb-	22, INTERCHAN
INTERCHANGE RA		590 2	5-041-13	21-741-21	2		100 /0	10.370				<u></u>	
Project Baseline Bar	Critical Remaining Work V Summary	EMPLOYER:				<u>c</u>	ONTRACTOR:			late	Revision	Checked	Appro
Actual Work	♦ ♦ Milestone	MUMBAI METROPOLITA	N REGIO	N DEVELOPM	ENT AUTHOR	RITY D	AEWOO - T	PL JV	25-Dec-2	21	R0		
		(MMRDA)											

/ complete

MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION	
(CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE	ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT
UNDER IDENTIFICATION NO MMRDA/ENG/000753	(PACKAGE-2)

		A state ID	A.F. S. NI.		i	O i sin al	DI Ducia at Ota at		A start Otest	Asterl	Ochochula (V	Deferment	2018 2019
#		Activity ID	Activity Name			Duration	BL Project Start	BL Project Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete	
434		INTERCHANGE RAMP PI	ER_MA			169	18-Mar-20	29-Dec-20	24-Dec-19	18-Sep-21	100%	100%	
435		MODULE_23_MAA2-MA					18-Mar-20	10-Aug-20	19-Feb-20	26-Feb-21	100%	100%	· · · · · · · · · · · · · · · · · · ·
436 437		MODULE_24_MAP4-MP					10-Aug-20	29-Dec-20	24-Dec-19	18-Sep-21 18-Dec-21	100% 100%	100% 100%	
437		INTERCHANGE RAMP PI MODULE_33_ACA2-AC	-				16-May-20 16-May-20	27-Apr-21 30-Nov-20	19-May-20 19-May-20	27-Sep-21	100%	100%	
439		MODULE_34_ACP5-MP					30-Nov-20	27-Apr-21	17-Jun-20	18-Dec-21	100%	100%	
440		INTERCHANGE RAMP PI					08-Feb-19	18-Mar-20	15-Jan-20		100%	60.34%	
441		MODULE_25_MP245-JI	MP4			122	22-Oct-19	18-Mar-20	15-Jan-20		100%	60%	
442		MODULE_26_JMP4-JM					09-May-19	22-Oct-19	01-Feb-21		100%	50%	
443		MODULE_27_JMP8-JM					08-Feb-19	08-May-19	12-Apr-21		100%	78.7%	
444 445		INTERCHANGE RAMP PI MODULE 35 MJA2-MJ					08-Feb-19 08-Feb-19	16-May-20 26-Jul-19	07-Sep-20 02-Nov-20	20-Nov-21 29-Jul-21	100% 100%	100% 100%	
446		MODULE_36_MJP9-MJ					27-Jul-19	18-Jan-20	07-Sep-20	22-Oct-21	100%	100%	
447		MODULE_37_MJP4-MP					18-Jan-20	16-May-20	02-Feb-21	20-Nov-21	100%	100%	
448		INTERCHANGE RAMP PI	ER_CA			230	08-Jan-20	16-Feb-21	27-Apr-20		100%	60.34%	
449		MODULE_28_MP249-C					10-Sep-20	16-Feb-21	27-Apr-20		100%	60%	
450		MODULE_29_CAP4-CA					06-Apr-20	10-Sep-20	19-Dec-20		100%	50%	
451 452		MODULE_30_CAP8-CA					08-Jan-20 29-Jan-19	06-Apr-20 08-Jan-20	19-Jan-21 26-Sep-20		100% 100%	78.7% 56.14%	
452		MODULE 31 MAA2-AN					29-Jan-19	27-Aug-19	14-Mar-21		100%	53.24%	
454		MODULE_32_AMP4-MF					27-Aug-19	08-Jan-20	26-Sep-20		100%	60%	
455		INTERCHANGE BEARING	INSTALLATION			135	27-Feb-19	31-May-21	08-Sep-21		0%	0%	
456		INTERCHANGE RAMP BE	EARING_MA				16-Apr-20	01-Feb-21	08-Sep-21		0%	0%	
457		INTERCHANGE RAMP BE	······································				24-Jun-20	31-May-21			0%	0%	
458 459		INTERCHANGE RAMP BE	-				11-Mar-19 11-Mar-19	20-Apr-20			0%	0% 0%	
459							06-Feb-20	30-Jun-20 22-Mar-21			0% 0%	0%	
461		INTERCHANGE RAMP BE					27-Feb-19	10-Feb-20			0%	0%	
462		INTERCHANGE SUPERSTR	— — — —			632	20-Sep-19	15-Feb-22	18-Sep-21		97.82%	1.05%	
463		INTERCHANGE BOX GIRD					09-Jan-21	03-Jan-22	18-Sep-21		96.23%	9%	
464		MODULE_23_MAA2-MAI					09-Jan-21	21-Jun-21	18-Sep-21		100%	21%	
465 466		STAGGING & BOTTOM S SIDE WALLS & TOP SLA					09-Jan-21 05-Mar-21	04-Mar-21	18-Sep-21 22-Dec-21		100%	70% 0%	
460		STRESSING & DESTAG					27-Apr-21	26-Apr-21 21-Jun-21	22-De0-21		100%	0%	
468		MODULE_24_MAP4-MAR					21-Jun-21	03-Jan-22	01-Oct-21		93.41%	0%	
469		STAGGING & BOTTOM	SLAB			39	21-Jun-21	20-Sep-21	01-Oct-21		100%	0%	
470		SIDE WALLS & TOP SLA				45	20-Sep-21	18-Nov-21			100%	0%	
471		STRESSING & DESTAG					18-Nov-21	03-Jan-22			34.09%	0%	
472 473		INTERCHANGE BOX GIRD MODULE_33_ACA2-ACF					27-Feb-21 27-Feb-21	27-Dec-21 08-Sep-21	01-Nov-21 01-Nov-21		99.52% 100%	0% 0%	
473		STAGGING & BOTTOMS				-	27-Feb-21	16-Apr-21	01-Nov-21		100%	0%	
475		SIDE WALLS & TOP SLA					17-Apr-21	15-Jun-21			100%	0%	
476		STRESSING & DESTAG	GING			39	15-Jun-21	08-Sep-21			100%	0%	
477			4-ACP3-ACP2-ACP1-MP256				31 - May-21	27-Dec-21			99.14%	0%	
478		STAGGING & BOTTOM					31-May-21	03-Sep-21			100%	0%	
479 480		SIDE WALLS & TOP SLA STRESSING & DESTAG					03-Sep-21 10-Nov-21	10-Nov-21 27-Dec-21			100% 91.42%	0% 0%	
481		INTERCHANGE BOX GIRD					11-Mar-20	26-Feb-21			100%	0%	
482		MODULE_25_MP245-JN	—				19-Aug-20	09-Feb-21			100%	0%	
483		STAGGING & BOTTOM	SLAB			45	19-Aug-20	30-Oct-20			100%	0%	
484		SIDE WALLS & TOP SLA					31-Oct-20	23-Dec-20			100%	0%	
485		STRESSING & DESTAG					24-Dec-20	09-Feb-21			100%	0%	· · · · · · · · · · · · · · · · · · ·
486 487		MODULE_26_JMP4-JMF STAGGING & BOTTOM					29-Sep-20 29-Sep-20	26-Feb-21 19-Nov-20			100% 100%	0% 0%	
487		SIDE WALLS & TOP SLA					29-Sep-20 20-Nov-20	11-Jan-21			100%	0%	
489		STRESSING & DESTAG					12-Jan-21	26-Feb-21			100%	0%	
490		MODULE_27_JMP8-JMF	9-JMP10-JMA2			125	11-Mar-20	29-Sep-20			100%	0%	
491		STAGGING & BOTTOM					11-Mar-20	28-Apr-20			100%	0%	
492		SIDE WALLS & TOP SLA					28-Apr-20	04-Jul-20			100%	0%	
493 494		STRESSING & DESTAG					04-Jul-20 20-Sep-19	29-Sep-20 08-Jan-21			100%	0% 0%	
494		MODULE_35_MJA2-MJF					20-Sep-19 20-Sep-19	08-Jan-21 16-Mar-20			100%	0%	
496		STAGGING & BOTTOM					20-Sep-19	25-Nov-19			100%	0%	· * •
<u> </u>					1					1			
	_	Project Baseline Bar	Critical Remaining Work	Summary	EMPLOYER:					<u>CO</u>	NTRACTOR:		Date
		Actual Work	♦ Milestone		MUMBAI METRO	OPOLIT	AN REGION	DEVELOPME	NT AUTHOR	RITY DA	AEWOO -	TPL JV	25-Dec-21
		Remaining Work	% Complete		(MMRDA)								
		-											

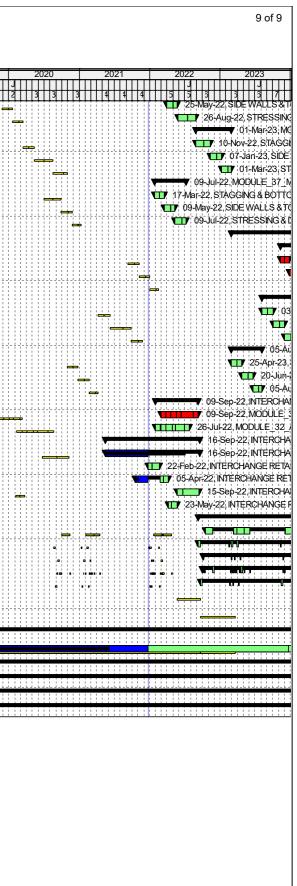


MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION
(CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE
UNDER IDENTIFICATION NO MMRDA/ENG/000753

ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME_ABSTRACT (PACKAGE-2)

								1				1010			2010		_
#	Activity	ly ID	Activity Name	Duration	BL Project Start	BL Project Finish	Actual Start	Actual Finish	Schedule % Complete	Performance % Complete		2018		J	2019	1,11	J 2
497		SIDE WALLS & TOP SLAB		50	25-Nov-19	22-Jan-20			100%	0%	1111	ЦЦ		++++	11111	1111	1
498		STRESSING & DESTAGGIN	G	45	22-Jan-20	16-Mar-20			100%	0%							j
499		MODULE_36_MJP9-MJP8-M	AJP7-MJP6-MJP5-MJP4	145	16-Mar-20	29-Oct-20			100%	0%							-
500		STAGGING & BOTTOM SLA	B	50	16-Mar-20	14-May-20			100%	0%							ł
501		SIDE WALLS & TOP SLAB		50	14-May-20	17-Aug-20			100%	0%							1
502		STRESSING & DESTAGGIN	G	45	17-Aug-20	29-Oct-20			100%	0%							1
503		MODULE_37_MJP4-MJP3-N	AJP2-MJP1-MP252	125	30-Jun-20	08-Jan-21			100%	0%							1
504		STAGGING & BOTTOM SLA	В	41	30-Jun-20	29-Sep-20			100%	0%							-
505		SIDE WALLS & TOP SLAB		45	29-Sep-20	24-Nov-20			100%	0%	H.U.						
506		STRESSING & DESTAGGIN	G	39	25-Nov-20	08-Jan-21			100%	0%							1
507		INTERCHANGE BOX GIRDER	INSTALLATION_CA	342	30-Oct-20	15-Feb-22			90.91%	0%							-
508		MODULE_28_MP249-CAP1	-CAP2-CAP3-CAP4	125	08-Sep-21	15-Feb-22			75%	0%							
509		STAGGING & BOTTOM SLA	B	41	08-Sep-21	08-Nov-21			100%	0%							
510		SIDE WALLS & TOP SLAB		45	08-Nov-21	30-Dec-21			75%	0%							
511		STRESSING & DESTAGGIN	G	39	30-Dec-21	15-Feb-22			0%								-
512		MODULE_29_CAP4-CAP5-C	CAP6-CAP7-CAP8	145	09-Apr-21	23-Nov-21			100%	0%							-
513		STAGGING & BOTTOM SLA	В	50	09-Apr-21	11-Jun-21			100%	0%							
514		SIDE WALLS & TOP SLAB		50	11-Jun-21	28-Sep-21			100%	0%							
515		STRESSING & DESTAGGIN	G	45	28-Sep-21	23-Nov-21			100%	0%							
516		MODULE_30_CAP8-CAP9-C	CAP10-CAA2	135	30-Oct-20	08-Apr-21			100%	0%							1
517		STAGGING & BOTTOM SLA	B	47	30-Oct-20	24-Dec-20			100%	0%							
518		SIDE WALLS & TOP SLAB		48	25-Dec-20	19-Feb-21			100%	0%							1
519		STRESSING & DESTAGGIN	G	40	20-Feb-21	08-Apr-21			100%	0%							
520		INTERCHANGE BOX GIRDER	INSTALLATION_AM	150	14-Oct-19	19-Aug-20			100%	0%							
521		MODULE_31_AMA2-AMP8-A	AMP7-AMP6-AMP5-AMP4	125	14-Oct-19	11-Mar-20			100%	0%							-
522		MODULE_32_AMP4-AMP3-A	AMP2-AMP1-MP259	130	10-Feb-20	19-Aug-20			100%	0%							
523		INTERCHANGE RETAINING ST	RUCTURE	165	11-Mar-19	06-Nov-20	15-May-21		100%	15.66%							ł
524		INTERCHANGE RETAINING S			24-Jun-20	06-Nov-20	15-May-21		100%								1
525		INTERCHANGE RETAINING S			11-Mar-19	08-May-19			100%								
526		INTERCHANGE RETAINING S			09-May-19	11-Jul-19	18-Oct-21		100%	5.23%							
527		INTERCHANGE RETAINING S			06-Feb-20	24-Mar-20			100%		11111						ł
528		INTERCHANGE RETAINING S			12-Jul-19	24-Oct-19			100%	0%						-	1
529		MISCELLANEOUS & FINISHING	G WORKS		19-Aug-20	28-Apr-22			50%								-
530		EXPANSION JOINT			01-Oct-20	22-Apr-22			0%								-
531		CRASH BARRIER & GURARD	RAILS		19-Aug-20	21-Feb-22			50%	0%							
532		WATER PROOFING			10-Sep-20	08-Mar-22			50%	0%							;
533		PAVEMENT			07-Sep-20	28-Apr-22			50%	0%							;
534		DRAINAGE WORKS			28-Aug-20	26-Feb-22			50%	0%							-
535	F	PROJECT HANDINGOV	'ER	65	24-May-22	22-Sep-22			0%	0%							
536	I	DEFECT LIABILITY PE	RIOD (DLP)	730	22-Sep-22	21-Sep-24			0%	0%		11-11		+			-
537		PRICE SCHEDULE		2574	23-Mar-18	21-Mar-23	23-Mar-18		85.79%	39.5%	-						Ì
538		SCHEDULE-1		2574	23-Mar-18	21-Mar-23	23-Mar-18		89.85%	85.03%					· · · · · ·		-
539		SCHEDULE-2		1644	23-Mar-18	22-Sep-22	23-Mar-18		83.49%	74%			<u></u>	<u></u>	<u></u>		-
540		SCHEDULE-3			23-Mar-18	22-Sep-22	23-Mar-18		83.49%	63.17%	-	÷		++++	+++++	++++	Ļ
541		SCHEDULE-12			23-Mar-18	22-Sep-22	23-Mar-18		83.49%	75.93%	-	<u>i i i i</u>		<u></u>	<u></u>		į
UT1					20100-10	· · · ·					لل ال						
542		SCHEDULE-13		4044	23-Mar-18	22-Sep-22	23-Mar-18		83.49%	0.28%	1 1	_	_				

Project Baseline Bar	Critical Remaining Work Summary	EMPLOYER:	CONTRACTOR:	Date
J		MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY		25-Dec-21
Actual Work	♦ Milestone		DAEWOO - TPL JV	
Remaining Work	% Complete	(MMRDA)		
6	· ·			



Revision	Checked	Approved
R0		

Attachment 8- Package-3's Construction Programme Updated as on 25th December 2021

)	Activity Name	Original BL1 Start	BL1 Finish	Start	Finish		hedule Layo	Performance	Earned Value	Planned Value	Schedule	2022 2023 2024 2025
-		Duration				%	%	% Complete	Cost	Cost	erformance	
THL Pka 3	Construction Schedule Dec'21	1783 23-Mar-18	21-Sep-21	23-Mar-18A	10-Jul-24	omplete	Complete 100%	66.84%	Rs6,976,392,543	Rs10,437,570,645	0.67	. 10-Jul-24, M1FiL
	nt of Mumbai Trans Harbour Link Project	1783 23-Mar-18	21-Sep-21	23-Mar-18A	10-Jul-24		100%	66.84%	Rs6,976,392,543	Rs10,437,570,645	0.67	🗸 : 10-Jul i -24, Procu
t	Commencement Date (CD)	0		23-Mar-18A		100%	0%	100%	Rs0	Rs0	0.00	CommencementDate (CD), 23-Mar-18A
- Physical Mile	. ,	958 18-Sep-18	21-Sep-21	31-Jul-19A	10-Jul-24		0%	0%	Rs0	Rs0		↓ 10-Jul-24, Physic
E KD1001	KD1 [Construction programme, completion of Soil Investigatic	0 18-Sep-18	18-Sep-18	31-Jul-19A	31-Jul-19A	100%	100%	100%	Rs0	Rs0	0.00	KD1 (Constructio
🔲 KD1002	KD2 [NOC for technical design doc & drawing for foundation,	0 17-Dec-18	17-Dec-18	31-Jan-20A	31-Jan-20A	100%	100%	100%	Rs0	Rs0	0.00	KD2[NOC for te
🛑 KD1003	KD 3 [NOC for Good for construction drawing for foundation, ${\ensuremath{\xi}}$	0 15-Jun-19	15-Jun-19	22-Mar-20A	22-Mar-20A	100%	100%	100%	Rs0	Rs0	0.00	<u></u>
🛑 KD1004	KD4 [Substantial completion of foundation, piles (if applicable	0 21-Mar-20	21-Mar-20	31-May-20A	31-May-20A	100%	100%	100%	Rs0	Rs0	0.00	KD4[Substantia
🛑 KD1005	KD 5 [Substantial completion of pile caps (if applicable), piers	0 19-Sep-20	19-Sep-20	01-Feb-23	01-Feb-23	0%	100%	0%	Rs0	Rs0	0.00	KD5 (Substantia
🛑 KD1006	KD 6 [Substantial completion superstructure (PC/CIS/SS) & as	0 20-Mar-21	20-Mar-21	17-Feb-24	17-Feb-24	0%	100%	0%	Rs0	Rs0	0.00	KD6[Substantia
🛑 KD1007	KD7 [Substantial completion of kerb/traffic signs, Marking & n	0 24-Jul-21	24-Jul-21	01-Jun-24	01-Jun-24	0%	100%	0%	Rs0	Rs0	0.00	KD7 [Substantia
🔲 KD1008	KD8 [Final completion & handing over]	0 21-Sep-21	21-Sep-21	10-Jul-24	10-Jul-24	0%	100%	0%	Rs0	Rs0	0.00	KD8 [Final comp
Financial Mil		1781 18-Sep-18	21-Sep-21	23-Mar-18A	10-Jul-24		0%	0%	Rs0	Rs0	0.00	10-Jul-24, Finan 24-Dec-23, Intelface Mile
Interface Mile		1063 17-Dec-18	06-Mar-21	17-Sep-18A	24-Dec-23		0%	0%	Rs0	Rs0	0.00	
Document St		45 23-Mar-18	06-May-18	06-Apr-18A	30-Sep-19A		100%	100%	Rs74,992,895	Rs74,992,895	1.00	
	Obligation / Land Handover	151 19-Apr-18	18-Sep-18	23-Mar-18A 25-Jan-19A	25-Dec-21 19-Jun-22		0% 100%	0% 96,26%	Rs0 Rs137,031,195	Rs0 Rs142,351,995	0.00	
	fice (Sch 01- General Item) otechnical Investigation Works	797 20-Aug-18 346 19-Apr-18	16-Sep-21 22-Oct-18	19-Apr-18A	30-Sep-19A		100%	90.20%	Rs242,300,945	Rs142,351,995 Rs242,300,945	0.00	cal Investigation Works
Design Work		729 07-May-18	14-Jun-19	25-Apr-18A	28-Jan-22		100 %	99.62%	Rs158.521.395	Rs159,123,270		▼ 28-Jan-22, Design/Works
Procurement		1308 12-Sep-18	08-Jun-21	15-Feb-19A	02-Jan-24		100%		Rs1,447,560,584	Rs1.685,124,737	0.86	▼ 02.Jan-24, Procuremen
	Fabrication & Manufracturing Works	1036 27-Sep-18	10-Feb-20	21-Feb-19A	17-Feb-23		100%	50%	Rs195.303.446	Rs390,606,723	0.50	✓ 17-Feb-23, Co-ordinated Fabrication 8
		1544 20-Jul-18	23-Jul-21	26-Sep-18A	01-Jun-24		100%	65.65%	Rs4.637.176.610	Rs7.063.471.551	0.66	▼: 01÷Jun-24, Constr
	uction Activity	962 20-Jul-18	01-Jul-19	26-Sep-18A	17-May-22		100%	79.03%	Rs447	Rs565	0.79	
Sub Struct	ures (Open Foundation, Pier ,Pier Cap)	1016 08-Dec-18	07-Nov-20	05-Dec-18A	17-Jun-22		100%	87.87%	Rs2,981,387,376	Rs3,392,806,949	0.88	
Super Stru		998 27-Feb-19	12-Apr-21	11-Sep-19A	14-Oct-23		100%	50.46%	Rs710,950,756	Rs1,408,931,773	0.50	14-Oc-23; Super Structures
	Expansion Joints	376 03-Aug-20	12-Apr-21	11-Nov-20A	13-Nov-23		100%	11.88%	Rs1,242,264	Rs10,454,697	0.12	13-Npv-23, Bearings & Exp
RE Wall	illaries & Miscellaneous Item	537 12-Aug-20 582 27-Feb-19	23-Jul-21 18-Feb-21	18-Jul-22 01-Nov-21A	01-Jun-24 06-Feb-24	·	<u>100%</u> 100%	0%	Rs0 Rs902,653	Rs180,922,099 Rs461,687,488	0.00	
Road Work		1243 20-Apr-19	18-May-21	16-Feb-19A	29-Feb-24		100%	58.6%		Rs1,608,667,980	0.59	
Completion of	of Interface Activity	565 19-Sep-20	06-Mar-21	25-Dec-21	25-Dec-23		0%	0%	Rs0	Rs0	0.00	▼ 25-Dec-23, Completion o
Provisional S	Sum	1162 23-Apr-18	23-Aug-21	30-Nov-18A	02-Feb-24		100%	12.29%	Rs83,505,472	Rs679,598,496	0.12	▼ 0 <mark>2</mark> -Feb-24, Provisional
	ommissioning Works	33 26-Jul-21	20-Sep-21	01-Jun-24	10-Jul-24		100%	0%	Rs0	Rs33	0.00	10-Jul-24,Testir
	Testing & Commissioning Works	25 26-Jul-21	11-Sep-21	01-Jun-24	01-Jul-24	0%	100%	0%	Rs0	Rs25		Testing & Comm
ToC1001 ToC1002		6 13-Sep-21	18-Sep-21	01-Jul-24	08-Jul-24	0%	100%	0%	Rs0	Rs6		SafetyTest&Au
	TOC	2 19-Sep-21	20-Sep-21	08-Jul-24	10-Jul-24	0%	100%	0%	Rs0	Rs2	0.00	ТОС

Actual Level of Effort Remaining Work Milestone Page 1 of 1 Baseline Schedule Baseline Schedule				-	
	 Actual Level of Effort 	Remaining Work	♦ ♦ Milestone	Page 1 of 1	Baseline Schedule
Actual Work Critical Remaining Work V Summary	Actual Work	Critical Remaining Work	summary		

Attachment 9- Project Progress Photos for December 2021



Package 1- Site Progress Photos

Photo No. 1: Erection of segment at Span MP47-48 south

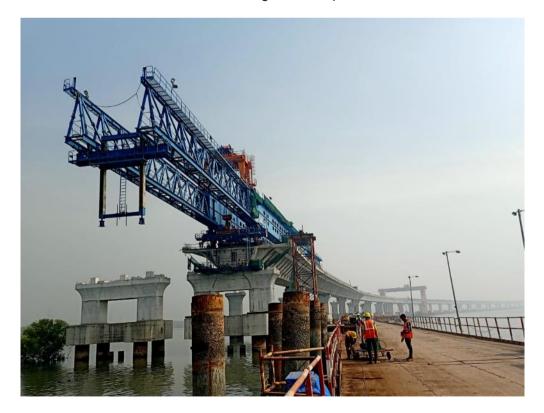


Photo No. 2: Erection of segment at MP04-05 south



Photo No. 3: A view of the erected spans at the intertidal area (MP 11 to MP 50) looking towards Navi Mumbai

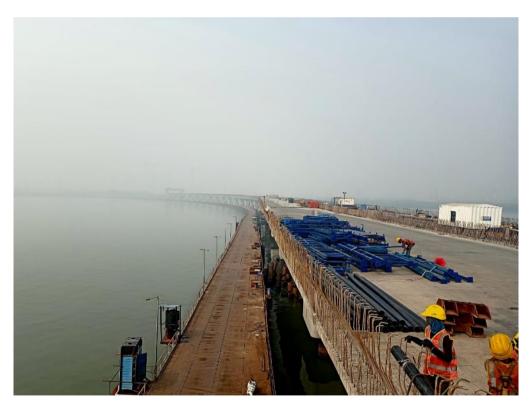


Photo No. 4: A view of the Erected Spans at the Intertidal area (MP 40 to MP-05) looking towards Navi Mumbai



Photo No. 5: Erection of LG-05 at MP53-54 South in progress



Photo No. 6: FP-03 Pier cap reinforcement activity in progress



Photo No.7: Stressing activity for Interchange LPS Ramp in progress



Photo No. 8: OSD04-N Assembly ready for loadout - Assembly Yard



Photo No. 9: Concreting for Pier MP126 South in progress

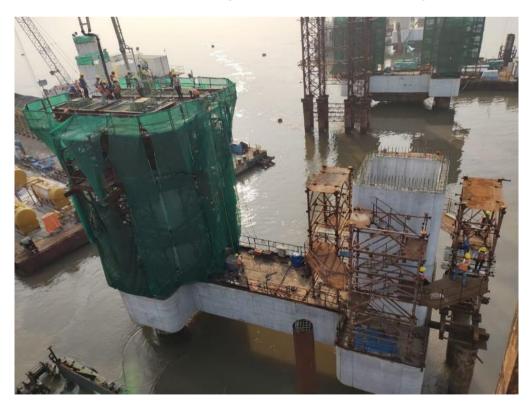


Photo No. 10: Concreting of Pier Cap - MP 148 South in progress



Photo No. 11: View of LG-03 (erection of span MP87-88)



Photo No. 12: OSD barge at MP130 (Trussell erection) in progress



Package 2 – Site Progress Photos

Photo No. 1: LG-1 Segment gluing at Span MP 215-216 RHS in progress

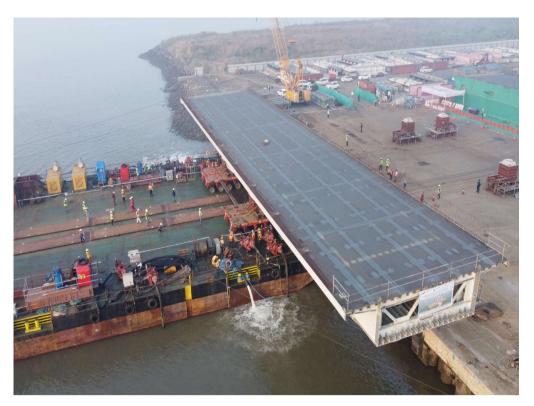


Photo No. 2: Load-out of the 1st OSD Span on the barge



Photo No. 3: OSD lifted by Strand Jack for Load Test at Karanja Port in progress



Photo No. 4: Sonic Tube Testing in progress at MP 170 RHS in progress



Photo No. 5: Pile boring at MP 173 RHS in progress



Photo No. 6: OSD Pier Cap reinforcement tying at MP 180 LHS and RHS in progress



Photo No. 7: Pile cap formwork alignment at MP 176 RHS in progress



Photo No. 8: Cast in situ bottom slab concreting at Ramp MA in progress



Photo No. 9: Pier Head Segment concreting at MP 258 RHS



Photo No. 10: Pile cap concreting at MP 169 LHS in progress

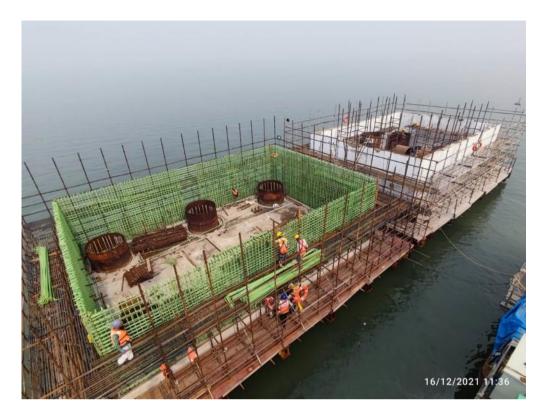


Photo No. 11: PC Shell wall reinforcement tying at MP 185 RHS in progress

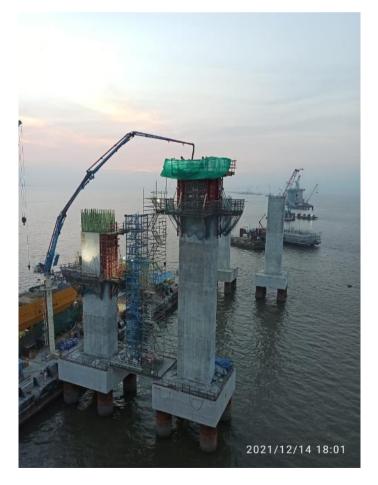
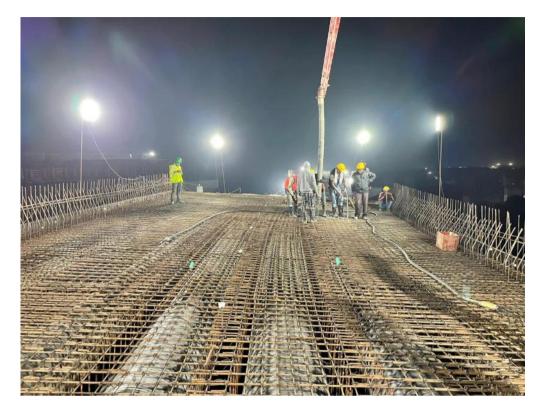


Photo No. 12: Pier final lift concreting at MP 187 LHS in progress



Package 3 – Site Progress Photos

Photo No. 1: Voided slab MPP 9-8 concrete pouring in progress



Photo No. 2: MJP Loop Chirle RE wall work in progress



Photo No. 3: LMP 276 Portal Piercap reinforcement in progress



Photo No. 4: RMP 271 Pier 3rd lift Reinforcement work in progress

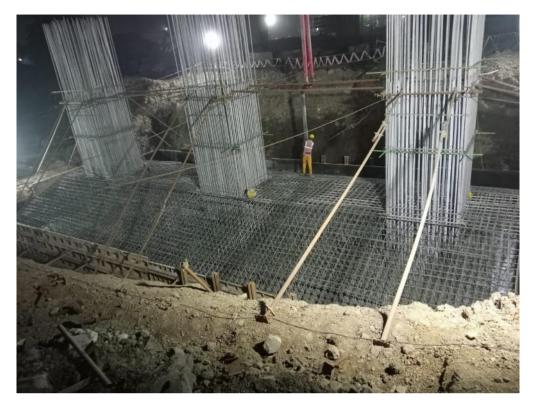


Photo No. 5: LP-24 foundation concrete pouring work in progress



Photo No. 6: LMP 273 Foundation completed



Photo No. 7: LMP 271 Foundation completed



Photo No. 8: RP 24C pier 1st lift 6.5m concrete pouring work in progress



Photo No. 9: RP 22 Portal concrete pouring work in progress



Photo No. 10: ROB Girder Structure Steel Painting at Global Steel Company in progress



Photo No. 11: Span LP 22-23 Staging work for Cast-in-situ 3 Cell box girder in progress



Photo No. 12: Span LMP 282-283, 1st stage stressing work in progress



No. MMRDA/MTHL-PIU/JICA/QPR-20/ /156/2022

To,

Chief Representative, Mumbai Trans Harbour Link Project (I) 16th Floor, Hindustan Times House, 18-20, Kasturba Gandhi Marge, New Delhi-110-001

Kind Attn: Mr. Katsuo Matsumoto,

Sub : Mumbai Trans Harbour Link Project (I) (ID-P255) - Quarterly Progress Report (QPR) No. 20 for January 2022 to March 2022.

Sir,

The loan agreement for the Official Development Assistance (ODA) loan for the Mumbai Trans Harbour Link Project (I) is signed between Mumbai Trans Harbour Link Project (I) and Mumbai Metropolitan Region Development Authority (MMRDA) on 31st March 2017 & 29th March 2020 with MMRDA as a direct borrower of the loan.

The Quarterly Progress Report (QPR) No. 20 for the Mumbai Trans Harbour Link Project (I) for the period of January 2022 to March 2022 is enclosed herewith for information please.

Thanking you.

Yours faithfully,

(S. A. Wandhekar) Engineer- In- Chief

Encl.: QPR-20 (January 2022 to March 2022)

Mumbai Metropolitan Region Development Authority

Bandra-Kurla Complex, Bandra East, Mumbai 400 051. T +91 22 2659 1234 EPABX +91 22 2659 0001 / 4000 F +91 22 2659 1112 / 1264 https://mmrda.maharashtra.gov.in





Mumbai Metropolitan Region Development Authority

Mumbai Trans Harbour Link Project

Quarterly Progress Report - No. 20

(From 1st January 2022 to 31st March 2022)



Mumbai Trans Harbour Link Project Quarterly Progress Report No. 20 1st January 2022 to 31st March 2022 Loan Agreement No. ID-P255 (Tranche–I)

ORGANIZATION INFORMATION

	Mumbai Metropolitan Region Development Authority				
<u>Lisels</u>	Person in Charge	Metropolitan Commissioner, MMRDA			
Borrower	Contact Address	M.M.R.D.A. New Office Building, Bandra-Kurla Complex Plot no. R-5, R-6 & R-12, E Block, Bandra (East), Mumbai - 400051 Phone: +91-22-26594000 Fax No:+91-22-2659 1264			
	Mumbai Trans Harbour Link Project Implementation Unit				
Executing	Headed by:	Chief Engineer Mumbai Trans Harbour Link Project Implementation Unit			
Agency	Contact Address	M.M.R.D.A. New Office Building, Bandra-Kurla Complex, Plot no. R-5, R-6 & R-12, E Block Bandra (East), Mumbai - 400 051 Phone: +91-22-2659 4034 Fax No: +91-22-2659 4179			

Details of JICA Loan

	JICA ODA Loan Portion:	238,572 million Japanese YEN (JPY)
Source of Finance	Tranche-I:	144,795 million Japanese YEN (JPY) (Loan Agreement signed on 31 st March 2017)
	Tranche-II:	66,909 million Japanese YEN (JPY) (Loan Agreement signed on 27 th March 2020)
Terms and Conditions of JICA ODA Loan (Tranche-1)	Repayment Period:	30 years, including 10 years of grace period.



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DOCUMENT VERIFICATION AND REVISION RECORD

PROJE	ECT NAME	Mumbai Trans Harbour Link Project				
DOC NO.		20		TE OF ISSUE	22/04/2022	
DOCT	TITLE	Quarterly Progress Report No. 20				
REV No.	DATE OF ISSUE	DESCRIPTION	PREPAREI BY	CHECKED BY	APPROVED BY	
RO	05/07/2017	Quarterly Progress Report No. 1 (Apr-Jun 17)	J Senthil	Dr T K Sundara	m Dr Robin Sham	
RO	05/10/2017	Quarterly Progress Report No. 2 (Jul-Sep 17)	J Senthil	Dr T K Sundara	m Dr Robin Sham	
RO	05/01/2018	Quarterly Progress Report No. 3 (Oct-Dec 17)	J Senthil	Dr T K Sundara	m Dr Robin Sham	
RO	05/04/2018	Quarterly Progress Report No. 4 (Jan-Mar 18)	J Senthil	Dr T K Sundara	m Dr Robin Sham	
RO	24/07/2018	Quarterly Progress Report No. 5 (Apr-Jun 18)	Prashant I	3 Dr T K Sundara	m Dr Robin Sham	
RO	10/10/2018	Quarterly Progress Report No. 6 (Jul-Sep 18)	Prashant I	3 Dr T K Sundara	m Dr Robin Sham	
R1	08/02/2019	Quarterly Progress Report No. 7 (Oct-Dec 18)	Prashant I	J Senthil/ Dr T K Sundara	Dr Robin Sham	
RO	05/04/2019	Quarterly Progress Report No. 8 (Jan-Mar 19)	Prashant (3 J Senthil	V. D. Sharma/ D Robin Sham	
RO	18/09/2019	Quarterly Progress Report No. 9 (Apr-Jun 19)	Prashant E	3 Mr. Som Ghos	h Dr Robin Sham	
RO	13/11/2019	Quarterly Progress Report No. 10 (Jul-Sep 19)	Prashant B	3 Mr. Som Ghos	h Dr Robin Sham	
RO	11/02/2020	Quarterly Progress Report No.11 (Oct-Dec 19)	Prashant 8	3 Mr. Som Ghos	h Dr Robin Sham	
RO	25/11/2020	Quarterly Progress Report No.12 (Jan-Mar 20)	Prashant B	3 Mr. Som Ghos	h Dr Robin Sham	
RO	15/12/2020	Quarterly Progress Report No.13 (Apr-Jun 20)	Prashant B	3 Mr. Som Ghos	h Dr Robin Sham	
RO	06/01/2021	Quarterly Progress Report No.14 (Jul-Sept 20)	Prashant B	3 Mr. Som Ghos	h Dr Robin Sham	
RO	12/02/2021	Quarterly Progress Report No.15 (Oct-Dec 20)	Prashant E	3 Mr. Som Ghos	h Dr Robin Sham	
RO	06/05/2021	Quarterly Progress Report No.16 (Jan-Mar 21)	Prashant E	3 Mr. Som Ghos	h Dr Robin Sham	
RO	30/07/2021	Quarterly Progress Report No.17 (Apr-Jun 21)	Prashant B	Mr. Som Ghos	h Dr Robin Sham	
RO	11/11/2021	Quarterly Progress Report No.18 (Jul - Sep 21)	Prashant E	3 Mr. Som Ghos	h Dr Robin Sham	
RO	17/01/2022	Quarterly Progress Report No.19 (Oct-Dec 21)	Prashant E	3 Mr. Som Ghos	h Dr Robin Sham	
RO	22/04/2022	Quarterly Progress Report No.20 (Jan - Mar 22)	Prashant E	Mr. Som Ghos	n Dr Robin Sham	

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1.0 PROJECT DESCRIPTION

1.1 Project Objective

Original:

To improve connectivity in Mumbai Metropolitan region by constructing the Mumbai Trans Harbour Link connecting Mumbai with Navi Mumbai, thereby contributing to mitigation of traffic congestion and promoting regional economic development.

Actual (P/R, PCR)

There is no change in the Project Objective.

1.2 Necessity of the Project

The Project is consistent with the development policy, sector plan, national/regional development plans and demand of target group of the recipient country.

Benefits from MTHL Project

- Saving in travel time for commuters from Mumbai to Navi Mumbai.
- Improved comfort and accessibility between the island and the mainland.
- Reduced operating costs of vehicles due to lesser congestion.
- Smooth traffic flow from Navi Mumbai airport to Mumbai Island.
- Accelerated economic development of Navi Mumbai and nearby regions.
- Greater economic integration of Mumbai Island with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug.
- Improvement in environment and reduced pollution levels.
- · Improved safety due to reduction in accidents.
- Improvement in trade competitiveness through faster and improved logistics.
- Accelerated growth of Navi Mumbai.
- Decongestion of Mumbai Island and dispersal of population to Navi Mumbai region & beyond.

Necessity of the Project

- Although the urbanization in India has been rapidly progressing, infrastructure development in the urban areas has not caught up its progress. Particularly, the traffic congestion in the urban areas due to a lack of road network hinders the economic development. Thus, Government of India (GOI) places transport and connectivity as one of the "Growth Enablers" and plans to enhance road network in the "Three Year Acton Agenda 2017-2018 to 2019-20 (NITI Aayog)".
- Mumbai Metropolitan Region, which includes Mumbai and Navi Mumbai, has about 18.4 million people in population as of 2011 (Census 2011) and the population density reaches 20,694 people per square km in the center of Mumbai, which is one of the most overpopulated and high-density cities in the world.
- 3. Mumbai, the narrow stretch of land that has traditionally been the epicentre of India's commerce, has seen a steady increase in population in the last three decades despite obvious spatial constraints. Thus, the development of Navi Mumbai has been identified as

1st January to 31st March 2022

Page 5 of 63

an urgent requirement for broad development in Mumbai Metropolitan Region.

- 4. The Government of Maharashtra (GoM), of which Mumbai Metropolitan Region is under jurisdiction, has been facilitating various development plans particularly in Navi Mumbai area, which stands at the opposite site of Mumbai across the Mumbai Bay and still has spacious area for development, such as a new international airport, Special Economic Zone (SEZ) and expansion of Jawaharlal Nehru Port in order to promote the sustainable economic development in Mumbai Metropolitan Region.
- Furthermore, a lack of connectivity in Mumbai has stunted its growth. The GoM has given importance to construct the faster connection with Mumbai to Navi Mumbai International Airport, Jawaharlal Nehru Port, Mumbai-Pune expressway and main hinterland.
- 6. Accordingly, the Mumbai Trans Harbour Link (MTHL) has been identified as the important infrastructure to improve the connectivity between Mumbai and Navi Mumbai and continue economic development in Mumbai Metropolitan Region.

The MTHL is proposed to be developed as an expressway link comprising of a dual threelane main carriageway bridge connecting Sewri in Mumbai to Chirle in Navi Mumbai. When completed, MTHL will reduce the distance between Mumbai and Navi Mumbai and will help save approximately an hour in travel time. Also, development of Navi Mumbai along with the imminent construction of the Navi Mumbai airport will lead to increased traffic between Mumbai and Navi Mumbai. Consequently, the project is envisaged to; improving accessibility between Mumbai and Navi Mumbai, accelerating growth of Navi Mumbai, smooth traffic flow from Navi Mumbai airport to Mumbai, accelerating economic development of Navi Mumbai and surrounding regions, greater economic integration of Mumbai with Navi Mumbai and extended regions of Pune, Goa, Panvel and Alibaug, and decongestion of Mumbai and dispersal of population to Navi Mumbai region and beyond.

- 7. The Comprehensive Transportation Study (CTS) for Mumbai Metropolitan Region which was guided by Mumbai Metropolitan Region Development Authority (MMRDA) and supported by World Bank, was completed in July 2008, which was over 25 years after the issuance of the last comprehensive transport study. The report provided a vision for Mumbai's future transportation as seamless and integrated system, in which commuters can make their journeys safely and conveniently by various modes of transport, particularly by public transport, and recommended the development of Multi Modal Corridor to take care of the varied travel demands of the region for the period up to 2031. The CTS proposed to develop the highway network in the region. The MTHL has been regarded as the priority road for Mumbai, considering its function and importance connecting between Mumbai and Navi Mumbai.
- Necessity of the Project: To promote economic development in Mumbai Metropolitan Region it is essential to improve the connectivity between Mumbai and Navi Mumbai, by constructing MTHL.

Actual (P/R, PCR)

There is no change in the Necessity of the Project preamble.

1.3 Rationale of the Project Design

- Timing, Scale, Technology of the Project:
- 1st January to 31st March 2022



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 At the opening year 2022, the daily traffic on the main bridge is expected to be 39,300 PCU. The traffic is projected to increase up to 103,900 by 2032 and up to 145,500 by the year 2042. The daily breakdown by vehicle class on the main bridge link is presented in the Table 1.3.1 below:

Vehicle Type	and the second se	ewri Interch r Interchange		Between Shiv Chirle Interch	vaji Nagar Inte nange	rchange and
1.0.0	2022	2032	2042	2022	2032	2042
Car	24,100	66,400	94,100	4,900	21,300	43,300
Taxi	2700	14,100	20,200	100	400	2,300
Bus	2,700	3,700	3,700	2,700	3,700	3,700
LCV	2,200	4,100	5,600	700	1,300	1,800
HCV	3,000	6,500	8,100	1,000	2,000	2,200
MAV	4,600	9,100	13,800	400	900	1,700
Total	39,300	103,900	145,500	9,800	29,600	55,000

LCV: Light Commercial Vehicle; HCV: Heavy Commercial Vehicle; MAV: Multi Axle Vehicle

- At the opening year in 2022, the traffic flow on MTHL represents a diversion of 10% on the traffic across Thane creek which will increase up to 16% in 2032. If only Thane Creek Bridge is considered, then the diverted traffic from the bridge will be 21% in 2022 which will rise up to 35% in 2032.
- 3. 6-lane of main carriageway was decided by GoM. It was reviewed based on the forecasted result of future traffic volume by Manual of Specification and Standards for Expressways (IRC: SP:99-2013). The result of the review shows that 6-lane will be required in 2032 (10 years later after traffic open). Although, 8-lane will be required in 2042, it is assumed that the level of service of MTHL would be maintained as additionally metro might be constructed in parallel with MTHL.

Design Parameters / Overall Design

- 4. The MTHL which is 21.8 km long road bridge partly on the land and partly over the creek across the Mumbai Bay between Sewri in Mumbai and Chirle in Navi Mumbai, is to be constructed with the approach sections and interchanges. ITS (Intelligence Transport System) and the other necessary facilities will be provided for full access-controlled bridges.
- As per the provisions of IRC (Indian Road Congress) SP:99-2013, the Width of each lane of the Main Carriageway is 3.5 meters.
- 6. When the design speed is 100 km/h according to the traffic demand forecast the large vehicle, ratio will be as low as 9.4% (2022).
- 7. The shoulder width of bridge towards outside of each carriageway is 2.5 meters and towards median side of each carriageway is 0.75 meters.
- The major portion of MTHL structure is on sea and partly towards ends is on land with different type and with different span, viz., PC box girder with 50 m spans which is typically applied on marine viaduct since, it is economical, easy to construct and maintain.

- 9. On the land portion, the PC box girder having span of generally 30m is used.
- 10. As far as the location in which long span (150-180 m) is required to cross significant obstacles, such as navigation channels, pipelines and creeks, the steel box girder bridge with steel deck is proposed with large block erection method to shorten the construction period.
- 11. The project is coded with three lanes of traffic in each direction. The reference toll is presented in the Table 1.3.2 below for each vehicle class in Year 2022 (based on 2015 monetary value reflecting price escalation).

Table 1.3.2: Base Toll Rates (Rs) for different class of vehicles between Interchanges

Vehicle Type	Sewri to Shivaji Nagar	Shivaji Nagar to Chirle	Total
Car	180	60	240
Bus	420	130	550
LCV	240	70	310
HCV	420	130	550
MAV	600	180	780

Intelligent Transport Systems (ITS) and Toll Management System (TMS)

- 12. The Toll Management System will be implemented in MTHL to collect tolls from all road users of MTHL. Two types of toll collection method will be adopted: Electronic Toll Collection (ETC) and Manual (paying by cash).
- 13. The lanes corresponding to these toll collection methods are dedicated ETC lanes and Manual lanes, and Manual system shall be installed to ETC lanes for backup to be able to cope at the time of the trouble of ETC equipment failure.

Traffic management System

- 14. Traffic Management System is a support system to Manage the traffic on MTHL safely and efficiently. The System consists of the information collection system including Closed-Circuit Television (CCTV), Emergency Call Box (ECB), Automatic Traffic Counter-Cum-Classifier (ATCC) and Meteorological Data System (MDS), and Information Dissemination System including Variable message Sign (VMS).
- 15. CCTV Cameras shall be installed at around three places per 1 km, on Both side of main route and the monitoring of the traffic condition of the whole stretch of MTHL will be almost enabled in the Traffic Control Centre and VMS displays the appropriate information for road users on the collated information.
- 16. The Information collected by these devices shall be transmitted to the Command Control Centre through the medium of an Optical Fiber Cable laid in MTHL.

Actual (P/R, PCR)

There is no change in the Rationale of the Project Design.



2.0 PROJECT IMPLEMENTATION

2.1 Project Scope

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Refer Table 2.1.1 and 2.1.2 for details on Scope of the Project.

Table 2.1.1 Comparison of Original and Actual location

Location	Original: (P/M) Mumbai Metropolitan Region Development	Actual: (P/R and PCR)
	Authority, Mumbai, State of Maharashtra	

Table 2.1.2 Comparison of Original and Actual Scope

Items	Original	Actual
Construction	work: 6-lane Marine Bridge Road (21.8 km)	
Package-1 Ch 0+000- 10+380 (10.380 km)	 1 Interchange (Sewri) Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder) Viaduct Substructure (RC Concrete Structure) Viaduct Foundation (Bored piles) Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers) 	(P/R and PCR)
Package-2 Ch 10+380- 18+187 (7.80 km)	 1 Interchange (Shivaji Nagar) Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder) Viaduct Substructure (RC Concrete Structure) Viaduct Foundation (Bored piles) Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers) 	(P/R and PCR) Actual: No View Barriers
Package-3 Ch 18+187- 21+800 (3.61 km)	 2 Interchanges (State Highway-54, National Highway-4B) Viaduct superstructure (Marine Portion: PC Box Girder & Steel Box Girder with Steel Slab Land Portion: PC Box Girder & PC-I Girder & Steel Truss Girder for Rail-over-Bridges (ROB) Viaduct Substructure (RC Concrete Structure) Viaduct Foundation (Bored piles) Cutting Section (6-lane with Slope Protection) Road Furniture and roadside facilities (Traffic Signs and Pavement Marking, Traffic Safety Devices, Crash Barrier, Drainage Structures, Noise Barriers, View Barriers) 	<i>(P/R and PCR)</i> Actual: <i>No</i> Noise Barriers & <i>View Barriers</i>

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Items	Original	Actual
Package-4 ITS (Intelligent Transport System)	 Administrative Buildings Toll Booths (1 for main alignment and each on and off rumps for 3 interchanges) Traffic Management System (Traffic Control Centre, Closed Circuit Television (CCTV), Meteorological Observation System (MET), Emergency Call Box (ECB), Automatic traffic Counter-cum-Classifier (ATCC), Variable Message Sign (VMS)) Highway Lighting (Whole sections Low-positioned lighting for some sections) Electrical Powering System including HV/ LV Ring Network across the Bridge. 	(P/R and PCR)
Consulting Services	 Tender Assistance Construction Supervision Facilitation of Implementation of Environmental Management Plan (EMP), Environmental Monitoring plan (EMoP). 	(P/R and PCR)



1st January to 31st March 2022

2.2 Implementation Schedule

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2.2.1 The Original Implementation Schedule

Table 2-2-1 Comparison of Original and Actual Schedule

	Items	Original	Status (P/R and PCR) as on 31 st March 2022
1)	Completion of Land Acquisition and Resettlement	March 2019	March 2022
2)	Consulting Services	and the second second second	
	a) Selection of Consultant	May – December 2016	May – December 2016
	b) Consultancy Works	December 2016 – September 2024	December 2016 – September 2024
3)	Selection of Contractor		1
Pa	ckage-1, Package-2 & Package-3	3 (Civil)	
_	a) Pre-Qualification Process	May – December 2016	May – December 2016
	b) Main Bidding	January – December 2017	January – December 2017
	 c) JICA's Concurrence of Contract 	February-2018	February-2018
Pa	ickage-4 (ITS)		
	a) Pre-Qualification Process	January 2019 – May 2019	January 2020 - May 2020
	b) Main Bidding	June 2019 – September 2020	Jan 2021 – Dec 2021
4)	Civil Construction		
Pa	ckage-1 and Package-2	March 2018 – September 2022	March 2018–September 2023 (Extended)
Pa	ckage-3	March 2018 – September 2021	March 2018 – March 2023 (Extended)
Pa	ckage-4	October 2020 – September 2022	May 2022 – July 2023
5)	Defect Liability Period		
	ckage-1, Package-2 and ckage-4	October 2022 – September 2024	October 2023 – September 2025
Pa	ckage-3	October 2021 – September 2023	April 2023 – March 2025
6)	Commencement of Toll Collection	September -2022	September -2023
7)	Selection of O&M Organization	October 2020 – September 2021	October 2022 – September 2023

Attachment 6, 7 & 8: Package wise construction schedules (progress) updated at the end of 4th Quarter (January- February- March 2022).

2.2.2 Reasons for changes of the schedule and their effects to the Project

(P/R and PCR)

No change in the Implementation Schedule except the selection of O&M Organization timeline.

1st January to 31st March 2022

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2.3 Project Cost

2.3.1.a Comparison of Originally Planned and Actually Incurred Cost BY ITEM

Table 2.3.1.a.(i) Originally Planned Cost BY ITEM

	Foreign	Currency	Portion	Local	Local Currency Portion			Total		
Cost Breakdown	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	Total (Rs. mil)	JICA Portion (Rs. mil)	Others (Rs. mil)	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	
Package-1	34,398	34,398	0	45,376	45,376	0	105,713	105,713	0	
Package-2	26,513	26,513	0	32,617	32,617	0	77,774	77,774	0	
Package-3	759	759	0	8,276	8,276	0	13,766	13,766	0	
Package-4 (ITS)	0	0	0	1,444	1,444	0	2,269	2,269	0	
Package-5 (Geotechnical Investigation)	0	0	0	166	0	166	260	0	260	
Dispute Boards (Package-1, 2, 3 & 4)	63	63	0	45	45	0	134	134	о	
Price Escalation	2,251	2,251	0	7,133	7,133	0	13,460	13,460	0	
Physical Contingency	6,398	6,398	0	9,506	9,489	17	21,338	21,312	26	
Consulting Services	1,650	1,650	0	1,587	1,587	0	4,145	4,145	0	
Land Acquisition*	0	0	0	11,293	0	11,293	17,748	0	17,748	
Administration Cost	0	0	0	4,898	0	4,898	7,698	0	7,698	
GST	0	0	0	18,238	0	18,238	28,663	0	28,663	
Import Tax	0	0	0	13,435	0	13,435	21,114	0	21,114	
Interest during construction	2,942	0	2,942	0	0	0	2,942	0	2,942	
Front End Fee	477	0	477	0	0	0	477	0	477	
Total	75,451	72,032	3,419	154,013	105,967	48,046	317,501	238,572	78,929	

(Note) 1. Exchange Rate: US\$1=Rs. 71.9, US\$1=JPY 113.0, Rs.1 = JPY 1.57

2. Price Escalation (a) Foreign Currency Portion: 1.83% p.a.

(b) Local Currency Portion: 4.13% p.a.

3. Physical Contingency: 10%

4. Base Year for Cost Estimation: December 2018

* Base Cost for Land Acquisition considered in the year 2016 was INR 9,062,669,696. The base cost has been revised to INR 11,293 million considering Price Escalation and 10% Physical Contingency.



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	Foreign	Currency	Portion	Local	Local Currency Portion			Total		
Cost Breakdown	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	Total (Rs. mil)	JICA Portion (Rs. mil)	Others (Rs. mil)	Total (JPY mil)	JICA Portion (JPY mil)	Others (JPY mil)	
Package-1	19,053	19,053	-	33,499	33,499		66,285	66,285		
Package-2	21,225	21,225	-	22,186	22,186		52,375	52,375		
Package-3	623	623	-	6,534	6,534		9,256	9,256		
Package-4 (ITS)	-		-				-			
Package-5 (Geotechnical Investigation)	-			196		196	308		308	
Dispute Boards (Package-1, 2, 3 & 4)				-			-		-	
Price Escalation	-		1	4	4		6	6	-	
Physical Contingency	-			-			-		-	
Consulting Services	253	253		362	362		1,108	1,108		
Land Acquisition*	-			6,712		6,712	10,538		10,538	
Administration Cost	4			4,635		4,635	7,277		7,277	
GST	÷			12,489		12,489	19,608		19,608	
Import Tax	-			-			-		-	
Interest during construction	-			2			-		-	
Front End Fee				4			-		-	
Total	41,154	41,154	-	86,617	62,585	24,032	166,761	129,031	37,730	

Table 2.3.1.a.(ii) Actually Incurred Cost BY ITEM

(Note) 1. Exchange Rate: Rs.1 = JPY 1.57 for MMRDA Portion only

2. Price Escalation (a) Foreign Currency Portion: 1.83% p.a.

(b) Local Currency Portion: 4.13% p.a.

3. Physical Contingency: 10%

4. Base Year for Cost Estimation: December 2018

* Base Cost for Land Acquisition considered in the year 2016 was INR 9,062,669,696. The base cost has been revised to INR 11,293 million considering Price Escalation and 10% Physical Contingency.

2.3.1.bComparison of Originally Planned and Actually Incurred Cost BY YEAR Table 2.3.1.b.(i) Originally Planned Cost BY YEAR

Cost	Total	JICA Portion					
Breakdown	Total	Tranche I	Tranche II	Tranche III	Sub Total	(MMRDA Portion)	
FY 2017	12,679	10,134	0	0	10,134	2,545	
FY 2018	30,771	22,707	0	0	22,707	8,064	
FY 2019	72,379	56,816	0	0	56,816	15,563	
FY 2020	92,944	55,138	16,040	0	71,178	21,765	
FY 2021	66,397	0	50,869	0	50,869	15,527	
FY 2022	27,683	0	0	20,113	20,113	7,570	
FY 2023	3,723	0	0	565	565	3,158	
FY 2024	10,925	0	0	6,189	6,189	4,735	
Total	317,501	144,795	66,909	26,868	238,571	78,929	

(All Figures are in JPY mil)

Table 2.3.1.b.(ii) Actually Incurred Cost BY YEAR

(All Figures are in JPY mil)

Cost	Total		Others			
Breakdown	Total	Tranche I	Tranche II	Tranche III	Sub Total	(MMRDA Portion)
FY 2017	13,738	9,232	-	-	9,232	4,506
FY 2018	26,813	21,695	-	-	21,695	5,118
FY 2019	40,410	31,014		-	31,014	9,396
FY 2020	31,859	23,922	-	-	23,922	7,937
FY 2021	53,940	43,167	-	-	43,167	10,773
FY 2022						
FY 2023						
FY 2024						
Total	166,760	129,030	-	4	129,030	37,730

(Note) 1. Exchange Rate used: Rs.1 = JPY 1.57 for MMRDA Portion only

2. Fiscal Year starting from 1st April and ending on 31st March.

2.3.2 Reason(s) for the wide gap between the original and actual, if there have been any, the remedies you have taken, and their results.

(P/R and PCR)

There is no major gap between the original and actual cost.

2.4 Organization for Implementation

2.4.1 Executing Agency

Original:

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Executing Agency

Mumbai Metropolitan Region Development Authority (MMRDA) was established on 26thJanuary 1975 in accordance with the Mumbai Metropolitan Development Act, 1974 to make Mumbai Metropolitan Region (MMR) a destination for economic activity by promoting infrastructure and regional planning. MMRDA takes all the necessary measures, required from time to time, in an effective manner and be fully responsible for the Project implementation. After completion of the Project, MMRDA continues to be responsible for the efficient operation and maintenance of the Project.

The GoM appointed MMRDA as the implementing/ executing agency of MTHL vide Government Resolution dated 4th February 2009 and further the ownership of MTHL would be with MMRDA vide Government Resolution dated 8th June 2011.

Organization's Role

To construct, execute, carryout, improve, work, develop, administer, manage, control or maintain in MMR all types of roads, highways, express routes, paths, streets, bridges, sideways, tunnels and other infrastructure, works and conveniences, approach road, etc. Under the Project, MMRDA is responsible for all the tendering process including employment of consultants, as well as for the construction process.

Project Implementation Unit (PIU)

The PIU is in charge of the Projects. The PIU is headed by Chief Engineer, comprising of 6 Divisions/Cells (Finance Division, Social Development Cell, Engineering Division, Land Cell, Administrative Division and Environmental Cell), Supervision/ ITS Consultant and supporting staff.

Procurement

MMRDA shall have to adopt the JICA's Standard Biding Documents of the latest version, as stipulated in Section 4.01 (2) of "Guidelines for Procurement under Japanese ODA Loans.

Procurement of goods and services, except for consulting services, converted by the Japanese ODA Loan should be implemented in accordance with "Guidelines for Procurement under Japanese ODA Loans", dated in April 2012. Employment of consultants should be implemented in accordance with "Guidelines of Employment of Consultant under Japanese ODA Loans", dated in April 2012. "Principles of Procurement under the Project" is attached for brief explanation of the above Guidelines.

Actual, if changed: (P/R and PCR)

There is no change made in original Organisation Set-up & Implementation methods. Refer Annexure III Organisation Chart.

2.4.2 Contractor(s)/ Supplier(s), and Consultant(s) and their Performance:

2.4.2.1 Procurement & Consultant

Table 2.4.2 Procurement of Contractor(s)/ Supplier(s) and Consultant(s)

Contract	Selection Method		
Package	Original: (P/M)	Actual: (P/R and PCR)	
Construc	tion Works		
1	<u>Package-1:</u> From CH 0+000 - To CH 10+380 (10.38 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change
2	<u>Package-2:</u> From CH 10+380 - To CH 18+187 (7.80 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change
3	<u>Package-3:</u> From CH 18+187 - To CH 21+800 (3.61 km)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	No Change
4	<u>Package-4:</u> To install ITS (Toll Management System and Highway Traffic Management System)	International Competitive Bidding Process (With PQ, Single stage with two envelopes)	International Competitive Direct Bidding Process without Pre-Qualification
5	Package-5: To conduct the geotechnical investigation	Local Competitive Bidding Process	No Change
Consulting	g Services		
1	Consulting Service for Supervision	Short List Method (QCBS)	No Change

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2.4.2.2 Performance

Consultant's Progress:

January 2022:

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- 1 GC scrutinized & certified the following invoices claimed by the Contractors:
 - i) Package-1: IPC-48 80% Ad-hoc.
 - ii) Package-2: IPC-43 20% Detailed Verification and IPC-44 80% Ad-hoc.
 - iii) Package-3: IPC-41 80% Ad-hoc.
- 2 GC has prepared and submitted a total reimbursement claim of 3824.58 million JPY to MMRDA / JICA in January 2022.

February 2022:

- 1 GC scrutinized & certified the following invoices claimed by the Contractors:
 - i) Package-1: IPC-47 20% Detailed Verification and IPC-49 80% Ad-hoc.
 - ii) Package-2: IPC-44 20% Detailed Verification and IPC-45 & IPC-46 80% Ad-hoc.
 - iii) Package-3: IPC-40 20% Detailed Verification and IPC-42 80% Ad-hoc.
- 2 GC has prepared and submitted a total reimbursement claim of 8645.74 million JPY to MMRDA / JICA in February 2022.

March 2022:

- 1 GC scrutinized & certified the following invoices claimed by the Contractors:
 - i) Package-1: IPC-48 & IPC-49 20% Detailed Verification and IPC-50 80% Ad-hoc.
 - ii) Package-2: IPC-45 & IPC-46 20% Detailed Verification and IPC-47 80% Ad-hoc.
 - iii) Package-3: IPC-41 & IPC-42 20% Detailed Verification and IPC-43 80% Ad-hoc.
- 2 GC has prepared and submitted a total reimbursement claim of 2042.10 million JPY to MMRDA / JICA in March 2022.
- 3 100% of the Technical Design Modules across all the 3 Packages have been given "NONO" by the GC.
- 4 Approximately 99% of the Construction (GFC Good For Construction) Design Modules across all the 3 Packages have been given "NONO" by the GC.

Package-1 - 100%, Package-2 - 99%, Package-3 - 100%

5 GC evaluated the Financial Bid, and the report was sent to the Employer on 28th March 2022 which they further sent to JICA. JICA's concurrence for the Financial Evaluation Report is awaited.

1st January to 31st March 2022

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Contractor's Progress:

Package-1 Physical Progress till 31st March 2022

S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks			
1	Permanent Bridge Works -	Land/ Inter	change	Zone					
1.1	Piles	523	No.	520	99.4%				
1.2	Pile Caps	158	No.	99	62.7%				
1.3	Piers	228	No.	165	72.4%				
1.4	Pier Caps	215	No.	154	71.6%				
2	Permanent Bridge Works - I	ntertidal Z	one						
2.1	Piles	312	No.	312	100%				
2.2	Pile Caps	75	No.	75	100%				
2.3	Piers	146	No.	146	100%				
2.4	Pier Caps	146	No.	142	97.3%				
3	Permanent Bridge Works - Marine Zone								
3.1	Piles	403	No.	403	100%				
3.2	Pile Caps	80	No.	76	95%				
3.3	Piers	162	No.	114	70.4%				
3.4	Pier Caps	162	No.	110	67.9%				
4	Permanent Bridge Works - 1	otal							
4.1	Piles	1238	No.	1235	99.8%				
4.2	Pile Caps	313	No.	250	79.9%				
4.3	Piers	536	No.	425	79.3%				
4.4	Pier Caps	523	No.	406	77.6%				
5	Precast Segments								
5.1	Segment Casting	6713	No.	4189	62.4%				
5.2	Segment (Span) Erection+ Cast-in-Situ Slab	478	No.	216	45.2%				
6	OSD Structural Steel					200			
6.1	Fabrication	52726	МТ	51712	98.07%				
6.2	Assembly (Large Blocks)	52726	МТ	11602	22.0%				
6.3	OSD Span Erection	38	No.	3	7.89%				

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1st January to 31st March 2022

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Package-2 Physical Progress till 31st March 2022

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S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks				
1	Permanent Bridge Works - Land/ Interchange Zone									
1.1	Open Foundation	113	No.	113	100%					
1.2	Piers	119	No.	119	100%					
1.3	Pier Caps	105	No.	92	87.62%					
1.4	Portal Beams- Land	6	No.	6	100%					
1.5	Pier Head Segments -Land	42	No.	42	100%					
2	Permanent Bridge Works -	Intertidal	& CRZ Z	one	all in year					
2.1	Piles	280	No.	280	100%					
2.2	Pile Caps	72	No.	72	100%					
2.3	Piers	72	No.	72	100%					
2.4	Pier Caps	18	No.	18	100%					
2.5	Pier Head Segments	54	No.	54	100%					
3	Permanent Bridge Works - Marine Zone									
3.1	Piles	504	No.	504	100%					
3.2	Pile Caps	120	No.	106	88%					
3.3	Piers	120	No.	96.2	80%					
3.4	Pier Caps	48	No.	22	46%					
3.5	Pier Head Segments	72	No.	21	28%					
4	Permanent Bridge Works -	Total				Stern Real				
4.1	Open Foundation	113	No.	113	100%					
4.2	Piles	784	No.	784	100%					
4.3	Pile Caps	192	No.	178	92.71%					
4.4	Piers	305	No.	287.2	92.35%					
4.5	Pier Caps/ Portal Beams	177	No.	138	77.97%					
4.6	Pier Head Segments	168	No.	117	68.83%					
5	Precast Segments									
5.1	Segment Casting	3142	No.	1,832	58.31%					
5.2	Segment (Span) Erection + Cast-in-Situ Slabs	272	No.	113	41.54%					
6	OSD Structural Steel	2012								
6.1	Fabrication	34726	МТ	34726	100%					
6.2	Assembly (for Large Block)	34726	мт	8749	25.19%					
6.3	OSD Span Erection	32	No.	2	6.25%					

1st January to 31st March 2022

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S. No	Activity	Total Scope	Unit	Cumulative Achieved Works	% of Work done Against the Total Scope	Remarks
1	Permanent Bridge Works					
1.1	Open Foundations	219	No.	216	98.63%	
1.2	Piles	No.	36	24	66.67%	
1.3	Pile Caps	No.	6	4	66.67%	
1.4	Piers	No.	242	225	92.98%	
1.5	Pier Caps	No.	189	171	90.48%	
1.6	Segment Casting	No.	834	834	100%	
1.7	Segment (Span) Erection	59	No.	36	61.01%	
1.8	Cast in-situ Slab	108	No.	68	62.96%	

Package-4 (ITS) Progress till 31st March 2022

- 1. As recommended by the GC, JICA accorded concurrence for Single Stage Bidding (without Pre-Qualification) on 9th October 2020 and asked to submit draft Bid Document for review and approval.
- 2. The GC submitted first draft Bid Document to the Employer on 2nd November 2020 for review.
- 3. After reviewing the draft, MMRDA issued the observations on 29th December 2020 for further correction & amendments, etc. The GC is in the process of preparing the revised draft Bid Document.
- 4. The GC submitted the revised draft Bid Document to the Employer on 14th June 2021 for a review and further concurrence with JICA.
- 5. The Employer received JICA concurrence for the revised Bid Documents on 24th August 2021.
- 6. The Tender has been floated (published) on 3rd September 2021. A Pre-bid Meeting was arranged on 27th September 2021.
- 7. JICA concurrence for the Technical Evaluation Report received on 15th Feb 2022. The Financial Bid opened on 16th Feb 2022.
- 8. GC evaluated the Financial Bid, and the report was sent to the Employer on 28th March 2022 which they further sent to JICA. JICA concurrence for the Financial Evaluation Report is awaited.

1st January to 31st March 2022

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Please refer Attachment 9 - Site Progress Photos showing the development of the project. Health & Safety and Environment (HSE)

The HSE Plans have been submitted by the respective construction agencies for the Packages which are being monitored by the GC on a regular basis.

Package-1 Safety Report

Sr. No	Description	From January to March 2022	Cumulative
1	Total Man Hours Since Inception	4,904,652	44,053,754
2	Number of Man-Hours (Accident-Free Man-Hours)	4,904,652	7,051,656
3	Number of Man-Days	613,081	5,506,719
4	Number of Reportable Fatal Accidents	0	6
5	Number of Non-Fatal Accidents	1	4
6	Number of Near Miss Incidents	11	113
7	Number of First Aid Cases	29	272
8	Number of Dangerous Occurrences	2	3
9	Number of Reportable Sick Cases	0	0
10	Number of Man-Hours Lost	1,552	292264
11	Number of Man-Days Lost	194	36533
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	1	0.23
13	Number of Inspections done for Offices & Sites	220	3852
14	Number of Training/ Induction done for Offices & Sites	349	2274
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	13,848	3142
16	Details of Safety Committee meetings	3	41
17	No. of toolbox talks	16,532	115622
18	No. of critical excavations.	8	76
19	Pre-employment Medical check-up	2,847	380
20	No. of Safety Walk down	15	251
21	No. of Safety Inductions completed	2,847	38098

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Package-2 Safety Report

Sr. No	Description	From January to March 2022	Cumulative
1	Total Man Hours Since Inception	2,931,412	22,811,789
2	Number of Man-Hours (Accident-Free Man-Hours)	1,932,634	965,459
3	Number of Man-Days	266,492	2,075,146
4	Number of Reportable Fatal Accidents	0	0
5	Number of Non-Fatal Accidents	1	8
6	Number of Near Miss Incidents	25	252
7	Number of First Aid Cases	13	160
8	Number of Dangerous Occurrences	2	12
9	Number of Reportable Sick Cases	0	2
10	Number of Man-Hours Lost	1,744	4,012
11	Number of Man-Days Lost	218	483
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	1	0.35
13	Number of Inspections done for Offices & Sites	74	1,151
14	Number of Training/ Induction done for Offices & Sites	107	917
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	10,806	2,295
16	Details of Safety Committee meetings	3	45
17	No. of toolbox talks	1,134	9,940
18	No. of critical excavations.	0	0
19	Pre-employment Medical check-up	1,048	15,180
20	No. of Safety Walk down	12	153
21	No. of Safety Inductions completed	1,053	1,883

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Package-3 Safety Report

Sr. No	Description	From January to March 2022	Cumulative
1	Total Man Hours Since Inception	731,082	5,228,100
2	Number of Man-Hours (Accident-Free Man-Hours)	731,082	3,127,751
3	Number of Man-Days	91,385	653,513
4	Number of Reportable Fatal Accidents	0	0
5	Number of Non-Fatal Accidents	0	2
6	Number of Near Miss Incidents	2	24
7	Number of First Aid Cases	12	110
8	Number of Dangerous Occurrences	0	1
9	Number of Reportable Sick Cases	0	0
10	Number of Man-Hours Lost	0	2312
11	Number of Man-Days Lost	0	289
12	Number of Reportable Accidents per 100,000 Man-Hours Worked	0	0.38
13	Number of Inspections done for Offices & Sites	51	804
14	Number of Training/ Induction done for Offices & Sites	15	247
15	Daily Average Manpower (Including all Workmen & Staff) for the Month	2,206	468
16	Details of Safety Committee meetings	2	40
17	No. of toolbox talks	729	6,932
18	No. of critical excavations.	3	6
19	Pre-employment Medical check-up	949	9178
20	No. of Safety Walk down	12	157
21	No. of Safety Inductions completed	949	9178

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3.0 BENEFITS DERIVED FROM THE PROJECT (EFFECTIVENESS)

3.1 Operational and Physical Condition

(This section will be developed when the operational plan is available)

Facilities	Description of condition	Problems, its Background and Remedial Action Plan
(P/R and PCR)	(P/R and PCR)	(P/R and PCR)

3.2 Precautions (Measures To Be Adopted/ Points Which Require Special Attention)

Actual Issues and Countermeasure(s)
(P/R and PCR)
Appropriate Tolling Policy/ Rates will be finalized by December 2021.
Single Operation and Maintenance Contractor will be appointed by December 2021.
(P/R and PCR) • MMRDA has disclosed Supplemental EIA &
 SIA on MMRDA website. The renewed CRZ clearance was granted on 25/1/2016 from MoEF&CC and the approval conditions have been imposed on the Contractors as the Employer's requirements. MMRDA has actively monitored the compliances of the approval conditions and maintains throughout the construction phase.

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CRZ Clearance, appropriate measures shall be taken, and necessary budget shall be secured by MMRDA.	 Biodiversity Foundation for bird monitoring and implementation of Flamingos and bird monitoring program for the MTHL project during the construction as well as the long- term monitoring after the construction. Rs 91.42 Crore has been transferred to Mangroves & Marine Biodiversity Foundation, Mumbai for the development & conservation of mangrove area and its afforestation. Such funds will be managed by the Mangrove Foundation of Maharashtra State. As per the renewed CRZ clearance condition, IIT Mumbai has been appointed for the DPR study to develop a Mahul creek Effluent Treatment Plant (ETP). Rs 4.98 Crore was secured for IIT services. The Draft DPR has been reviewed and approved.

b. Required Permits

The Permits to be obtained by MMRDA/ Contractors and the present status is given in the following Table.

Clearance Required	Approving Authority	Responsible Organization	Obtained by when	Remark /Status
Mangrove Cutting	Hon. Bombay High Court	MMRDA/ Contractor	Approval received from Hon. Bombay High Court on 28 th November 2016	Mangrove cutting operation was completed with full compliance and as of now, no further follow up work is required.
Tree Cutting /Transplantati on	Respective Tree Authorities	Contractor for respective Packages	-	Pkg-1:TreeCutting/Transplantationpermissionfrom the Garden Dept., MCGMobtainedobtainedobtainedobtained2020.Pkg-2:TreeCutting/Transplantationpermissionobtained & completed.Pkg-3:Pkg-3:ForestPepartmentissuedaconcurrence19/05/2019.CIDCO'spermissionforTransplantationobtainedobtainedobtainedobtainedobtained19/05/2019.CIDCO'spermissionforTreeCutting/Transplantationobtainedobtainedon25 th November2019.2019.
Consent to Establish	Maharashtra Pollution Control Board	Contractor for respective Packages	Pkg-1-18.07.2018 Pkg-2-16.08.2018 Pkg-3-29.05.2019	

Table 3.2.2 Present Status of some Important Permits

1st January to 31st March 2022

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3.3 Environmental and Social Impacts

Major environmental and social impacts have occurred during project implementation (e.g. involuntary resettlement, poverty reduction, impacts on the natural environment).

lssue(s)	Action or countermeasure(s) taken and remaining problem(s)	
 Establishment of Effective Environmental and Social Cell in PIU MMRDA confirmed that Social Development Cell (2 Officers), Land Cell (3 Officers), and Environmental Cell (2 Officers) had been set up. 	Cell is established by MMRDA (Annexure III, Organization chart)	
 2. Rehabilitation and Land Acquisition Issues a. Affected Area and Population Due to the Project, 1282 non-titleholders will be involuntary resettled, and 108.09 ha of land will be handed over by CIDCO. 	 Sewri: Involuntary resettlement in Sewri section has been further validated by Social Development Cell of MMRDA. Out of 297 Project Affected Households (PAHs) have given consents as follows: 164 PAHs Kanjurmarg for residential 25 PAHs Kanjurmarg for commercial 7 PAHs (Satsangi Plot) Kanjurmarg for Commercial 1 PAHs (commercial to residential) for Bhakti Park 100 PAHs HDIL Kurla for residential Navi Mumbai: CIDCO has been finalizing the land acquisition closely monitored by Land Cell of MMRDA. Except private land and forest, CIDCO has possessed all required land of 108.09 ha. Out of the 108.09 ha, 106.345 ha has been handed over by CIDCO to MMRDA. CIDCO is going to acquire the balance 1.745 ha with the help of Collector, Raigad. 	
b. Entitlement Policy MMRDA prepared the entitlement matrix for resettlement of non-title holders in Sewri, which meets the Resettlement and Rehabilitation Policy for Mumbai Urban Transportation Project (1997, amended in 2000) and JICA guidelines for Environmental and social considerations (2010)	There have been no changes during the enforcement. As per the Attachment 2-5 of JICA MoD, MMRDA has committed to enforce the agreed/approved policy.	

1st January to 31st March 2022

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Issue(s)	Action or countermeasure(s) taken and remaining problem(s)	
("Guidelines") (Attachment 2-5).	remaining problem(s)	
c. Compensation to Project affected		
Fishermen Detailed baseline survey will be undertaken by MMRDA in order to identify fishermen who are affected by the Project. Based on the result of the baseline survey, MMRDA will compensate them in accordance with compensate them in accordance with compensation policy prior to the construction. Monitoring will be conducted by MMRDA with assistance of the Consultant to gasp the exact impact during construction and operation phase.	Updated Attachments 2-8 and 2-10 are enclosed in the report.	
d. Implementation Schedule The Implementation schedule for land acquisition, resettlement and rehabilitation is attached as per Attachment 2-10.	Updated Attachment 2-10 is enclosed in the report.	
e. Grievance Redressal Mechanism Grievance Redressal Committee ("GRC") set under MMRDA will deal with grievances raised by PAPs in Sewri and fishermen to be affected by the Project. Any grievances raised by PAPs whose land is acquired by CIDCO shall be resolved by CIDCO.	Sewri: FLGRC (Field Level Grievance Redressal Committee) and SLGRC (Senior Level Grievance Redressal Committee) were set as per the RAP and in operation. Compensation Committee has been constituted to address the issues of Compensation to Lease Holders at Sewri. Fishermen: GRC for resolving grievances of the fisherfolk was set up as per the compensation policy and is in operation.	
f. Internal Monitoring Internal Monitoring of the Resettlement Action Plan (RAP) implementation will be conducted by MMRDA in accordance with the RAP with necessary assistance of the consultant. RAP Internal Monitoring Form (Attachment 2-8) will be submitted to JICA on a quarterly basis as a part of PSR during the RAP implementation.	Internal Monitoring updates are mentioned in Attachment 2-8 .	

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Issue(s)	Action or countermeasure(s) taken and		
	remaining problem(s)		
g. Qualitative Independent Evaluation An Independent Evaluation Agency will be hired by MMRDA for evaluation of RAP implementation. An external evaluation report will be submitted to MMRDA at mid-term and end-term. MMRDA would submit the evaluation report to JICA in a timely manner.	Updated Attachment 2-10 is enclosed in the report.		
h. RAP Implementation Budget			
The amount of estimated resettlement and compensation budget is Rs.906.26 Cr MMRDA informed to the JICA Mission that RAP implementation cost would be borne by MMRDA and ensured sufficient and timely allocation of funds for smooth implementation.	As updated in MOD dated 03/09/2019 for MTHL- II, the base cost Budget towards RAP Implementation is updated as Rs 1129.3 Cr.		
i. Environmental Management Plan			
("EMP") The mitigation measures against air pollution, waste, noise, and water pollution etc. shall be taken during construction and operation phase. Mitigation measures such as installation of noise barrier, appropriate waste management, etc. have been prepared by MMRDA. The mitigation measures are listed in the EMP matrix. (Attachment 2-1). During the detailed design stage, MMRDA, with assistance of the Consultant, will update the EMP, as necessary.	EMP will be updated, if required, in due course of construction activities/progress.		
 j. Environmental Monitoring Plan ("EMoP") MMRDA takes overall responsibility for implementation of EMoP. During construction, environmental monitoring will be carried out by contractors under supervision by Construction Supervision consultant. The result shall be reported to the JICA India Office on a quarterly basis as a part of Progress 	Environmental Monitoring Plan with the package wise budgeted cost is reported in Attachment 2-3 . Environmental Monitoring Results during the construction phase are reported in Attachment 2- 4 .		

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lssue(s)	Action or countermeasure(s) taken and remaining problem(s)
Status Report (PSR) by filling in the Reporting Form of Environmental Monitoring Result. (Attachment 2-4). After completion of the construction, EMoP shall be implemented by MMRDA, and the results shall be submitted to the JICA India Office semi- annually until two years after complementation of construction. The required amount of estimated environmental monitoring budget is borne by MMRDA.	
k. Long Term Bird Monitoring MMRDA committed to conduct the long-term monitoring of birds and its habitat in Sewri mudflats with the assistance of hired bird expert. During the long-term monitoring, MMRDA will share information and receive advice from external experts including the one from NGOs and civil society.	 MMRDA has entrusted the work of bird monitoring and implementation of Flamingos and birds related mitigation measures & bird monitoring program to Mangrove and Marine Biodiversity Foundation. Rs. 31.92 Crore deposited to Mangrove foundation, Mumbai for periodical disbursement to BNHS.

3.4 Qualitative and Quantitative Data of Monitoring Indicators

Operation and Effect Indicator EIRR and/ or FIRR

Supporting data for Computing EIRR and/ or FIRR

Indicators	Original (Year 2015)	Target (Year 2024) 2 Years After Commercial Operation
Average Annual Daily Traffic (PCU/ day)	-	47,400
Daily Average Travel Time (min) * 1	61 min	15.8 min
Number of Users (Persons/ year) * 2		46,077,504
Cargo Volume (tons/ year) * 3	-	13,511,759

*1 Section on Sewri - Chirle

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*2 Assumptions: average passengers of car and taxi (2.6 persons), bus (37.2 persons) based on JICA study. Number of passengers of LCV, HCV and MAV is assumed as 1 person each. *3 Assumptions: the maximum capacity of respective vehicle (LCV: 1 ton, HCV and MAV: 15 tons) is used for estimation.

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EIRR	Original: 15.4% Cost: Project cost (excluding Price Escalation, Tax and Duties and Administration cost) O&M cost, Land Acquisition Benefit: Travel Time cost and Vehicle Operation cost Project Life: 32 Years	Actual: (PCR) % Cost: Benefit: Project Life: Attachment(s): Supporting data for computing EIRR
FIRR	Original: 1.5% Cost: Project Cost, O&M cost, Land Acquisition cost Benefit: Toll Revenue Project Life: 32 Years	Actual: (PCR)

3.5 Monitoring Plan for the indicators

Monitoring Methods, Section(s)/ department(s) in charge of monitoring, frequency, the term and so forth are given below:

Original: (P/M and PCR)

Monitoring Organization

PIU shall be In-Charge of Monitoring activities for the Project.

Submission of QPR and PCR

The timely submission of the following documents is required by MMRDA.

- a. Quarterly Progress Report (QPR): The progress report for the Project should be submitted by MMRDA to JICA on quarterly basis, not later than 30 days after the concerned quarter, in the form of Project Status Report (PSR) attached hereto as per Annex I; Updated status land Acquisition, milestone achieved with respect to Action Plan with Timetable, the monitoring form for environmental and social consideration should also be appended to the PSR. In addition, MMRDA shall also forward the Monthly & Quarterly Progress Reports (including S-Curve Chart) prepared by the Consultant to JICA India Office on regular basis till project completion.
- b. Project Completion Report (PCR): A project completion report should be submitted by MMRDA to JICA promptly, but in any event not later than six months after completion of the Project, in the form of Project Status Report (PSR) attached hereto as per Annex I.

Actual: (P/R and PCR)

Monitoring Organization

PIU for MTHL has been established for monitoring the Project.

Submission of QPR and PCR

This QPR No. 20 is submitted for the period of 1st January to 31st March 2022.

3.6 Achievement of the Project Objective

(PCR)

1st January to 31st March 2022

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4.0 OPERATION AND MAINTENANCE (O&M) (SUSTAINABILITY)

4.1 O&M and Management

- Organization Chart of O&M

- Operational and maintenance system (structure and the number, qualification and skill of staff or other conditions necessary to maintain the outputs and benefits of the project soundly, such as manuals, facilities and equipment for maintenance, and spare part stocks etc.)

Original: (P/M)

Operation & Maintenance, Toll Management and ITS

MMRDA proposes to engage two separate agencies for O&M and Toll Management System. Though MMRDA will not directly carry out O&M, the overall monitoring over the O&M agency will be the responsibility of MMRDA. O&M Budget will be allocated by MMRDA. O&M and increase in toll rate will be done in accordance with the NHAI's manuals such as "NHAI Works manuals".

Actual: (PCR)

4.2 O&M Cost and Budget

- The actual annual O&M cost for the duration of the project, as well as the annual O&M budget.

(PCR) This will be reported when the outcome of the above work study is available.

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5.0 EVALUATION

5.1 JICA and Borrower / Executing Agency performance

JICA:

(PCR)

Borrower/ Executing Agency:

(PCR)

5.2 Overall Evaluation

Please describe your evaluation on the overall outcome of the project.

(PCR)

5.3 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future JICA assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

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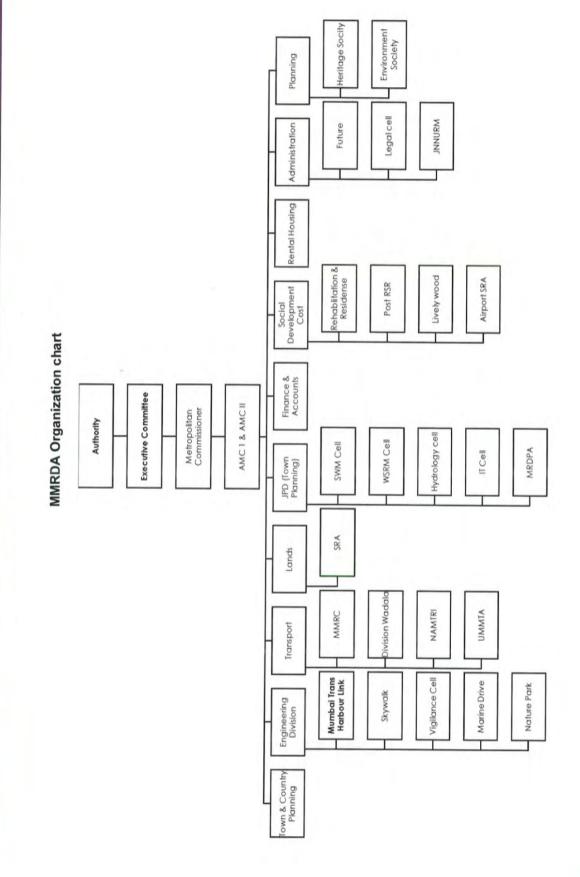
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Attachment 1- MMRDA & PIU Organization Chart



Mumbai Trans Harbour Link Project - Quarterly Progress Report No. 20 (Jan-Mar 2022)

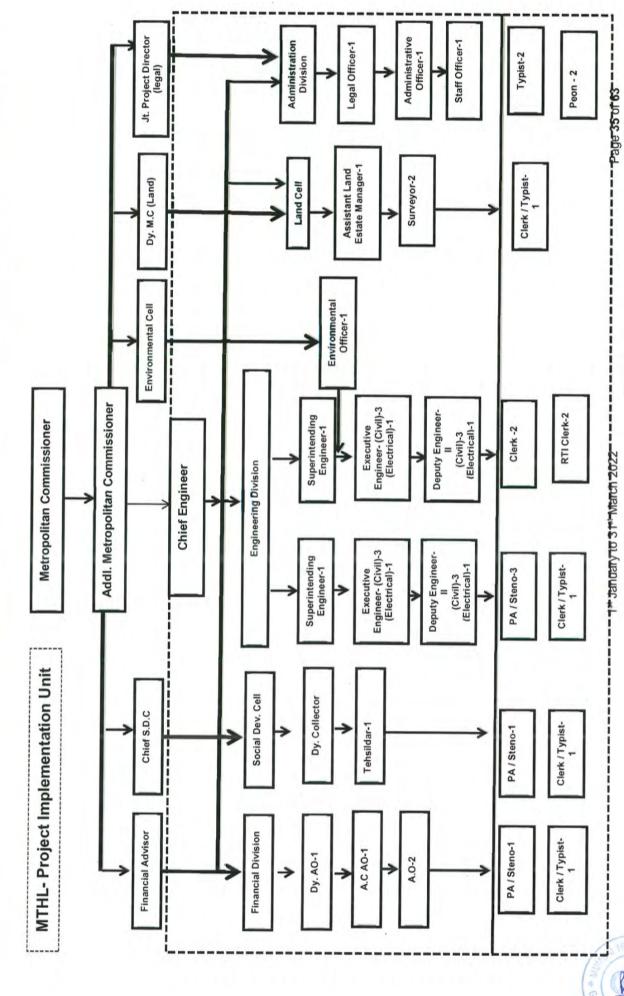


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Mumbai Trans Harbour Link Project - Quarterly Progress Report No. 20 (Jan-Mar 2022)



CONSULTAN

Attachment 2- Environmental & Social Impacts Attachments

Attachment 2-3 – Envi. Monitoring Plan with Package wise Estimated Cost Attachment 2-4 – Environmental Monitoring Result Reporting Form Attachment 2-6 – MTHL Land Acquisition Status Attachment 2-8 – RAP Internal Monitoring Form Attachment 2-10 – Schedule of the RAP Implementation



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Environmental Monitoring Plan with Packagewise Estimated Cost

No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollution Control Board (CPCB) – Ministry of Environment & Forest (MoEF)	Remarks
1	Air pollution	SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5} , O ₃ , CO, (6 ltems)	National Ambient Air Quality Standards, 2009	1. Sewri & Sewri bay area for package l	Fortnightly at all locations except 2 locations each near Batching plants	1,800,000	15,000,000	1,800,000	742,500	17,542,500	National Ambient Air Quality Standards (NAAQS) by Central Pollution Control Board (CPCB)	P1 contractor team is conducting Ambient air quality monitoring with reference to National Standards and clause 1.2 Employer's requirement
				2. Nhava temporary bridge & casting yard in Gavhan for package II							(Standard for 24hrs: Industrial and Residential/ Ecological Sensitive area)	P 2 contractor Monitorin plan has been designed per EIA of 2015
				3. Gavhan & Chirle for package III	Fortnightly only for 3 months (jan-2019 to Mar-2019). Then quarterly monitoring as per MOEF and CPCB norms						 SO₂: 80 / 80µg/m³ . 	P3 contractor team is conducting Ambient air quality monitoring with reference to National Standards and clause 1. Employer's requirement
											 NO₂: 80 / 80μg/m³ 	P 1 received Consents (& CTO from MPCB and are following MPCB frequency in addition to frequency set by Environment Expert fro GC. The NAAQ standard
								-				showing High rate as th the usual procedure. The frequency of monitoring is set by us which varies for differe parameters as either
												Statutory requirement as required by us to en we have sufficient data hands if there are addi claims for Compensatio C5 category. Summary : Although th
												contract conditions fo packages were same a time of biding. Later modifications suggest GC were not accepted 2. P1 and P3 accepted
												modifications and hen difference. Second poi 1 carrying out monitor as per the obatiend CT CTO. Both other packa have applied for CTE b haven't obtained it yet we expect the monitor frequecy would change
												obtaining CTE.
											 PM₁₀: 100 / 100µg/m³ PM₂₅: 60 / 60µg/m³ O₃: 180 / 180µg/m³ 	
2	Water pollution	pH, BOD, DO, Turbidity and O&G	IS / AWWA	1. Sewri & Sewri bay area for package I	Quarterly	810,000	2,400,000	810,000	0	3,210,000	CO: 0.4 / 0.4mg/m ³ Marine water quality Standards – Class SW-IV Harbour Waters (MPCB)	Water Pollution no applicable for Pkg.
				 Nhava temporary bridge & casting yard in Gavhan for package II 	4 Times / Year						• pH:6.5-9	
				3. Gavhan & Chirle for package III	Not applicable						DO: 3 mg/l Turbidity: 30 NTU BOD: 5 mg/l	
3	Waste	Volume of waste soil,	Volumetric	1 Sourci & Sourci have once	Deflet	500.000	200.200.000				• 0 & G: 10 mg/l	
5	waste	cutting tree and domestic garbage		1. Sewri & Sewri bay area for package I	Daily	500,000	299,200,000	500,000	600,000	300,300,000		The cost of waste dispo for P1 includes C&D wa Pile muck etc. from all a like, interchange, interf and marine. The dispose location is at MCGM approved location Bhayandarpada, Thane

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Attachmemt 2-3



No.	Impacted Item on JICA Guidelines	Parameter	Method	Location	Frequency a year	Cost (INR)	Cost Pkg.1 (INR)	Cost Pkg.2 (INR)	Cost Pkg.3 (INR)	Total Cost (INR)	Standard Central Pollut Ministry of Environ
				2. Nhava temporary bridge & casting yard in Gavhan for package II						_	Municipal Soild Waste Mi Generated waste shall be n designated site. Sites have been identified a
				3. Gavhan & Chirle for package III	Once site clearing work/execution part of work start.						at Bhayandar Pada in Than For Pkg, 2 & 3 is in Navi M "Teen Taki Junction" along
4 and 8	s Soil	Heavy Metals & Oil &	IS / Methods	1. Sewri & Sewri bay area	1. Muck: 1 Time / Year	150,000	1,500,000	150,000	100,000	1,750,000	Soil Pollution Standard in I
	Contamination/ sedimentation	Grease	Manual Soil Testing in India by		2. Sediments: 4 Times / Year	130,000	1,500,000	130,000	100,000	1,/30,000	Son Politici Standard In 1
		(5-10 items shall be selected from Soil pollution standards)	Department of Agriculture and Cooperation, January 2011	 Nhava temporary bridge & casting yard in Gavhan for package II 							• Cd: 0.01mg/l
				3. Gavhan & Chirle for package III	*If any spillage/ leakage take place from chemical, fuel storage area. *One time grab sample to be collected during Bridge Construction *Pre & Post Monsoon						Lead: 0.01 mg/l Chromium (VI): 0.05m Arsenic: 0.01mg/l T-Mercury: 0.0005mg/ Copper: 125mg/kg (some items shall be select
5	Noise and vibration	Ambient and road side noise (dB(A)L _{Aeq})	IS Standard	1. Sewri & Sewri bay area for package 1	at Storage area only Fortnightly	150,000	54,000	150,000	369,000	573,000	items) -Construction Noise; 85d
				 Nhava temporary bridge & casting yard in Gavhan for package II 	2 Times / Year						-Ambient Noise Standard
				 Gavhan & Chirle for package III 	Fortnightly						1.Industrial Area
											Day Time: 75 (6-22hr) Night Time: 70 (22-6hr) 2. Commercial Area: Day Time: 65 (6-22hr)
				g i k							Night Time: 55 (22-6hr) 3.Residential Area: Day Time: 55 (6-22hr) Night Time: 45 (22-6hr) 4.Silence Zone
				1 - J.							Day Time: 50 (6-22hr) Night Time: 40 (22-6hr)
		Vibration (dB L10 or mm/sec)		1 Location Gavan area for package III	Halfyearly	75,000	0	75,000	400,000	475,000	Construction vibration Vibration Standards roa
											1. Commercial /Industrial / Day Time: 70 (7-20hr) Night Time: 65 (20-7hr) 2. Residential Area:
9 and 10	Protected Area	1.Monitoring of	Ocular inspection	Along MTHL alignment and	Quanturba	< 500 000	7,200,000	(500 000		13,700,000	Day Time: 65 (7-20hr) Night Time: 60 (20-7hr)
J and To	/Ecosystem	mudflat conditions including fauna-flora	and quantitative	mangrove replant area for Package I	Quarterly during the construction Period	6,500,000	7,200,000	6,500,000	0	13,700,000	
	-	2. Monitoring of Cutting Tree and replantation/		Along MTHL alignment and mangrove replant area for package II	4 Times / Year						Significant impacts are not
		transplanting area	1-1. Fauna-Flora	Not applicable for Package III							
		3.Monitoring of Mangrove Plantation area appointed by MoEF	Line-Point census and record number and appeared species								Note)

llution Control Board (CPCB) - ironment & Forest (MoEF)	Remarks
e Management Rules, 2013 be reused or disposed at ed and the location for Pkg, 1 is hane. ri Mumbai at Pushpak Node nera ong the Amar Marg.	P2 contractor has considered only Domestic garbage with respect to CIDCO. Other wastes are not considered. <u>Construction wastes will be</u>
in India (MOEF)	
15mg/l	-
mg/l lected from totally 25 standards	
85dB(A) ards in India (dB (A) _{Leq})	-
)	-
)	
) on 75dB	Not applicable for Pkg. 1
roadside ial Area	
)	-
	Not applicable for Pkg 3
not caused by the project	
	-

Image: Process of the second	NR) Standard Central Poll Ministry of Envir	Total Cost (INR)	Cost Pkg.3 (INR)	Cost Pkg.2 (INR)	Cost Pkg.1 (INR)	Cost (INR)	Frequency a year	Location	Method	Parameter	Impacted Item on JICA Guidelines	No.	Category
Image: Property of the stands of th	Detailed monitoring pl design stage								density and	sedimentation soil and ecological parameter (18items on Supplemental EIA Table 6.1.15 for soil and 7 items such as 1)Netprimary productivitye, 2)Chlorophyll-a, 3)Phosphate, 4)Nitrate, 5)Nitrite, 6)Particulate Organic			
Image: state													Natural environment
Image: Second	Standard for Soil; Suppler Standard for Ecological P - Netprimary Producti <1,500 mgC/m3/day at s - Chlorophyll-a								2-1: Cutting trees confirmation 3-1: Mangrove survey in the				
Image: Section of the sectio	<4mg/m3 - Phosphate: 0.1-90µg, - Nitrate: 1.0-500µg/l - Nitrite: <125µg/l - Particulate Organic C - SiO2: 10-5,000µg/l												
Image: stability of package II 2 Locations (CR2 at Severi and Shivaj) Nagar) for Package II 4 Times / Year Image: stability of package II Image: stability of package:	Project activities and stru- and impacts on tidal cond	350,000	0	350,000	0	350,000		Not applicable for Package I	measurement during high precipitation	Flooding situation	Hydrology	11	
Image: second							4 Times / Year	and Shivaji Nagar) for					
Image: Second			1 1								1. 1		Γ
Image: Note of the second s	Embankment shall be sta and cracks	115,000	0	115,000	0	115,000	4 Times / Year	Interchange in Shivaji Nagar	Stability of			12	
Image: Note of the state of the st			-			As per Actuals			_		such as	13	+
Interests worker's township worker's township worker's township sewri and Shivaji Nagar) for Package II Sewri and Shivaji Nagar) for Sewr											and livelihood		L
Implement worker's condition safety devices and conditions via interviews Sewri and Shivaji Nagar) for Package II. Package II. Package II. 17 Accidents Number of accidents Confirmation of accidents list from Sewri and Shivaji Nagar) for	Employment opportunity	125,000	0	125,000	0	125,000	2 Times / Year	Sewri and Shivaji Nagar) for	workers list from			14	ment
Implement worker's condition safety devices and conditions via interviews Sewri and Shivaji Nagar) for Package II. Pack	Infection disease rate sha	525,000	0	525,000	0	525,000			Confirmation of health check list		diseases such as	15	al envire
actidents list from Sewri and Shippi Nanar) for	"Building And Other Cons of Emloyment and Condit building and other constr Act, 1996" and internatio Performance Standard 2	500,000	0	500,000	0	500,000	2 times / year	Sewri and Shivaji Nagar) for	Confirmation of safety devices and conditions via		Labour	16	Soci
Ocal government Package II and State Traffic Police Department	Any accidents are not cau	400,000	0	400,000	0	400.000	4 Times / Year		accidents list from local government and State Traffic	Number of accidents	Accidents	17	other

Ö

illution Control Board (CPCB) -	Remarks
rironment & Forest (MoEF)	
plan will be setup during basic	
	1 I I I I I I I I I I I I I I I I I I I
	-
Jomental EIA Table 6115	-
lemental EIA Table 6.1.15	
Parameter:	
ctivity	1
t surface	-
	-
µg/Л	-
/1	1
c Carbon: 10-100mg/m ³]
1	N . 11 11 C . DI . 4 C . C
tructures does not cause flooding onditions	Not applicable for Pkg 1 & 3
stabilized without any landslide	Not applicable for Pkg. 1 & 3
ity shall be provided fairly	
shall not be caused by the project	
onstruction Workers (Regulation	
ditions of Service) Act,1996", "The struction worker's welfare cess	
tional standards such as "IFC	
2 Labor and Working Conditions"	
caused by construction	



The Project for Construction of Mumbai Trans Harbour Link Reporting Form of Environmental Monitoring during Constru

ruction	
	Monitoring Period - January 2022 to March 2022

This form is prepared for reporting the monitoring results to JICA India Office. Only minimum required parameters are included in this form, and not all perameters in EMoP are covered.

1. Environmental	Monitoring	during	Construction	for 4 5	vears
I. Lan in Change attai	in onitoring	uuring	Construction	101 4.5	years

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Attachment 2-4

	No.	Item	Parameter	Location	Emeran	Terr and Street A		Monitoring Result		-
	NO.	Item	Parameter	Location	Frequency a year	Item and Stanadard	Location 1- Pkg 1	Location 2- Pkg 2	Location 3- Pkg 3	Locat
				1. Sewri & Sewri bay area for package I	Quarterly monitoring ia conducted at all locations.	National Ambient Air Quality Standards (NAAQS)				
		1		2. Nhava temporary bridge & casting	4 Times / Year	2	Sewri	Shivaji Nagar	Chirle	
				yard in Gavhan for package II		(Standard for 24hrs: Industrial and Residential)				
	1	Air pollution	SO ₂ , NO ₂ , PM ₁₀ , PM _{2.5}	3. Gavhan & Chirle for package III	From march -2019 onwards monitoring is	1. SO ₂ 80µg/m ³	9.67	BDL.	12	
					conducted quarterly as per MOEF and CPCB	2. NO ₂ : 80µg/m ³	30.25	21	28	
					norms	3. PM ₁₀ ⁻ 100µg/m ³	249.17	76	66	
						4. РМ _{25.} : 60µg/m ³	63.33	27	31	
ŀ						5.CO:02mg/m3	1.38	1.3	0.6	
						6.VOCs	1,18	4.2	1.6	-
Γ				1. Sewri & Sewri bay area for package I	Quarterly	Marine water quality Standards – Class SW-IV Harbour Waters (MPCB)	Zone I	Zone II	Zone III/ Package-03	
1				2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year	1. pH : 6.5-9	81	8.3	Not applicable	
	2	Water pollution	pH, BOD, DO, Turbidity and O&G	3. Gavhan & Chirle for package III	Not applicable	2. DO: 3 mg/l	5	6	Not applicable	
						3. Turbidity: 30 NTU	4.3	7.6	Not applicable	
						4. BOD: 5 mg/l	BDL[DL=2]	BD1.	Not applicable	
L						5. O & G: 10 mg/l	BDL[DL=2]		Not applicable	
┝	_			-		6.COD		16	Not applicable	-
						Municipal Soild Waste Management Rules, 2016	Sewri Camp Site	Shivaji Nagar Camp Site	Chirle Camp Site	-
				1. Sewri & Sewri bay area for package I	MCGM - MTHL 1 - as per	Generated Concrete and Debris from Construction	12019.8 Cu.m.	App. 2000 CuM Collected in junibo bags and Disposed off in EBB Location	NA	
			Volume of waste soil,	1. Sewirl di Sewir Day al ca los package r	mount - mine i - as per	Generated cutting tree (ha) total	 Tree Cutting: 384 trees (Till March 2022) Transplanting : 445 Trees (Till March 2022) 		Tree cutting work completed and Half yearly report submitted to Client (Aug, 2021)	
	3	Waste	cutting tree and domestic			Generated domestic waste (t/month) total	119.74	3.5 T/quarter. It is disposed through CIDCO daily.	2.75 T for the quarter	
			garbage			Confirmation of adequate disposal (visualt survey)	Schedule Audited by EMS	Cibeo dally.		
				2. Nhava temporary bridge & casting yard in Gavhan for package II	4 Times / Year			Muck Testing Done on September 2021 and Reports submitted to GC	Not applicable	
				3. Gavhan & Chirle for package III	Once site clearing work/execution part of work start.					
					NOR SUIC			BDL		
-	_			1. Sewri & Sewri bay area for package I	1. Muck: 1 Time / Year 2. Sediments: 4 Times /	Soil Pollution Standard in India (MOEF)	Sediment sample at Sewri	0,17	Not applicable for package-3	
				2. Nhava temporary bridge & casting yard in Gayhan for package II	Year	1. Cadmium: 0.01mg/l	BDL	BDL		
				3. Gavhan & Chirle for package III	*lf any spillage/ leakage	2. total cyanide : not detected		BDL		
					take place from chemical, fuel storage area.	3. Organic Carbon	1.1	BDL.		
					*One time grab sample to be collected during Bridge Construction					
					*Pre & Post Monsoon at Storage area only	4. lead: 0.01mg/l	18		Not applicable for package-3	
						5. chromium (VI): 0.05mg/l		BDL		
						6. arsenic: 0.01mg/l or 15mg/kg (agri-land soil)	BDL			
1	1	Soil				7. total mercury: 0.005mg/l 8. alkyl mercury: not detected	BDL BDL	BDL BDL	Based	soil contamin
			Heavy Metals & Oil &				DDL	000	Kegarding	rds items durin

Attachment 2-4

i.	Remark - reasons why the data is exceeding standard - counter measures when the data is exceeding
_	Average is above permissble limit with OCP / Water
	sprinkling 3 times a day. Average is above permissble limit with OCP / Water sprinkling 3 times a day.
	Benzene is analysed in ambient air
	Comprehensive waste management plan is implemented with prior approvals of MCGM, PCB and Debris Disposed as autorized for MTHL-1
_	
	Hazardous Storeage is situated in low laying area at Gavan area. Due to this reason complete ground area is covered by boulders to avoid further water
	logging in rainy season. Therefore soil sample is impossible to taken out from in and around the Oil & chemical storage area. Same has witnessed by GC during Febrary-2020 monitoring.
	entation, some items shall be selected from the to ed Design. Only the selected items shall be reporte
	(1) + + 0

	in of Environm	ental Monitoring d	luring Construction						repared for report meters are include
t 2-4	Monitoring during	Construction for 4.5 y			Monitoring Peri	iod - January 2022 to March 2022		requireu para	meters are muidde
mental	entation	Construction for 4.5 y	ears	1	10. copper: 125mg/kg (only paddy field soil)	142	TIDI		1
					11. dichloromethane: 0.02mg/l	142	BDL BDL	JICA, and	the rest of items s
				_	12. carbon tetrachloride: 0.002mg/l		BDL		
					13. 1,2-dichloroethane: 0.004mg/l		BDL.		
					14. 1,1-dichloroethylene: 0.02mg/l		BDL		
					15. cis-1,2-dichloroethylene: 0.04mg/l		BDL.		
					16. 1,1,1-trichloroethane: Img/l		BDL.		
					17. 1,1,2-trichloroethane: 0.006 mg/l		BDL		
					18. trichloroethylene: 0.03mg/l 19. tetrachloroethylene: 0.01mg/l		BDL BDL		
					20. 1,3-dichloropropene: 0.002mg/l		BDL		
					21. thiuram: 0.006mg/l		BDL		
					22. simazine: 0.003mg/l		Sea Section (ST5000-5500) Migratory Bird Area	Shivaji Nagar (Commercial area)	
					23. thiobencarb: 0.02mg/l		(no standard on sea section) 68.2	(commercial area)	
_		1.0			24. benzene: 0.01mg/l 25. selenium: 0.01mg/l		65.6		
			1. Sewri & Sewri bay area for package I	Fortnightly - Noise leve	Els Construction area Standard 85 dB(A) daytime (Japan standard) Not construction area : Ambient Noise Standard in India (dB(A) Laeq) 75 Max.	Sewri (ST 200-500) (Industrial area)			
					Day time : 6-22 hr (continious) dB(A) - 75 DB	70.7			
				Noise levels - Night time	Night time: 22-6 hr (continious) dB(A) - 55 DB	66,21			
	-	Ambient and road side noise (dB(A)LAeq)	2. Nhava temporary bridge & casting yard in Gavhan for package II	2 Times / Year					
			3. Gavhan & Chirle for package III	Fortnightly					
					(only sea section) Day time : 6-22 hr (10 min during 9-17 hrs)				
					Night time: 22-6 hr (10 min 22-24 hr)			A	
	100 million - 100								
5	Noise and vibration		1		Note (standard values in Not construction area)				2
				1	1.Industrial Area		Shivaji Nagar	Chirle	
					Day Time: 75 (6-22hr)		(Commercial area) Not Applicable	Not applicable	
				P	Night Time: 70 (22-6hr)			. tor appareable	
					2.Commercial Area:				
					Day Time: 65 (6-22hr)				
					Night Time: 55 (22-6hr)				
			1 Location Gavan area for package III	Half yearly	Construction area Standard 75 dB daytime (Japan standard) Not constuction area : Vibration Standard (Japan Standard along the road)	Sewri (ST 200-500) (Industrial area)			
		Vibration (dB)			Day time : 6-22 hr (continious)				
		shall be converted from mm/s to dB			Night time: 22-6 hr (continious)		Sea Section (ST5500-16000)	Shiyaji Nagar side (app. ST16000-19000) N/A	
					Note (standard values in Not construction area)				cted area (CRZ and
					1. Commercial /Industrial Area				plan will be extab
					Day Time: 70 (7-20hr) Night Time: 65 (20-7hr)		not required	monitoring form	shall be updated b
			Along MTHL alignment and mangrove	Quarterly	1.200 rune. 05 (20°/18)		not required		
			replant area for Package I	during the construction Period	Standard is not existing, but quantity and quality should not be worsen	Sewri side (ST500-5500)	not required		Mangorove Rep area appointed Governme
			Along MTHL alignment and mangrove replant area for package II	4 Times / Year	1-1. Fauna-Flora (number of species and quantity	Flora/Fauna list maintained for Referal	not required		N/A
					(1) Number of species of bird	35	not required		
		1.Monitoring of mudflat			(2) Number of species of fish	27	not required		
		conditions including fauna- flora 2. Monitoring of Cutting			(3) Estimated number of Flamingo	20000+ Lesser Flamingo is dominant	not required	Approved By Both CIDCO and Forest forest Dept (both Alibaug and Uran(regional office))	
		Tree and replantation/transplation					P		

1-2: Mangrove density and community survey

Avicennia marina

Sensitivity: LNT Construction Internal Use

area 3.Monitoring of Mangrove

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be de	leted from this form.
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2.4	
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	There is no reference standard in India for Vibration
	monitoring in marine area. GC has confirmed that
	vibration monitoring is not required for the project.
_	
ortan	t Bird Area) and ecosystem, detailed long-
ed duri	ing baseline survay of birds. This tentative
d on t	he detailed long-term monitoring plan.
ation	
State	
	Biodiversity list in CEMp/ EMP 2022 updates
	Testing for phytoplankton/ zooplankton density and
	list of fauna attached in original test records available
	from Ultratech.
	-
	-
	~
	/
_	

nt	6	Protected Area	Construction for 4.5 ye Plantation area appointed by MoEF 4. Monitoring of sedimentation soil and ecological parameter (25 items on EIA main text Table 6.1.15 for soil and 7		
Vatural Environment			items such as 1)Net primary productivity, 2)Chlorophyll-a,		
Natural			3)Phosphate, 4)Nitrate, 5)Nitrite, 6)Particulate Organic Carbon, 7) SiO2)		
		Ecosystem			
	7	Hydrology	Flooding situation	Not applicable for Package I	
				2 Locations (CRZ at Sewri and Shi Nagar) for Package II Not applicable for Package III	
			1	2 Locations	
	8	Topography and Geology	Conditions in embankment area		
	9	Local conflict of interests	Construction worker's township	2 Locations (major camp site in Sew Shivaji Nagar)	
	_	ancress	iowasap	Sinvaji (Vagar)	
	10	Infectious diseases such as HIV/AIDS	Number of infected patient	2 Locations (major camp site in Se Shivaji Nagar)	
			Construction worker's cond		
	п	Labour Environment		2 Locations (major camp site in Sew Shivaji Nagar)	
Other	12	Accident	Number of accidents	2 Locations (major camp site in Sew Shivaji Nagar)	

Sensitivity: LNT Construction Internal Use

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Monitoring Period - January 2022 to March 2022

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This form is prepared for repo required parameters are inclu

			Plantation area appointed						
		Protected Area	by MoEF			(1) Number of species of mangorve	Dominant - Avicennia sp.	not required	Nil
6		Troite icu Tuca	4. Monitoring of			(2) Density of mangrove (xx trees/10m x 10m)		not required	
		sedimentation soil and ecological parameter (25 items on EIA main text			1-3: Benthos Survey	MEIO, Flora, faun a, phytoplankton, zooplankton	not required		
		Table 6.1.15 for soil and 7			(1) Number of species and quantity by species	130 Species and 145 No/m2			
	1.1	items such as 1)Net primary productivity,			2-1: Cutting tree confirmation	1. Tree Cutting: 384 trees [Till March 2022] 2. Transplanting: 445 Trees (Till March 2022)			
			2)Chlorophyll-a,			(1) Number of cutting tree and species	CRZ- Cost assigned to FD		
			3)Phosphate, 4)Nitrate,			3-1: Mangrove survey in the replant area	GC to integrate FD and environmentalist		
			5)Nitrite, 6)Particulate Organic Carbon, 7) SiO2)		~	(1) Number of species of mangorve			
			organic carbon, // Sto2/			(2) Density of mangrove (xx trees/10m x 10m)			
						4. Ecologial Parameter			
						(1) Net primary Productivity : <1,500 mgC/m3/day at surface	500		
						(2) Chlorophyll-a: <4mg/m3	4.5	Shivaji Nagar	
						(3) Phosphate: 0.1-90µg/l	3	No flooding	
						(4) Nitrate: 1.0-500µg/l	3		
						(5) Nitrite: <125µg/l	BDL [DL=2]	Shivaji Nagar Camp Site	Chirle
						(6) Particulate Organic Carbon: 10-100mg/m ³	11		Rock filling activity is carried out as per aggrement.
_		Ecosystem				(7) SiO2 10-5,000µg/l	33.13	Shivaji Nagar Camp Site	Chirle
				Not applicable for Package I		Criteria for evaluation		100.101	
	7	Hydrology	Flooding situation			Project activities and structures does not cause flooding and impacts on tidal conditions	Sewri	125-150	85
				2 Locations (CRZ at Sewri and Shivaji	4 Times / Year	Monitoring of flooding situation	No Flooding	Shivaji Nagar Camp Site	
_				Nagar) for Package II		Fromoring of moouning situation	No Flooding	Health Checks carried out but	Regular Health check up is
				Not applicable for Package III				HIV/AIDS parameter is not there.	carried out by site Doctor.
1		Topography and	Conditions in embankment	2 Locations (1. Embankment of Inter Change in Shivaji		Criteria for evaluation Embankment shall be stabilized without any landslide and cracks	Shivaji Nagar	Shivaji Nagar Camp Site	Gavan Camp site
8 Geology		area	Nagar and 2 Cutting area at toll gate in Chirle)	4 times / year x 4.5 years	Monitoring of embankment	In progress	Conforming with BOCW Act 1996	Conforming with BOCW Act 1996	
					Criteria for evaluation	Sewri Camp Site	Shivaji Nagar Camp Site	Chirle/Other area	
3		Local conflict of interests	Construction worker's township	2 Locations (major camp site in Sewri and Shivaji Nagar)	4 times / year x 4.5 years	Employment opportunity shall be provided fairly	1. Local labor : Jan 2022 : 885		Nil
	_					Number of hired workers by community	2. Local labor : Feb 2022 : 900 3. Local Labor : Mar 2022 : 927	NIL	NI
						Criteria for evaluation Infection disease rate shall not be caused by the project	Sewri Camp Site		
1		Infectious diseases such as HIV/AIDS	Number of infected patient	2 Locations (major camp site in Sewri and Shivaji Nagar)	4 times / year x 4.5 years	Confirmation of health check record and inspect project site > PPE provisions for work, social distancing for covid protocol at work in TBT training. Posters for awarenss at Kitchen and Labor camp. Medical camp : 220 Labor Covid Precautions : 1. L&T office and camps : Thermal screening / Sanitation. 2. Fogging : 2 times in a week 3. Pest control : 2 times in a week	Doctor on call checks site specific infections., minor and major incidents . 24x7 ambulance service , ERT team with trained first aiders available		
1	1 1	Labour Environment	Construction worker's con	2 Locations (major camp site in Sewri and Shivaji Nagar)	2 times / year x 4.5 years	Criteria for evaluation "Building And Other Construction Workers (Regulation of Employment and Conditions of Service) Act,1996", "The building and other construction worker's welfare cess Act, 1996" and international standards such as "IFC Performance Standard 2 Labor and Working Conditions" BOCW Registeration of Labor- 943 Labour BOCW kit distribution: 496 Labour	 * 4164 labor for 3 months at 11 functional camps. * One mid- day meal introduced as per BOCW act and by Maharashtra state serves 119250 free meals from Jan 22 to Mar 22 *Entertainment (Movie) arranged for 600 labour on Sunday 		
						Site Visual Inspection			
1	,	Accident	Number of accidents	2 Locations (major camp site in Sewri and	4 times / year x 4.5 years	Criteria for evaluation Any accidents are not caused by construction	1 RLTI reported		
	ľ	. weigen	reaction of accidents	Shivaji Nagar)	+ miles / year x 4.5 years	Number of recorded accident			
-	-								

	Attachment 2-4
	nitoring results to JICA India Office. Only minimum rm, and not all perameters in EMOP are covered.
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	Functional first aid center within MTHL -1 campus. Induction, medical check up and
	authroization required to begin work for Labor.
	Biotoilets used for labor camps with biodigestors. A DRDO patented technology used for Solid
	waste. The bathing and kitchen water was
	directed to a reed bed for treatment.
	While cutting the bracing secondary beam tilted
	towards IP and resulted cut injury of little, ring and middle finger
-	and anosit inger



QPR No.20 (January to March 2022) - Attachment 2-6

MTHL Land Acquisition Status (Attachment 2-6):

The total land required on Navi Mumbai side- 108.09 ha Land in possession in MMRDA – 106.345 ha Balance land acquisition- 1.745 ha

Note: The acquisition of 1.745 ha is in progress by CIDCO. The balance acquisition would be likely completed by the end of June 2022.

Land Required in ha		Land Acquired in ha		Balance Land to be acquired in ha	Anticipated date for Land Acquisition	Payment status (Payment made to Land Owners by CIDCO)	Remarks
Govt.	Private	Govt.	Private	Private*		1.00	
98.75	9.34	98.75	7.595	1.745	31-07-2022	-	The payment status to the land owners is awaited from CIDCO. The same would be communicated to JICA on receipt of the same.
	otal 8.09	98.75	7.595	1.745			

*Portions of Private Land

Sr. No.	Name of Village	Area (Hectare)	Acquired	Non-acquired	
1	Gavhan	0.15	0.15	0.00	
2	Jasai	8.72	7.306	1.414	
3 Chirle		0.47	0.139	0.331	
	Total Area	9.34	7.595	1.745	

QPR No. 20 (January to March 2022) Attachment 2-8

Attachment 2-8

RAP Implementation Monitoring Form For Mumbai Trans Harbour Link Project (MTHL)

1.	General	Informat	tion

O

- a. RAP Implementation Monitoring Results:
- b. Date of Preparing This form

Progress Status Report (PSR) for the 1st quarter of 2022 31-03-2022

c. Person Preparing This form

Name: Robin Sham Position: Engineer and Team Leader Department/Organizations: General Consultants

2. Scale of Impact

2.1 Project Affected Households (PAHs) and Project Affected Persons (PAPs) for Sewri side

Total Project Affected Households (PAHs)	297 Hhs	Titleholders: 0 Hhs
		Non-titleholders: 297 Hhs
Total PAPs	1,282 persons*	Titleholders: 0 persons
		Non-titleholders: 1,282 persons*
PAHs who need relocation (as residents)	231 Hhs	Titleholders: 0 persons
		Non-titleholders: 231 (1,088 persons) *
PAPs who do not need relocation (as residents)	0 persons	Titleholders: 0 persons
		Non-titleholders: 0 persons
Commercial PAPs who need relocation	66	Titleholders: 0 persons
	(194 persons) *	Non-titleholders: 66 (194 persons) *
Commercial PAPs who do not need relocation	0 persons	Titleholders: 0 persons
	A STREET	Non-titleholders: 0 persons

* - Figures for number of persons do not include no. of family members of few additional PAPs.

2.2 Structures

Structures	Residential: 231
	Commercial: 65
	Residential + Commercial: 1 (counted in Commercial)
	Community: 9 (Religious Properties 6, Public Toilets 3)
	Government: 16 (MbPT Structures 9, Occupants of Leased Plots 6 & Police Chowki 1) Total: 322

2.3 Fishery

Categories of Fisher-folks	Identif	ied Number	Total	Remarks
	Mumbai side	Navi Mumbai side	- Anna	
C1: Fishing stakes and nets in RoW (250 m.)	178	54	232	Funds for 230 nos C category fishermen are transferred to Commissioner o Fisheries on 17.03.2020 for payment to the beneficiaries. 2. The list of balance 2 Nos. of C1 category fishermen are in process of fund transfer to the

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				Commissioner of Fisheries.
C2: Fishing Stakes and Nets within 500 m. of RoW (Southern side)	296	567	863	 Funds for 496 nos C2 category fishermen are transferred to the Commissioner of Fisheries in 2017-18. The list of balance 367 Nos. of C2 category fishermen are under verification of validity.
C3: Hand Pickers	1498	4051	5549	Funds for 4141 nos of C3 category fishermen are already transferred to the Commissioner of Fisheries and the balance of 1408 Nos. of C3 category fishermen are in process of fund transfer to the Commissioner of Fisheries.
C4: Commercial and Artisanal Fisher-folks (Loss of Time and Increased Operating Costs)	Will be observed during the construction period	Will be observed during the construction period		Nil
C5: Fisher-folks with Loss due to Turbidity	Will be observed during the construction period	Will be observed during the . construction period		Nil
C6: Fisher-folks with Damages due to Accidents	Will be observed during the construction period	Will be observed during the construction period		Nil

2.4 Land Acquisition / Transfer

Location		quired in a.	Land Acqu	uired in Ha.	Balance Land to be acquired in Ha	Remarks
	Govt.	Private	Govt.	Private		
Sewri	10.089	0	10.089	0	0	
Navi Mumbai	98.75	9.34	98.75	7.595	1.745	
Total	118	179	108.839	7.595	1.745	

QPR No. 20 (January to March 2022)



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3. Monitoring Results

3.1 Sewri Section

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Activity	Indicator	Total Target	Progress till Last Quarter	Progress during reporting Quarter	Cumulative Progress till Current Quarter	Cumulative Achievement of Total Target (%)	Remarks, If Any
Resettlement	No. of Residential PAHs provided with Allotment Letters of Alternate Tenements	231	197	29	226	97%	
	No. of Residential PAHs given possession of Alternate Tenements	231	197	29	226	97%	
	No. of Commercial/R+C PAPs provided with Allotment Letters of Alternate Shops/Tenements	66	23	38	61	92%	
	No. of Commercial R+C PAPs given possession of Alternate Shops/Tenements	66	23	38	61	92%	
	No. of Occupants of MbPT Leased Plots provided Compensation	6	5	1	6	100%	
	No. of Religious properties Relocated / Removed	6	1	5	6	100%	
	No. of Other Community properties Relocated / Removed	4	0	4	4	100%	
	No. of Structures in possession of MbPT Dismantled / Cleared	9	0	9	9	100%	
	No. of PAHs/PAPs provided Shifting Charges / Arrangement	297	0	0	0	0%	
Rehabilitation	No. of PAHs / PAPs identified for Livelihood Support in Post Resettlement Assessment						
	No. of PAHs / PAPs provided Livelihood Support under Program-I (to be identified)		_	_			
	No. of PAHs / PAPs provided Livelihood Support under Program-II (to be identified)						
	No. of PAHs / PAPs provided Livelihood Support under Program-III (to be identified)						
	No. of new enterprises started						

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QPR No. 20 (January to March 2022)

Activity	Indicator	Total Target	Progress till Last Quarter	Progress during reporting Quarter	Cumulative Progress till Current Quarter	Cumulative Achievement of Total Target (%)	Remarks, If Any
Grievance Redress	No. of Grievances Received by FLGRC	4	HU		OHO	U V E	
Redress	No. of Grievances Disposed by FLGRC	2	1	1	2	100%	
	No. of Grievances Received by SLGRC	2					
	No. of Grievances Disposed by SLGRC	0					
Post Resettlement	No. of CHSs Registration helped						
Assistance	No. of CHSs provided Tenements for Social Amenities						
	No. of CHSs' Maintenance Fund Invested						
	No. of CHSs' Office Bearers provided training						

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QPR No. 20 (January to March 2022)

Sr.	Villege Ne		Total number	Total		ed eligible inits	e family
No.	Village Na	те	of forms Received	C1	C2	С3	Total
1	Bamandon	gri	273	1	1	28	30
2	Belapur		110	0	5	15	20
3	Belpada		1185	0	7	478	485
4	Diwale		455	12	201	52	265
5	Ganeshpur	i	276	0	37	35	72
6	Gavhan		2162	0	14	1317	1331
7	Jasai		926	0	0	18	18
8	Jawale		51	0	1	0	1
9	Kombadbh	uja	413	1	23	134	158
10	Kopar		994	2	5	228	235
11	Karave		178	0	44	67	111
12	Mahul		1062	129	76	604	809
13	Moha		475	22	25	134	181
14	Mora		818	0	102	375	477
15	Morave		539	14	21	88	123
16	Nhava		1646	0	32	307	339
17	Sarsole		266	0	30	83	113
18	Sewri		305	0	1	72	73
19	Shivajinagar Trombay		241	0	0	15	15
20			202	1	4	61	66
21			1208	49	219	823	1091
22	Ulwe		218	1	3	14	18
23	Uran & Han	uman Koliwada	a 683	0	11	600	611
24	Vahal		411	0	2	1	3
-	Tot	al	15097	232	864	5549	6645
	Total applic	ations					15097
Duplicate/Repeated Applicati Net Applications			ation				2428
							12669
	Approved a	pplications					6645
	Grievance	Redressal Comm	uittee (GRC) for Fi	sher-folk	Compens	ation	
	of Cases red to GRC		of Cases	No. of	f Cases ected	No. o	f Cases nsideratior
		Allowed	Compensation Paid				
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QPR No. 20 (Jan to March 2022) Attachment 2-10

Implementation Schedule for Fisher-folks Compensation & Land Acquisition in Navi Mumbai

A. Implementation Schedule for Fisher-folks Compensation: -

Sr. No.	Task Designation	Approving authority	Start Date	Completion Date
-	Approval of fisherfolk's compensation Policy	Fisher-folks Compensation	08-10-2015	23-12-2015
		Committee (FCC)		
2	Approval by MMRDA	MMRDA	10-12-2015	23-12-2015
3	Submission to JICA	MMRDA	1	04-01-2016
4	A detailed list of PAP and compensation plan	1. Detailed list of Fisher-folk PAP	23-12-2015	Up to 31-03-2022
		up to list 1 (1165 Nos) & 2 (1399		1. Total up to date applications scrutinized = 12669 Nos.
		Nos) are finalized by the		2. Eligible = 6645 Nos.
		Fisheries Department.		3. Rejected = 6024 Nos.
		2. From 2018, FEVC committee		
		is the approval authority of PAF		
		and approved C1- 232 Nos.		
		C2 - 368 Nos and C3- 3481 Nos		
		are approved.		
	Validation of compensation plan	Fisher-folks Compensation	23-12-2015	1. Approval to the Fisher-folk PAP list obtained from Fisheries
		Committee (FCC)		Department for Fisherfolk from Sewri, Mahul & Trombay
				(Mumbai side) – 12th September 2017 and 20th November
				2018 for C-2 & C3 Category only.



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	Task Designation	Approving authority	Start Date	Start Date Completion Date
			23-12-2015	 23-12-2015 2. Approval to the Fisher-folk PAP list obtained from Fisheries Department for Fisherfolk of Navi Mumbai of C2 & C3 on 25th April 2018. 3. Validation of compensation is in progress and would be completed in phases.
6 Appr	Approval of compensation plan	FCC	23-11-2015 28-12-2017	28-12-2017
7 Appr	Approval by MMRDA	MMRDA	23-11-2015 09-03-2021	09-03-2021

B. Implementation Schedule for Land Acquisition in Navi Mumbai: -

Land Re H	Land Required in Ha.	Land Acq	Land Acquired in Ha.	Balance Land to be acquired in Ha	Balance LandThe anticipatedto be acquireddate for Landin HaAcquisition	Payment status (Payment made to Landowners by CIDCO)	Remarks
Govt.	Private	Govt.	Private	Private			
98.75	9.34	98.75	7.595	1.745	31-07-2022	1	 CIDCO is the land acquisition authority for land acquisition for Navi Mumbai MMRDA has paid an amount of INR 59.16 Cr to CIDCO as per their demand. The payment status to the landowners is awaited from CIDCO. The same would be communicated to JICA on receipt of the same.
Total	108.09	106	106.345	1.745			



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Task No.	Task Designation	Start Date	Completion / Forecast Date
1	Preparation of Final SIA		
1.1	MMRDA Approval	October 2015	January 2016
1.2	JICA Approval	November 2015	January 2016
1.3	Posting of project Information on MMRDA		
1.4	Translation and disclosure of entitlement policy in local language to all PAP's	December 2015	January 2016
2	LARP Implementation		
2.1	Grievance redress mechanism established	August 2016	August 2016
2.2	Staff deployment SIA implementation	June 2016	Dec. 2021
2.3	Staff Deployment Public Relation	June 2016	June 2016
2.4	Hiring of Independent Evaluation Agency	November 2018	November 2020
2.5	Preparation and issue of allotment letters to PAPs	June 2018	July 2022
2.6	Notice of PAPs for shifting (Sewri Section)	December 2018	Nov. 2021
2.7	Allotment of dwelling units to PAPs	September 2016	July 2022
2.8	Shifting of PAPs to resettlement Colony	December 2018	Nov. 2021
2.9	Transfer of compensation/allowance/ assistance to PAPs	December 2018	July 2022
2.10	Creation of Community Revolving fund (within 3 months post handing over)	April 2019	July 2022
2.11	Assessment of economic rehabilitation needs by individual household (within 6 months after handing over	September 2019	July 2022
2.12	Registration of Co-operative housing societies transfer of maintenance funds. (6 months period)	December 2019	July 2022
2.13	Signing of Civil Contract		January 2018
2.14	Notice of Civil works to proceed		March 2018
3	Monitoring & Evaluation		
3.1	Internal Monitoring- Monthly/ Quarterly	June 2016	July 2020
3.2	Independent Evaluation Mid-term and End term evaluation Mid Term End Term	May 2019 November 2019	June 2020 July 2022



Attachment 3- JICA's Concurrence Status

1st January to 31st March 2022

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Status of JICA'S Concurrence

			Bid Cost	tost			JICA's Con	JICA's Concurrence on		
No.	SI. Brief No. description	Procurement	Local Currency (Cr Rs.)	Total (Cr Rs)	PQ Documents	PQ Evaluation		Technical Evaluation	Financial Evaluation	Contract
÷	1. (CH 0+000 km to CH10+380 km)	ICB with PQ (2P)	7637.30	7637.30	7637.30 7637.30 Concurrence - 9th May 2016	JICA's Concurrence - 22 nd Dec 2016	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 12 th Sep 2017	JICA's JICA's JICA's Concurrence - 12 th Sep 2017 12 th Oct 2017	JICA's Concurrence – 15 th Feb 2018
Ň	Package-2 (CH 10+380 km to CH18+187 km)	ICB with PQ (2P)	5612.61	5612.61	5612.61 Concurrence - 9 th May 2016	JICA's Concurrence - 22 nd Dec 2016	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 12 th Sep 2017		JICA's JICA's JICA's Concurrence – 12 th Oct 2017 15 th Feb 2018
ŝ	3. (CH18+187 to CH21+800)	ICB with PQ (2P)	1013.79	1013.79	1013.79 1013.79 Concurrence - 9 th May 2016	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 4 th Jan 2017	JICA's Concurrence - 15 th Sep 2017	JICA's Concurrence - 12 th Oct 2017	JICA's JICA's JICA's Concurrence – 12 th Oct 2017 15 th Feb 2018
4	Package-4 Intelligent Transport System	ICB with PQ (2P)	413.88	413.88	JICA's Concurrence - 23rd Aug 2019		JICA's Concurrence - 24 th Aug 2021	JICA's JICA's JICA's Concurrence - 24 th Aug 2021 15th Feb 2022		



1st January to 31st March 2022

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Attachment 4- Project Procurement and Financial Status till 31st March 2022

1st January to 31st March 2022

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Mumbai Trans Harbour Link Project - Quarterly Progress Report No. 20 (Jan-Mar 2022)

PROJECT PROCUREMENT AND FINANCIAL STATUS TILL 31st MARCH 2022	
ECT PROCUREMENT AND FINANCIAL	2022
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Type	Contract	Awarded or Estimated Value (in Rs. Crore)	Current Status	Contractors	Contractors Commencement Date	Stipulated Project Completion Date	Revised Project Completion Date After granting the Extension of Time (EOT)	% Of Overall Works Progress (Design, Material Procurement and Construction) as per the Primavera Baseline Schedule Updated as of	% Of Financial Progress till 31st March 2022 (GC Certified) (Excluding Mobilization Advance, Price Adjustment and Work Variation)
	Package-1 (CH 0+000 km to CH 10+380 km)	7637.30	Awarded	L&T-IHI Consortium	March 2018	21-Sep- 2022	30-Sept- 2023	25th March 2022 74.68%	68.37%
CIVIL	Package-2 (CH 10+380 km to CH18+187 km)	5612.61	Awarded	DAEWOO- TPL JV	March 2018	21-Sep- 2022	27-Sept- 2023	72.82%	70.56%
	Package-3 (CH18+187 to CH21+800)	1013.79	Awarded	L&T	March 2018	21-Sep- 2021	03-Mar- 2023	84.05%	81.73%
ITS	Package-4 Intelligent Transport System (ITS)	413.88	Tender Evaluation Stage	NA	May 2022 (Tentative)	July 2023 (Tentative)	NA	NA	NA

1st January to 31st March 2022



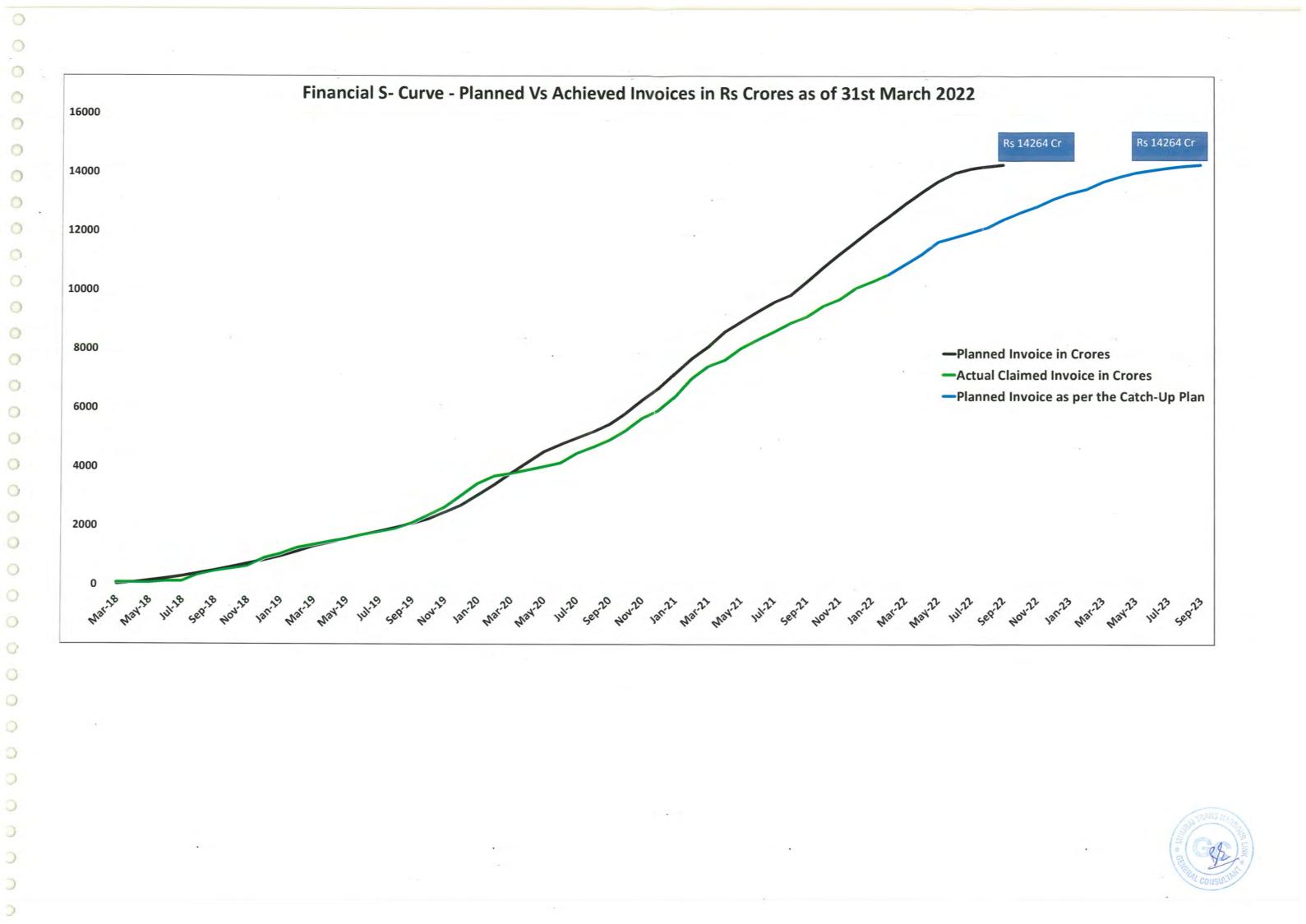
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Attachment 5- S-Curve for Cumulative Planned Vs Actual Amount in Rs Crores

1st January to 31st March 2022

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Attachment 6- Package-1's Construction Programme Updated as of 25th March 2022



€ IHI				OR MARCH 2022			MP	IRE		
Activity Name	B	8L1 BL1 Start	BL1 Finish	Original Start Duration	Finish	Schedule % Complete	Performance % Complete	Variance - BL1 Start Date	Variance - BL1 Tr Finish Date	otal Roat 2018 2019 2020 A JJAS DJF A JJAS DJF A JJA
R48 MTHL P1 -Mar'22 Month Progress	10	62 23-Mar-18	22-Sep-22	1732 23-Mar-18A	18-Oct-24	98.89%	74.68%	0	-632	-633
PR48.1 Mumbai Trans Harbour Link - Package 1	10	062 23-Mar-18	22-Sep-22	1732 23-Mar-18 A	18-Oct-24	98.89%	74.68%	0	-632	-633
M10000 Commencement Date MPR48.1.1 Key Milestones		0 23-Mar-18		0 23-Mar-18A		100%	100%	0	0	
MPR48.1.2 Contractual Interface		64 19-Sep-18 43 09-Oct-18	22-Sep-22 05-Mar-22	2035 15-Feb-19 A 1262 09-Oct-18 A	18-Oct-24 25-Mar-22	0%	0%	-148	-756 -19	-757
PR48.1.3 Access to Site		65 23-Mar-18	03-Sep-18	165 23-Mar-18 A	26-Mar-22	0%	0%	0	-1300	-765
MPR48.1.4 Document Submittals MPR48.1.5 Survey		80 23-Mar-18	18-Sep-18	180 23-Mar-18 A	09-Dec-19 A	0%	0%	0	-446	
PR48.1.6 Geotechnical Investigation		73 23-Mar-18 65 23-Mar-18	03-Jun-18 03-Sep-18	73 23-Mar-18 A 165 23-Mar-18 A	23-Jul-19 A	0%	0%	0	-322	
MPR48.1.6.1 Phase 1 MPR48.1.6.2 Phase 2		60 23-Mar-18	21-May-18	60 23-Mar-18 A		0%	0%	0	0	
MPR48.1.6.3 Phase 3		25 22-May-18 50 16-Jun-18	15-Jun-18 04-Aug-18	25 22-May-18 A 50 16-Jun-18 A	15-Jun-18 A 30-Dec-18 A	0%	0%	0	-147	
MPR48.1.6.4 Phase 4		45 21-Jul-18	03-Sep-18	45 05-Oct-18 A		0%	0%	-76	-322	
PR48.1.7 Infrasturcture Facilities MPR48.1.7.1 Project Site Office Construction (Contractor + Employe		88 23-Mar-18	05-Feb-19	376 23-Mar-18 A		0%	0%	0	the second se	
MPR48.1.7.2 Casting Yard		20 04-Apr-18 64 20-Apr-18	27-Nov-18 05-Feb-19	120 04-Apr-18 A 355 20-Apr-18 A	25-Nov-18 A 26-Oct-20 A	0%	0%	0	-369	
MPR48.1.7.3 Fabrication Yard	1	33 23-Mar-18	30-Nov-18	133 23-Mar-18 A		0%	0%	0	-122	
MPR48.1.7.4 Rebar Yard MPR48.1.7.5 Batching Plant Installation - CP30 & CP60		33 23-Mar-18 64 20-Apr-18	30-Nov-18 05-Feb-19	376 23-Mar-18 A 164 08-Sep-18 A		0%	0%	0	-265	
PR48.1.8 Procurement Plan		64 20-Apr-18 18 04-Apr-18	05-Feb-19 07-Sep-22	164 08-Sep-18 A 2186 04-Apr-18 A		0%	0%	-47	-737	-723
MPR48.1.8.1 Plant & Machinery Deployment Plan	16	18 04-Apr-18	07-Sep-22	2186 04-Apr-18 A	14-Sep-24	0%	0%	0	-737	-723
MPR48.1.8.4 Bulk Material Procurement Plan PR48.1.9 Design & Engineering (Civil)		12 01-Sep-18	13-Jul-22	1679 31-Aug-18 A	- ×	0%	0%	0	-756	-757
MPR48.1.9.1 Initial Design (General & Preliminary Design, DBR)	Contraction of Contra	02 23-Mar-18 79 23-Mar-18	21-Sep-19 09-Jun-18	673 23-Mar-18 A 79 23-Mar-18 A		0%	0%	0	-610 -172	-390
MPR48.1.9.2 Finalization of Alignment		88 23-Mar-18	18-Jun-18	88 23-Mar-18 A		0%	0%	0	-83	
MPR48.1.9.3 Detailed Design and Construction Design		69 01-May-18	21-Sep-19	673 01-May-18 A		0%	0%	0	-610	-390
MPR48.1.9.3.2 Test Pile		33 22-May-18 13 01-May-18	01-Oct-18 15-Dec-18	193 22-May-18 A 568 01-May-18 A		0% 0%	0%	0	-433 -766	-513
MPR48.1.9.3.3 Design Phase -1 (Accelerated Design of Initial Items	5) 1	37 19-Jun-18	02-Nov-18		12-May-21 A	0%	0%	-8	-921	
MPR48.1.9.3.4 Design Phase -2 (Accelerated Design of Initial Item: MPR48.1.9.3.5 Design Phase -3		53 04-Jul-18	13-Dec-18		14-Oct-21 A	0%	0%	-22	-1035	
MPR48.1.9.3.6 Design Phase -4	Contraction of the local division of the loc	21 19-Jun-18 20 07-Jul-18	25-Jan-19 11-Feb-19	144 25-Aug-18 A 220 05-Oct-18 A	27-Oct-21 A 16-Dec-21 A	0%	0%	-67 -90	-1005	
MPR48.1.9.3.7 Design Phase -5		42 07-Jul-18	05-Mar-19	579 19-Dec-18 A	27-Sep-21 A	0%	0%	-165	-936	
MPR48.1.9.3.8 Design Phase -6 MPR48.1.9.3.9 Design Phase -7		21 26-Aug-18	03-Apr-19	799 24-Dec-18 A	27-Sep-21 A	0%	0%	-120	-907	
MPR48.1.9.3.10 Design Phase -8		72 26-Aug-18 55 02-Oct-18	24-May-19 21-Sep-19	850 11-Jan-19 A 585 08-Feb-19 A	27-Sep-21 A 17-Sep-21 A	0%	0%	-138 -129	-856 -726	
MPR48.1.10 Design, Engineering & Material Procurement (OSD)		97 23-Mar-18	17-Feb-20	1211 23-Mar-18A		0%	0%	0	-520	
MPR48.1.10.1 Initial Design MPR48.1.10.3 Aerodynamic Analysis		53 23-Mar-18 45 23-Mar-18	14-May-18 14-Aug-18	53 23-Mar-18A 145 23-Mar-18A		0%	0%	0	-198	
MPR48.1.10.4 Technical Design		11 15-May-18	21-Mar-19	813 15-May-18 A	A 02-Jul-19 A	0%	0%	0	-349 -488	
MPR48.1.10.4.1 OS01NS/SS		50 15-May-18		150 15-May-18 A	09-Sep-19 A	0%	0%	0	-332	· · · · · · · · · · · · · · · · · · ·
MPR48.1.10.4.2 OS02NS/SS MPR48.1.10.4.3 OS03NS/SS		54 25-Jun-18 54 14-Aug-18	06-Dec-18 24-Jan-19	530 26-Jun-18 A 722 04-Nov-18 A	30-Jan-20 A 22-Jul-20 A	0%	0%	0	-419 -544	
MPR48.1.10.4.4 OS04NS/SS		54 09-Oct-18	24-Jan-19 21-Mar-19	425 06-Feb-19 A	20-Jan-20 A	0%	0%	-82 -120	-544	
MPR48.1.10.5 Construction Design		4 12-0ct-18	20-Sep-19	1124 02-Feb-19 A	22-Jul-21 A	0%	0%	-113	-670	
MPR48.1.10.5.1 OS01NS/SS MPR48.1.10.5.2 OS02NS/SS		01 12-Oct-18 81 07-Dec-18	30-Apr-19 25-Jul-19	731 02-Feb-19 A 478 01-Oct-19 A	14-May-20 A 02-Jul-21 A	0%	0%	-113	-379 -707	
MPR48.1.10.5.3 OS03NS/SS		33 25-Jan-19	26-Jul-19		22-Jul-21 A	0%	0%	-298 -437	-707	
MPR48.1.10.5.4 OS04NS/SS MPR48.1.10.6 Material Procurement (1st Lot)	the second se	33 22-Mar-19	20-Sep-19		19-Jun-21 A	0%	0%	-193	-637	
PR48.1.11 Tree Cutting and Transplantation		3 02-Mar-19	17-Feb-20 02-Nov-18	577 15-Mar-19 A 1121 23-Mar-18 A	19-Jan-21 A 12-Apr-22	0%	0%	-13	-336 -1257	-807
PR48.1.12 Utility Diversion		0 19-Jun-18	14-Jan-19		30-Mar-22	0%	0%	-104	-1171	-786
PR48.1.13 Construction MPR48.1.13.1 Sewri Interchange Section		Contraction of the local division of the loc	22-Jun-22		08-Aug-24	100%	68.85%	0	-650	-575
MPR48.1.13.1 Sewri Interchange Section MPR48.1.13.1.1 Sewri Interchange - Work Front - 1		9 03-Nov-18 9 03-Nov-18	28-Feb-22 28-Feb-22	1416 29-Mar-19 A 1416 16-May-19 A	01-Dec-23 01-Dec-23	100%	52.15% 50.79%	-121 -161	-537	-365 -365
MPR48.1.13.1.1.1 Sewri Interchange - Work Front - 1 - Piling		0 03-Nov-18	15-Dec-20	891 16-May-19 A		100%	90.01%	-161	-362	-139
MPR48.1.13.1.1.1.1 Piling - Land Viaduct		54 13-Apr-19	16-Sep-19	298 25-Jun-19 A	-	100%	100%	-53	-376	
MPR48.1.13.1.1.1.2 Piling - Ramp A		42 03-Nov-18 86 20-Oct-20	17-Oct-20 01-Dec-20	880 16-May-19 A 65 02-Dec-19 A	La contra c	100%	93.81% 33.33%	-161 192	-386	-171
MPR48.1.13.1.1.1.4 Piling - Ramp F		12 02-Dec-20	15-Dec-20		30-Jun-21 A	100%	100%	-28	-151	
MPR48.1.13.1.1.2 Sewri Interchange - Work Front - 1 -Pile Cap		0 19-Nov-18	24-Mar-21		21-Nov-22	100%	57.78%	-175	-429	-279
MPR481.13.1.1.2.1 Pile Cap - Land Viaduct		8 25-Apr-19 4 19-Nov-18	15-Oct-19 15-Jan-21	130 06-Sep-19 A 966 21-Jun-19 A	1	100%	100% 53.71%	-43 -175	-445 -461	-320
MPR48.1.13.1.1.2.3 Pile Cap - Ramp E		4 07-Jan-21	27-Feb-21		21-Nov-22	100%	33.33%	211	-461	-279
MPR48.1.13.1.1.2.4 Pile Cap - Ramp F		0 01-Mar-21	24-Mar-21		08-Nov-21 A	100%	100%	-111	-112	
MPR48.1.13.1.1.3 Sewri Interchange - Work Front - 1 - Pier MPR48.1.13.1.1.3.1 Pier - Land Viaduct		8 12-Dec-18 2 29-May-19	20-May-21 30-Oct-19	and the second se	16-Jan-23 19-Oct-21 A	100%	64.52% 100%	-155 -43	-428 -444	-252
MPR48.1.13.1.1.3.2 Pier - Ramp A		4 12-Dec-18	09-Feb-21	and the second se	02-Jan-23	100%	49.19%	-45	-500	-380
MPR48.1.13.1.1.3.3 Pier - Ramp E		6 27-Jan-21	20-May-21		16-Jan-23	100%	81.82%	337	-428	-315
MPR48.1.13.1.1.3.4 Pier - Ramp F MPR48.1.13.1.1.4 Sewri Interchange - Work Front - 1 - Pier Cap		3 23-Dec-20 7 05-Jan-19	01-Apr-21 11-Jun-21	56 24-Mar-21 A 499 12-Oct-20 A		100%	84.25% 61.9%	-75 -384	-405 -418	-196
MPR48.1.13.1.1.4.1 Pier Cap - Land Viaduct			14-Nov-19	88 12-Oct-20 A		100%	100%	-364	-418	

Page 1 of 4

Please note that this Monthly Rolling Plan has been updated based on the actual progress and will not match with Revised Work Program submitted post EOT-04.

Actual Work

Critical Remaining Work - summary





MUMBAI TRANS HARBOUR LINK PACKAGE 1, UPDATED BASELINE PROGRAMME FOR MARCH 2022



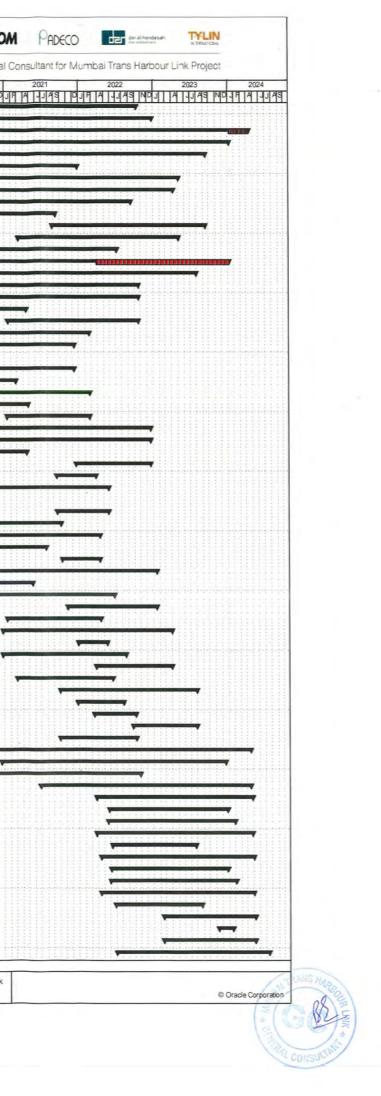


ty ID	Activity Name	BL1 BL1 Start	BL1 Finish	Original Start	Finish	Schedule %		Variance - BL1	Variance - BL1	Total Float	2018 2019 2020
	MPR48.1.13.1.1.4.2 Pier Cap - Ramp A	Duration 00 00 los 10	20.5.1.21	Duration	101.00	Complete	Complete	Start Date	Finish Date		A JIAS DIFA JAS DIFA JAS DJ
	MPR48.1.13.1.1.4.3 Pier Cap - Ramp E	499 05-Jan-19 100 13-Feb-21	26-Feb-21 11-Jun-21	469 04-Nov-20 A 98 28-Oct-20 A	19-Jan-23 27-Jan-23	100%	44.76% 81.82%	-403 90	-500 -418	-395	
	MPR48.1.13.1.1.4.4 Pier Cap - Ramp F	86 31-Dec-20	13-Apr-21	47 12-Apr-21 A	12-Nov-22	100%	84.18%	-84	-405	-179	
	MPR48.1.13.1.1.5 Sewri Interchange - Embankment Works - Ramp F	90 14-Apr-21	01-Nov-21	90 11-Nov-22	24-Feb-23	0%	0%	-403	-403	-254	
	MPR48.1.13.1.1.6 Sewri Interchange - Work Front - 1 - Super Structure Erection	628 04-May-19	28-Feb-22	760 29-Jul-20 A	01-Dec-23	100%	23.7%	-264	-537	-492	
	MPR48.1.13.1.1.6.1 Erection - Land Viaduct	96 19-Nov-19	11-Mar-20	154 29-Jul-20 A	15-Feb-22 A	100%	100%	-176	-432		
	MPR48.1.13.1.1.6.3 Erection - Ramp E	486 04-May-19 146 10-Apr-21	09-Apr-21	583 05-Sep-20 A		100%	4.41%	-306	-598	-512	
	MPR48.1.13.1.1.6.4 Erection - Ramp F	52 28-Dec-21	02-Dec-21 28-Feb-22	126 17-Aug-21 A 91 15-Feb-22 A		100%	32.39% 43.08%	-69 -40	-561	-512 -494	
	MPR48.1.13.1.2 Sewri Interchange - Work Front - 2	765 03-Nov-18	11-Feb-22	1192 29-Mar-19 A		100%	55.88%	-121	-388	-316	
	MPR48.1.13.1.2.1 Sewri Interchange - Work Front - 2 - Piling	553 03-Nov-18	01-Mar-21	946 29-Mar-19 A	28-Jul-22	100%	77.86%	-121	-354	-214	
	MPR48.1.13.1.2.1.1 Piling - Ramp C2	325 03-Nov-18	27-Feb-20	586 29-Mar-19 A	24-Mar-21 A	100%	100%	-121	-246		
	MPR48.1.13.12.12 Piling - Ramp C1	140 03-Apr-19	18-Dec-19	469 12-Nov-19 A		100%	67.14%	-108	-596	-412	
	MPR48.1.13.1.2.1.3 Piling - Ramp B MPR48.1.13.1.2.2 Sewri Interchange - Work Front - 2 - Pile Cap	84 21-Nov-20	01-Mar-21	244 22-Nov-19 A		100%	64.29%	227	-354	-214	
	MPR48.1.13.12.2.1 Pile Cap - Ramp C2	591 19-Nov-18 -361 19-Nov-18	29-Apr-21 24-Apr-20	1073 05-May-19 A 835 05-May-19 A	and the second second second	100%	40.23%	-140	-432 -268	-336	
	MPR48.1.13.12.2.2 Pile Cap - Ramp C1	172 12-Apr-19	04-Feb-20	541 14-Dec-19 A		100%	20%	-140	-208	-360	
	MPR48.1.13.1.2.2.3 Pile Cap - Ramp B	131 25-Nov-20	29-Apr-21	376 16-Jan-20 A	31-Dec-22	100%	26.79%	184	-432	-336	
	MPR48.1.13.1.2.3 Sewri Interchange - Work Front - 2 - Pier	589 12-Dec-18	21-May-21	740 04-Sep-19 A	10-Feb-23	100%	52.15%	-155	-449	-266	· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.1.2.3.1 Pier - Ramp C2	353 12-Dec-18	09-May-20	476 04-Sep-19 A	16-Aug-21 A	100%	100%	-155	-256	1	
	MPR48.1.13.12.32 Pier - Ramp C1	194 01-Apr-19	18-Feb-20	585 10-Sep-19 A		100%	38.78%	-64	-636	-355	· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.1.2.4 Sewri Interchange - Work Front - 2 - Pier Cap	248 25-Apr-20	21-May-21	458 08-Oct-19 A	10-Feb-23	100%	45.91%	168	-449	-266	
	MPR48.1.13.12.4.1 Pier Cap - Ramp C2	583 26-Dec-18 356 26-Dec-18	28-May-21 27-May-20	668 02-Dec-19 A 413 02-Dec-19 A	20-Feb-23 26-Aug-21 A	100%	51.51% 100%	-206	-451 -241	-267	
	MPR48.1.13.12.4.2 Pier Cap - Ramp C1	198 18-Apr-19	12-Mar-20	434 07-Aug-20 A		100%	40.16%	-200	-241	-331	
	MPR48.1.13.1.2.4.3 Pier Cap - Ramp B	235 19-May-20	28-May-21	308 07-Jan-20 A	20-Feb-23	100%	43.52%	112	-451	-267	
	MPR48.1.13.1.2.5 Sewri Interchange - Embankment Works - Ramp C2	60 23-May-19	02-Nov-19	60 01-Dec-21 A	15-Mar-22 A	0%	0%	-537	-563		
	MPR48.1.13.1.2.6 Sewri Interchange - Work Front - 2 - Super Structure erection	654 18-Mar-19	11-Feb-22	588 05-Dec-20 A	20-May-23	100%	56.18%	-370	-388	-316	
	MPR48.1.13.12.6.1 Erection - Ramp C2	343 18-Mar-19	02-Nov-20	389 09-Dec-20 A	15-Dec-21 A	100%	100%	-373	-262	-	
	MPR48.1.13.12.62 Erection - Ramp C1	194 08-Oct-19	26-May-20	352 05-Dec-20 A	15-Nov-22	100%	48.15%	-303	-651	-351	
	MPR48.1.13.1.3 Sewri Interchange - Work Front - 3 (Cast in situ Spans)	316 28-Nov-20 431 28-Feb-20	11-Feb-22 01-Feb-22	202 09-Mar-21 A 645 16-May-20 A	20-May-23 12-Sep-23	100%	44.44%	-83	-389	-317	
	MPR48.1.13.1.3.1 Sewri Interchange - Work Front - 3 - Piling	144 28-Feb-20	20-Nov-20	273 16-May-20 A		100%	88.88%	-65	-408	-296	· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.1.3.1.1 Piling - Ramp B	54 28-Feb-20	02-May-20	121 27-May-21 A		100%	92.56%	-300	-486	-296	
	MPR48.1.13.1.3.1.2 Piling - Ramp E	54 04-May-20	07-Oct-20	267 16-May-20 A	16-Jun-22	100%	88.89%	-11	-438	-296	· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.1.3.1.3 Pilling - Ramp C1	36 08-Oct-20	20-Nov-20	85 23-Feb-21 A	23-Jun-22	100%	83.33%	-114	-408	-296	
	MPR48.1.13.1.3.2 Sewri Interchange - Work Front - 3 - Pile Cap	159 07-Mar-20	15-Dec-20	247 21-Sep-20 A	08-Sep-22	100%	54.17%	-87	-452	-214	
	MPR48.1.13.1.3.22 Pile Cap - Ramp E	81 07-Mar-20	10-Jun-20	185 05-Jun-21 A	18-Aug-22	100%	22.22%	-302	-512	-343	
	MPR48.1.13.1.3.2.3 Pile Cap - Ramp C1	81 11-May-20 45 23-Oct-20	17-Nov-20 15-Dec-20	187 21-Sep-20 A 79 09-Apr-21 A	27-Jun-22 08-Sep-22	100%	88.89% 50%	-33 -140	-414 -452	-152 -222	· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.1.3.3 Sewri Interchange - Work Front - 3 - Pier	216 18-Mar-20	05-Mar-21	255 10-Oct-20 A	20-Oct-22	100%	50%	-95	-419	-247	· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.1.3.3.1 Pier - Ramp B	135 18-Mar-20	27-Nov-20	236 10-Jul-21 A	20-Oct-22	100%	22.22%	-301	-500	-379	
	MPR48.1.13.1.3.3.2 Pier - Ramp E	135 21-May-20	01-Feb-21	186 10-Oct-20 A	14-Jul-22	100%	77.78%	-41	-366	-167	
	MPR48.1.13.1.3.3.3 Pier - Ramp C1	90 18-Nov-20	05-Mar-21	110 01-Jun-21 A	12-Oct-22	100%	50%	-163	-413	-249	
	MPR48.1.13.1.3.4 Sewri Interchange - Work Front - 3 - Pier Cap MPR48.1.13.1.3.4.1 Pier Cap - Ramp B	196 24-Apr-20	19-Mar-21	236 27-Mar-21 A	15-Nov-22	100%	41.67%	-202	-428	-268	
	MPR48.1.13.1.3.4.2 Pier Cap - Ramp E	115 24-Apr-20 132 08-Jun-20	11-Dec-20 15-Feb-21	236 24-Jul-21 A	15-Nov-22	100%	11.11%	-269	-509	-388	
	MPR48.1.13.1.3.4.3 Pier Cap - Ramp C1	77 17-Dec-20	19-Mar-21	111 27-Mar-21 A 101 15-Jun-21 A	28-Jul-22 27-Oct-22	100%	77.78% 33.33%	-165 -150	-366 -413	-179 -261	
	MPR48.1.13.1.3.5 Sewri Interchange - Work Front - 3 - Super Structure	360 23-May-20	01-Feb-22	353 01-Mar-22 A		100%	1.09%	-383	-493	-397	
	MPR48.1.13.1.3.5.1 Super Structure - Ramp B	132 23-May-20	30-Jan-21	135 16-Jul-22	27-Dec-22	100%	0%6	-501	-504	-394	
	MPR48.1.13.1.3.5.2 Super Structure - Ramp E	132 16-Jan-21	24-Sep-21	135 01-Mar-22 A	19-May-23	100%	1.88%	-263	-504	-394	
-	MPR48.1.13.1.3.5.3 Super Structure - Ramp C1 MPR48.1.13.2 Intertidal Section	120 09-Jun-21	01-Feb-22	113 10-Mar-22 A	and in case of the local division of the loc	100%	1.43%	-150	-493	-397	
1000	MPR48.1.13.2.1 Intertidal - Temporary Access Bridge Work	715 11-Jun-18 467 11-Jun-18	23-Oct-21 26-Sep-20	1479 11-Jun-18 A 620 11-Jun-18 A	26-Sep-22	100%	96.54%	0	-282	-627	
	MPR48.1.13.2.1.1 Access Bridge	457 11-Jun-18	12-Jun-20	528 11-Jun-18 A	04-Dec-20 A 27-May-20 A	0%	0%	0	-56		
	MPR48.1.13.2.1.1.1 Access Bridge - Piling	451 11-Jun-18	05-Jun-20	415 11-Jun-18 A	13-Jan-20 A	0%	0%	0	14		· · · · · · · · · · · · · · · · · · ·
	MPR48.1.13.2.1.12 Access Bridge - Decking	437 06-Oct-18	12-Jun-20	528 14-Jul-18 A	27-May-20 A	0%	0%	16	14		••••••••••••••••••••••••••••••••••••••
	MPR48.1.13.2.12 Fingers	441 13-Oct-18	26-Sep-20	620 26-Sep-18 A	04-Dec-20 A	0%	0%	16	-56		•
	MPR48.1.13.2.1.2.1 Fingers - Piling	437 13-Oct-18	22-Sep-20	614 26-Sep-18 A		0%	0%	16	-57	-	
	MPR48.1.13.2.1.2.2 Fingers - Decking MPR48.1.13.2.2 Intertidal - Main Bridge Work	426 01-Nov-18 638 14-Dec-18		620 06-Oct-18 A		0%	0%	22	-56		
	MPR48.1.13.2.2.1 Intertidal - Main Bridge Work - Piling	531 14-Dec-18	23-Oct-21 16-Mar-21	1414 14-Nov-18 A 686 14-Nov-18 A		100%	96.54%	26 26	-282	-627	
	MPR48.1.13.2.2.2 Intertidal - Main Bridge Work - Pile Cap	536 29-Dec-18	06-Apr-21	953 17-Jan-19 A	-	100%	100%	-15	-26		
	MPR48.1.13.2.2.3 Intertidal - Main Bridge Work - Pier	562 17-Jan-19	25-May-21	960 29-Mar-19 A	1	100%	100%	-15	-36		**************************************
	MPR48.1.13.2.2.4 Intertidal - Main Bridge Work - Pier Cap	562 30-Jan-19	05-Jun-21	699 10-Aug-19 A		100%	100%	-115	-99		
	MPR48.1.13.2.2.5 Intertidal - Main Bridge Work - Super Structure Erection	534 18-Apr-19	23-Oct-21	1016 29-Nov-19 A		100%	84.26%	-110	-282	-627	•
_	MPR48.1.13.2.3 Intertidal - Finger Removal & Reuse	400 07-Mar-19	29-Dec-20	556 20-Jun-19 A	09-Apr-22	0%	0%	-85	-310	-100	
-	MPR48.1.13.3 Marine Section MPR48.1.13.3.1 Temporary Access Bridge Work -2 (MP70 to MP51- 21 Spans)	911 18-Sep-18	17-Jun-22	1596 14-Dec-18 A		100%	75.43%	-73	-654	-633	414141441449494949414141449444444949494
	MPR46.1.13.3.1 Temporary Access Bridge Work -2 (MP /0 to MP 51- 21 Spans) MPR48.1.13.3.2 Marine - Main Bridge	911 18-Sep-18 775 03-Nov-18	17-Jun-22 23-Feb-22	1235 14-Nov-19 A		0%	0%	-274	-654	-633	
5	MPR48.1.13.3.2.1 Marine - Piling	564 03-Nov-18	15-Mar-21	1499 14-Dec-18 A 962 14-Dec-18 A	16-Apr-24 05-Oct-21 A	100%	75.43% 100%	-34 -34	-654 -92	-633	
	MPR48.1.13.3.2.3 Marine - Pile Cap	572 23-Nov-18	12-Apr-21	1063 14-Jan-19 A		100%	97.53%	-54	-92	-107	
Adt	ual Level of Effort Remaining Work Milestone ual Work Critical Remaining Work summary		Page 2 of 4			te that this Mo submitted post		'lan has been i	updated base	d on the a	actual progress and will not match with Revised W

€_)-IHI	MUMBAI TRANS HAP						IRD			AECC Genera
Activity Name	BL1 BL1 Start Duration	BL1 Finish	Original Start Duration	Finish	Schedule % Complete	Performance % Complete	Variance - BL1 \ Start Date	/ariance - BL1 Finish Date	otal Float 2018	2019 2020
MPR48.1.13.3.2.4 Marine - Pier	590 22-Dec-18	02-Jun-21	844 12-Sep-19 A	10-Oct-22	100%	76.43%	-146	-336	-216	FAJJAS DJFAJJAS D
MPR48.1.13.3.2.2 Marine - Pier Cap	576 21-Jan-19	14-Jun-21	751 26-Dec-19 A	27-Dec-22	100%	70.01%	-206	-391	-267	
MPR48.1.13.3.2.5 Marine - Super Structure Erection PR48.1.13.4 Precast Segments	636 19-Apr-19		857 23-Jun-20 A	16-Apr-24	100%	14.11%	-276	-654	-633	
MPR48.1.13.4 Precast Segment - Sewri Interchange	778 06-Feb-19 701 06-Feb-19		1248 07-Aug-19 A 1043 20-Feb-20 A	08-Jan-24 13-Sep-23	100%	59.3% 51.14%	-154 -317	-732	-402	
MPR48.1.13.4.1.1 Precast Segement - Land Viaduct	276 04-Apr-19		319 03-Dec-20 A	_	100%	100%	-509	-558		
MPR48.1.13.4.12 Precast Segement - Ramp A	396 30-Mar-19	9 14-Jul-20	839 20-Feb-20 A	04-May-23	100%	18.96%	-273	-858	-541	
MPR48.1.13.4.1.3 Precast Segement - Ramp B MPR48.1.13.4.1.4 Precast Segement - Ramp C1	297 17-Mar-20		336 27-Nov-20 A		100%	46.56%	-214	-641	-417	
MPR48.1.13.4.1.5 Precast Segement - Ramp C1	290 04-Apr-19 143 06-Feb-19		669 18-Mar-20 A 425 06-Mar-20 A		100%	52% 100%	-291 -329	-765	-387	
MPR48.1.13.4.1.6 Precast Segement - Ramp E	253 15-Jul-20	14-May-21	166 25-Aug-21 A		100%	56.96%	-340	-718	-541	
MPR48.1.13.4.1.7 Precast Segement - Ramp F	107 16-Jan-21		135 10-Mar-21 A	04-May-23	100%	78.74%	-43	-597	-428	
MPR48.1.13.4.2 Precast Segement - Intertidal MPR48.1.13.4.3 Precast Segement - Marine	753 28-Feb-19		785 18-Oct-19 A	06-Jul-22	100%	95.11%	-194	-273	-175	
MPR48.1.13.5 Orthotropic Steel Deck (OSD) - Fabrication, Shipping, Asser	759 28-Feb-19 mbly & Erection - 608 11-Jun-19		1248 07-Aug-19 A 864 23-Sep-19 A	and the second se	100%	37.73% 63.21%	-135	-732 -424	-402	
MPR48.1.13.5.1 OSD - Fabrication	746 28-Sep-19		933 23-Sep-19 A	20-Oct-22	0%	05.21%	5	-372	-196	
MPR48.1.13.5.1.1 Fabrication - Factory A	720 28-Sep-19		933 23-Sep-19 A	20-Oct-22	0%	0%	5	-398	-271	
MPR48.1.13.5.1.1.1 OSD 01 - RHS Fabrication - MP 50 to MP53 (320			457 23-Sep-19 A		0%	0%	5	-239		
MPR48.1.13.5.1.1.2 OSD 03 - RHS Fabrication - MP75 to MP81 (770 MPR48.1.13.5.1.1.3 OSD 04 - RHS Fabrication - MP124 to MP128 (5			463 19-Jan-21 A 296 25-Mar-20 A		0%	0%	-359	-548 -157	-353	
MPR48.1.13.5.1.2 Fabrication - Factory B	720 28-Sep-19	and the second se	664 23-Sep-19 A		0%	0%	181	-15/		
MPR48.1.13.5.1.2.1 OSD 01 - LHS Fabrication - MP50 to MP53 (320)			379 23-Sep-19 A		0%	0%	5	-5		· · · · · · · · · · · · · · · · · · ·
MPR48.1.13.5.1.2.2 OSD 02 - RHS Fabrication - MP 69 to MP75 (683			418 07-Sep-20 A	11-Dec-21 A	0%	0%	-225	-235		
MPR48.1.13.5.1.2.3 OSD 04 - LHS Fabrication - MP124 to MP128 (50			174 24-Jan-20 A	26-Feb-21 A	0%	0%	242	203		
MPR48.1.13.5.1.3 Fabrication - Factory C MPR48.1.13.5.1.3.1 OSD 02 - LHS Fabrication - MP 69 to MP75 (683r)	660 23-Dec-19 (m) 420 23-Dec-19		581 27-Jan-20 A 314 27-Jan-20 A	23-Feb-22 A 26-Apr-21 A	0%	0%	-35	-133		
MPR48.1.13.5.1.3.2 OSD 03 - LHS Fabrication - MP75 to MP81 (770			286 15-Jan-21 A	23-Feb-22 A	0%	0%	-149	-133		
MPR48.1.13.5.2 OSD - Shipping	536 24-Jun-20	the second division of	779 09-Jul-20 A	19-Dec-22	100%	82.13%	-15	-372	-195	
MPR48.1.13.5.2.1 Shipping - Factory A	510 24-Jun-20		614 04-Dec-20 A		100%	65.16%	-163	-398	-195	
MPR48.1.13.52.1.1 OSD 01 - RHS Shipping - MP50 to MP53 (320m) MPR48.1.13.52.1.2 OSD 03 - RHS Shipping - MP75 to MP81 (770m)		the second s	88 04-Dec-20 A 358 20-Dec-21 A		100%	100% 25.35%	-163 -424	-180 -548	-378	
MPR48.1.13.52.1.3 OSD 04 - RHS Shipping - MP124 to MP128 (560			243 15-Sep-21 A		100%	100%	-424	-548	-5/6	
MPR48.1.13.5.2.2 Shipping - Factory B	510 24-Jun-20	the second se	572 09-Jul-20 A	25-May-22	100%	87.65%	-15	-191	-49	
MPR48.1.13.5.2.2.1 OSD 01 - LHS Shipping - MP50 to MP53 (320m)			77 09-Jui-20 A	21-Oct-20 A	100%	100%	-15	1		
MPR48.1.13.52.2.2 OSD 02 - RHS Shipping - MP69 to MP75 (683m) MPR48.1.13.52.2.3 OSD 04 - LHS Shipping - MP124 to MP128 (560r)			208 19-Sep-21 A		100%	71.74%	-302	-311	-260	
MPR48.1.13.5.2.3 Shipping - Factory C	450 18-Sep-20		111 28-Nov-20 A 509 25-Oct-20 A	08-Oct-21 A 13-Apr-22	100%	100% 95.46%	173 -37	-123	-20	
MPR48.1.13.52.3.1 OSD 02 - LHS Shipping - MP69 to MP75 (683m)			266 25-Oct-20 A		100%	100%	-37	-99		
MPR48.1.13.52.3.2 OSD 03 - LHS Shipping - MP75 to MP81 (770m)		STREET, STREET	88 15-Oct-21 A		100%	91.43%	-152	-123	-20	
MPR48.1.13.5.3 OSD - Custom Clearance and Inland Transport (Last Mo			809 13-Aug-20 A		100%	74,43%	25	-381	-204	
MPR48.1.13.5.3.2 OSD 2 - MP69 to MP75(683m)		20-Nov-20 17-Aug-21	269 13-Aug-20 A 541 07-Nov-20 A		100%	100% 78.55%	25 10	-179 -311	-203	
MPR48.1.13.5.3.3 OSD 3 - MP75 to MP81 (770m)		01-Jan-22	359 10-Nov-21 A		100%	48.05%	-324	-381	-299	
MPR48.1.13.5.3.4 OSD 4 - MP124 to MP128 (560m)	141 19-Jul-21		285 18-Jan-21 A		100%	91.07%	182	-131	72	
MPR48.1.13.5.4 OSD - Assembly MPR48.1.13.5.4.1 OSD 1 - MP50 to MP53 (320m)	337 07-Oct-20 80 07-Oct-20	16-Feb-22 11-Jan-21	583 25-Dec-20 A			20.99%	-66	-341	-180	
MPR48.1.13.5.4.2 OSD 2 - MP69 to MP75 (683m)	252 17-Dec-20		66 30-Dec-21 A 477 25-Dec-20 A		100%	3.98%	-297 -7	-332 -261	-138 -191	
MPR48.1.13.5.4.3 OSD 3 - MP75 to MP81 (770m)	329 20-Jan-21	16-Feb-22	311 25-Mar-22		100%	0%	-359	-341	-293	
MPR48.1.13.5.4.4 OSD 4 - MP124 to MP128 (560m)	142 18-Aug-21		316 06-Mar-21 A		100%	60.63%	140	-110	61	
MPR48.1.13.5.5 OSD - Erection MPR48.1.13.5.5.1 OSD 1 - MP50 to MP53 (320m)	608 11-Jun-19	15-Mar-22 26-Feb-21	413 01-Oct-21 A		100%	8.69%	-470	-424	-264	
MPR48.1.13.5.5.2 OSD 2 - MP69 to MP75(683m)	542 11-Jun-19		126 25-Dec-21 A 161 15-Mar-22 A		100%	0%	-331 -607	-363 -239	-194 -189	
MPR48.1.13.5.5.3 OSD 3 - MP75 to MP81 (770m)	279 07-Jan-21		262 24-Sep-22	02-Aug-23	100%	0%	-445	-428	-380	
MPR48.1.13.5.5.4 OSD 4 - MP124 to MP128 (560m)		15-Mar-22	95 01-Oct-21 A		100%	33.93%	-47	-174	-14	
MPR48.1.13.6 Post Erection Segmental Stitch Concrete (incl. Bearing Insta MPR48.1.13.6.1 Stitch Concrete - Sewri Interchange	allation and Prest 644 24-Apr-19 644 24-Apr-19		938 06-Feb-20 A 736 18-Dec-20 A	19-Apr-24 16-Dec-23	0%	0%	-163 -349	-645	-481	
MPR48.1.13.62 Stitch Concrete - Intertidal	475 29-Nov-19		895 06-Feb-20 A	26-Oct-22	0%	0%	-549	-342	-578	
MPR48.1.13.6.3 Stitch Concrete - Marine	563 21-Oct-19		731 25-Jun-21 A	19-Apr-24	0%	0%	-426	-654	-481	
MPR48.1.13.7 Crash Barrier Works	585 05-Oct-19		641 25-Mar-22	29-Apr-24	0%	0%	-596	-652	-489	
MPR48.1.13.7.1 Crash Barrier - Sewri Interchange MPR48.1.13.7.2 Crash Barrier - Intertidal	585 05-Oct-19 470 17-Dec-19		485 26-May-22 520 19-May-22	27-Dec-23	0%	0%	-649	-550 -633	-387	
MPR48.1.13.7.3 Crash Barrier - Marine	541 26-Nov-19		641 25-Mar-22	01-Feb-24 29-Apr-24	0%	0%	-584 -554	-654	-447	
MPR48.1.13.7.4 Crash Barrier - Orthotropic Steel Deck	291 23-Dec-20		343 09-Jun-22	24-Jul-23	0%	0%	-369	-420	-261	
MPR48.1.13.8 Bridge Deck (Superstructure) Water Proofing	581 15-Oct-19		626 16-Apr-22	04-May-24	0%	0%	-607	-652	-493	
MPR48.1.13.8.1 Water Proofing - Sewri Interchange MPR48.1.13.8.2 Water Proofing - Intertidal	579 15-Oct-19		477 04-Jun-22	27-Dec-23	0%	0%	-649	-548	-387	
MPR48.1.13.8.2 Water Proofing - Intertidal MPR48.1.13.8.3 Water Proofing - Marine	465 28-Dec-19 526 18-Dec-19	The second se	515 31-May-22 626 16-Apr-22	07-Feb-24 04-May-24	0%	0%	-584 -554	-633 -654	-420 -493	
MPR48.1.13.8.4 Water Proofing - Orthotropic Steel Deck	281 11-Jan-21		351 27-Jun-22	21-Aug-23	0%	0%	-354	-604	-493	
MPR48.1.13.9 Stone Mastic Asphalt Pavement	74 23-Dec-21		375 17-Feb-23	11-May-24	100%	0%	-353	-653	-555	
MPR48.1.13.9.1 Sewri Interchange	70 27-Dec-21		60 13-Nov-23	22-Jan-24	100%	0%	-573	-563	-464	
MPR48.1.13.9.2 Main Bridge	74 23-Dec-21		375 17-Feb-23	11-May-24	100%	0%	-353	-653	-613 -555	
MPR48.1.13.10 Bridge Andilaries and Misc. Works	575 31-Jan-20	22-Jun-22	622 02-Jul-22	16-Jul-24	0%	0%	-584	-630		

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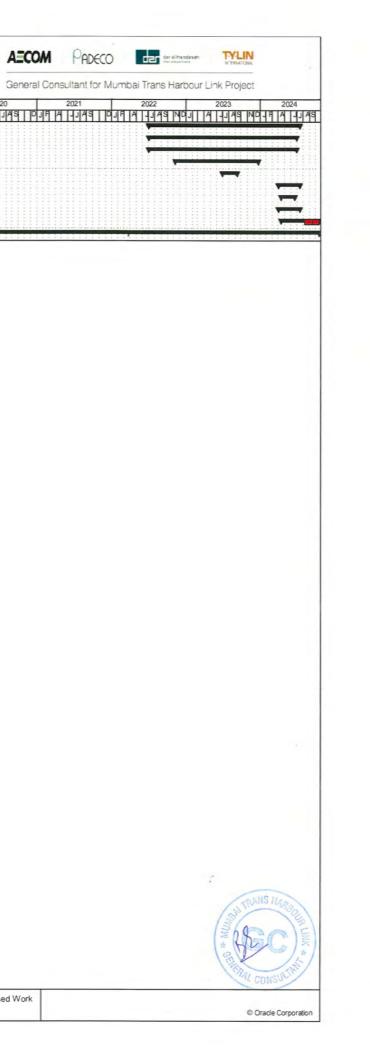


MUMBAI TRANS HARBOUR LINK PACKAGE 1, UPDATED BASELINE PROGRAMME FOR MARCH 2022



ctivity ID	Activity Name	BL1 BL1 Start	BL1 Finish	Original Start	Finish	Schedule %	Performance %	Variance - BL1	Variance - BL1	Total Roat	2018	2019	2020	2021
		Duration	1	Duration		Complete	Complete	Start Date	Finish Date		AJJAS	DJF A JJAS	DJF A JJAST	ICIT N PLOT
	IPR48.1.13.10.1 Bridge Ancillaries	575 31-Jan-20	22-Jun-22	622 02-Jul-22	16-Jul-24	0%	± 0%	-584	-630	-555	111111	11111111111111111	1111111111111	1111111111
	MPR48.1.13.10.1.1 Noise Barrier, View Barrier and Safety Fence	552 31-Jan-20	26-May-22	608 02-Jul-22	29-Jun-24	0%	0%	-584	-639	-541				
	MPR48.1.13.10.1.1.1 Noise Barrier	546 31-Jan-20	19-May-22	608 02-Jul-22	29-Jun-24	0%	0%	-584	-645	-541	111111			
	MPR48.1.13.10.1.1.2 View Barrier	416 13-Oct-20	26-May-22	343 10-Nov-22	22-Dec-23	0%	0%	-554	-481	-471				
	MPR48.1.13.10.1.1.3 Safety Fence	105 27-Oct-21	28-Feb-22	62 29-Jun-23	11-Sep-23	0%	0%	-512	-469	-385				
5	MPR48.1.13.10.1.2 Traffic Signages and Marking	84 17-Mar-22	22-Jun-22	88 03-Apr-24	16-Jul-24	0%	0%	-626	-630	-555				
	MPR48.1.13.10.1.2.1 Traffic Signages and Marking - Sewri Interchange	56 23-Mar-22	26-May-22	56 16-Apr-24	21-Jun-24	0%	0%	-632	-632	-534				
	MPR48.1.13.10.1.2.2 Traffic Signages and Marking - Main Bridge	84 17-Mar-22	22-Jun-22	88 03-Apr-24	16-Jul-24	0%	0%	-626	-630	-613		100000000000000000000000000000000000000	11111111111	111111111
MPR48	1.15 Handing Over	148 31-Mar-22	22-Sep-22	154 17-Apr-24	18-Oct-24	0%	0%	-626	-632	-633				
MPR48	1.14 Invoice Schedule (Shows the Invoice items which are not covered in the above Co	1062 23-Mar-18	22-Sep-22	1732 23-Mar-18 A	18-Oct-24	98.09%	78.87%	0	-632	-633				

Actual Level of Effort Actual Work	Remaining Work Milestone Critical Remaining Work	Please note that this Monthly Rolling Plan has been updated based on the actual progress and will not match with Revised Work Program submitted post EOT-04.	
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Attachment 7- Package-2's Construction Programme Updated as of 25th March 2022



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0		
0	MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONST (CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY 1	
0	UNDER IDENTIFICATION NO MM	RDA/ENG/000753
0	# Activity ID Activity Name	
0	1 MTHL-PKG2-DETAILED WORK PROGRAMME_2503	2022_APPROVED_M
0	2 PROJECT PRE-COMMENCEMENT ACTIVITY 3 PRE-COMMENCEMENT ACTIVITY	
0	4 JV FORMATION AND REGISTRATION 5 PROJECT EVENT MILESTONE	
0	6 PROJECT KEY MILESTONE	
0	7 INTERFACE MILESTONE_ERG19 8 PHYSICAL PROGRESS AND INTERFACE DATE_ADD2+ATTACHMEI	NT 25
0	9 CONSTRUCTION KEY MILESTONES 10 MANAGEMENT	
0	11 SITE ORGANISATION	
0	12 DEVELOPMENT OF MANAGEMENT SYSTEM 13 DEVELOPMENT OF WORK PROGRAMME	
0	14 OTHER CONTRACTUAL SUBMITTALS 15 PERMIT & APPROVAL	
0	16 DESIGN	
0	17 EARLY STAGE DESIGN WORK / INFORMATION COLLECTION 18 TEMPORARYWORK	
0	19 CONCRETE MIX DESIGN 20 JFE DESIGN PROGRAMME	
0	21 PROCUREMENT, MANUFACTURING AND LOGISTICS	
0	22 SURVEY & INVESTIGATION 23 TEMPORARYWORK	
-	24 MAIN WORK_SUBCONTRACT WORK 25 EQUIPMENTS	
0	26 BATCHING PLANT 27 RCD MACHINE	
0	28 GANTRY CRANE	
0	30 PRECAST MOULD AND SYSTEM FORM	
0	34 MATERIAL SUPPLIERS 32 MATERIAL PROCUREMENT	
0	33 PROCUREMENT OF STEEL GIRDER 34 STEEL PLATE FOR (RHS.STEEL MOUDLE-2 MP177 - MP182)	
0	35 STEEL PLATE FOR (LHS.STEEL MOUDLE-2_MP177 - MP182) 36 STEEL PLATE FOR (RHS.STEEL MOUDLE-3_MP183 - MP186)	
0	37 STEEL PLATE FOR (LHS.STEEL MOUDLE-3_MP183 - MP186) 38 STEEL PLATE FOR (RHS.STEEL MOUDLE-1_MP176 - MP171)	
0	39 STEEL PLATE FOR (LHS.STEEL MOUDLE-1_MP176-MP171) 40 IMPACT OF COVID-19	
0	41 CONSTRUCTION	
0	42 TEMPORARY WORK 43 PERMANENT WORK	
0	44 PRE-FA BRICATION AND ASSEMBLY 45 CONCRETE PRE-FABRICATION AT THE CASTING YARD	
0	46 47 STEEL SPAN FABRICATIONAT THE SUPPLER'S WORK SHOP INCLUDING L	000070
-	48 STEEL SPAN FABRICATIONAT THE SUPPLIER'S WORK SHOP	OGISTIC
0	50 STEEL MODULE-02_MP182 - MP177 (RHS)	
0	51 SHOP DRAWINGS 52 CUTTING & DRILLING 53 54 55 55 55 55 55 55 55 55 55 55 55 55	
0	53	
-	55 PAINTING 56 SHIPPING PREPARATION	
0	57 STEEL MODULE-02_MP182 - MP177 (LHS) Project Baseline Bar	Summary
0	Actual Work Milestone	▼ Summary
0	Remaining Work % Complete	
0		

						_		
2018 2019 2020 2021 2022 JJA J JJA J J J J J J J J J J J J J J J	Performance % 201 Complete J 9 J	Schedule % F Complete	Actual Finish	Actual Start	rt BL Project Finis	al BL Project Start	Original Duration	
	72.82%	99.36%		17-Nov-17	21-Sep-24	51 17-Nov-17	IPR.48 3261	ROGRAMME_25032022_APPROVED_M
нази на парерата раз ания стала стала у с	0%	0%	16-Mar-18	17-Nov-17	22-Mar-18	26 17-Nov-17		ACTIVITY
20-Nar-18A, PRE-CONMENCEMENT ACTIVITY	0.0	0%	20-Mar-18	15-Dec-17	07-Feb-18	5 15-Dec-17	55	
20-Mar-18A, JV FORWATIONAND REGISTRATION		0%	20-Mar-18	15-Dec-17	07-Feb-18	i5 15-Dec-17		
	0%	0%		23-Mar-18	21-Mar-23	6 23-Mar-18		
	0%	0%		23-Mar-18 03-Apr-18	22-Sep-22 21-Mar-23	6 23-Mar-18		
	0%	0%		31-Aug-18	22-Jun-22	11 18-Sep-18	2061	ATE_ADD2-ATTACHMENT 25
APS	0%	0%	CO. 4	25-Oct-18	06-Jul-21	03-Sep-18		
7-Mar-18A: SITEORGANISATION	0%	0%	22-Aug-19 07-Mar-18	12-Jan-18 07-Mar-18	18-Aug-18 23-Feb-18	3 20-Jan-18		
	0%	0%	22-Aug-19	20-Jan-18	27-May-18	3 20-Jan-18		EM
21-Sep-18A, DEVELOPMENT OF WORK PROGRAMME	0%	0%	21-Sep-18	23-Mar-18	24-May-18	3 23-Mar-18		
23-Agi-16A, OTHER CONTRACTUAL SUBMITTALS C3-Aug-19A, PERMIT&APPROVAL	1111111	0%	23-Apr-18	24-Mar-18	20-Apr-18	8 24-Mar-18		
USAULTSA FERWIT&APPROVAL 02Feb-21A,DESIGN	100%	100%	03-Aug-19 02-Feb-21	12-Jan-18 01-Jan-18	18-Aug-18 04-Sep-19	9 20-Jan-18		
12-Nov-19A, EARLYSTAGE DESIGN WORK / INFORMATION	100%	100%	12-Nov-19	01-Jan-18	17-Jul-18	8 20-Jan-18		ION COLLECTION
20-Aug-2DA, TEMPORARY WORK	100%	100%	20-Aug-20	20-Jan-18	01-Nov-18	7 22-Jan-18		
15-Nov-18A, CONCRETE MIX DESIGN		0%	15-Nov-18	12-May-18	31-Aug-18	4 23-Mar-18		
02-Feb-21A, JFE DESIGN PROG	100%	100% 100%	02-Feb-21	09-Apr-18 22-Dec-17	04-Sep-19 23-Aug-20	0 01-May-18 7 20-Jan-18		G AND LOGISTICS
04-Apr-18A, SURVEY&INVESTIGATION		0%	04-Apr-18	22-Dec-17	02-Apr-18	2 20-Jan-18		
11-May-20 A, TEMPORARY WORK	0%	0%	11-May-20	20-Jan-18	20-Oct-18	4 20-Jan-18		
	0%	0%		23-Mar-18	20-Jul-19	4 23-Mar-18		
C6:Nov-20A EQUPMENTS	100% 0%	100% 0%	05-Nov-20 23-Mar-19	23-Mar-18	12-Sep-19 31-Jul-18	7 23-Mar-18 7 23-Mar-18		
24-Aug-19A, RODMACHINE	0%	0%	24-Aug-19	23-Mar-18	11-Nov-18	4 23-Mar-18	514	
09:Mar-20A, SEGMENT LAUNCHER	100% 0%	100% 0%	05-Nov-20 09-Mar-20	23-Mar-18 24-Jul-18	08-Feb-19 12-Sep-19	7 23-Mar-18 0 24-Jul-18		
25-Sép-20A; PRECAST.MOU.DANDSYS	100%	100%	25-Sep-20	04-Sep-18	24-Mar-19	5 07-Aug-18		
	0%	0%		20-Apr-18	15-Oct-19	4 02-Jun-18		
U2-Feb-21A, PROQUEE MENT OF	0%	0%	00 Eab 21	08-Aug-18 01-Aug-19	23-Aug-20	0 3 07-May-19	0	
02-Jui-20A, STEEL PLATE FOR (R-SSTEEL)	0%	0%	02-Jul-20	08-Aug-19	13-Jul-20	3 04-Jun-19		77-MP182)
12:May 20A, Steel PLATE FOR (L+S Steel MC	0%	0%	12-May-20	01-Aug-19	16-Apr-20	8 07-May-19 5 01-Jul-19		77-MP182) 83-MP186)
05-Nov-20A, STEEL PLATE FOR (LHS	0% 0%	0% 0%	17-Aug-20 05-Nov-20	01-Nov-19 01-Oct-19	10-May-20 14-Apr-20	5 04-Jun-19		83 - MP 186)
02-Feb-21A STEEL PLATE FOR	0%	0%	02-Feb-21	01-Apr-20	23-Aug-20	6 30-Jul-19		76-MP171) 76-MP171)
05-Jan-21A, STEEL, PLATE FOR (L 25-May-20A, MPACTOF COVID-19	0%	0%	05-Jan-21 25-May-20	29-Mar-20 22-Mar-20	26-Jul-20	7 02-Jul-19 1		(0-INF(1/1)
	73.76%	99.87%		02-Apr-18	21-Jun-22	9 02-Apr-18		
	97 95%	99.5%		02-Apr-18	21-Jun-22	4 02-Apr-18	2164	
	70.6%	99,92%		08-Dec-18	24-May-22	2 03-Sep-18		
	8121% 57.88%	100%		16-Oct-19 06-Nov-19	19-Feb-22 15-Sep-21	5 18-Apr-19 3 18-Apr-19		YARD
	57.88%	100%		06-Nov-19	15-Sep-21	3 18-Apr-19	663	
✓ 08:Apr 18.Feb-22	88.51% 100%	100% 100%	18-Feb-22	16-Oct-19 16-Oct-19	24-Jan-22 29-Nov-21	1 02-Jun-19 2 02-Jun-19		WORK SHOP INCLUDING LOGISTIC S WORK SHOP
25 Juni 21 A ISTEEL MO	100%	100%	25-Jun-21	24-Oct-19	29-Jun-21	6 02-Jun-19	626	TIONAT JFE)
25-Juni21A, STEEL MO	100% 0%	100% 0%	25-Jun-21 10-Sep-20	06-Jan-20 17-Jan-20	29-Jun-21 08-Jul-20	6 29-Jun-19 5 29-Jun-19		
21-Jah-21A, CUTTING & DRLLING	0%	0%	21-Jan-21	06-Jan-20	27-Aug-20	7 02-Oct-19		
U4-Fe6-21A, FITTNG-UP-&WELT	0% 100%	0% 100%	04-Feb-21 03-Mar-21	12-Jan-20 27-Feb-20	10-Nov-20 09-Jan-21	7 17-Oct-19 9 30-Jan-20		
10-May-21A, PANTENG	0%	0%	10-May-21	16-Jun-20	09-May-21	3 19-Apr-20	413	
Zana za	0%	0%	25-Jun-21	10-Aug-20	29-Jun-21	3 03-Jul-20		
Date Revision Checked Approved	100%	100%	14-Apr-21	24-Oct-19	07-May-21	1 02-Jun-19		
25-Mar-22 R0	L JV	<u>ntractor:</u> AEWOO - TPI		ENT AUTHO	ON DEVELOPM	DLITAN REGIC	EMPLOYER: MUMBAI METROPOL (MMRDA)	te

	UNDER IDENTIFICATION NO MMRDA/ENG/00075	,			PROOKAM	IME_ADSIRA	CT (PACKAGE-2)		
Activity ID	Activity Name	Original B Duration	L Project Start	BL Project Fini	sh Actual Start	Actual Finish	Schedule % P Complete	erformance %	2018 J 4 J 4 J
SHOP DRAW	GS	300 0	2-Jun-19	27-Mar-20	17-Jan-20	10-Jun-20	0%	0%	3436783111111
			4-Sep-19	31-May-20	24-Oct-19	13-Jul-20	0%	0%	
FITTING-UP & TRIALASSEM			9-Sep-19	14-Aug-20	06-Nov-19	02-Sep-20	0%	0%	
PAINTING			2-Jan-20 7-Mar-20	28-Sep-20 26-Jan-21	20-Mar-20 15-May-20	24-Nov-20 18-Feb-21	100%	100% 0%	
SHIPPING PR			1-May-20	07-May-21	21-Jul-20	14-Apr-21	0%	0%	
	03_MP186-MP183 (FABRICATION AT JFE)		9-Jun-19	25-Sep-21	16-Oct-19	01-Dec-21	100%	100%	
SHOP DRAW	-03_MP186 - MP183 (RHS) GS		5-Jul-19 5-Jul-19	25-Sep-21 15-May-20	26-Dec-19 26-Dec-19	01-Dec-21 18-Jun-20	100%	100%	
			7-Nov-19	19-Jul-20	01-Apr-20	08-Oct-20	0%	0%	
FITTING-UP &			2-Nov-19	17-Oct-20	01-Jun-20	14-Jan-21	0%	0%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
			5-Apr-20 4-Jun-20	16-Dec-20 10-May-21	03-Aug-20 19-Oct-20	09-Feb-21 30-Sep-21	100%	100% 0%	1 1
	PARATION		2-Oct-20	25-Sep-21	11-Jan-21	01-Dec-21	0%	0%	
	-03_MP186 - MP183 (LHS)	653 29	Jun-19	29-Aug-21	16-Oct-19	23-Odt-21	100%	100%	
SHOP DRAWI			Jun-19	19-Apr-20	16-Oct-19	05-Nov-20	0%	0%	
			2-Oct-19 7-Oct-19	23-Jun-20 21-Sep-20	17-Feb-20 03-Apr-20	23-Dec-20 21-Jan-21	0%	0% 0%	
TRIALASSEM)-Mar-20	20-Nov-20	10-Jul-20	18-Mar-21	100%	100%	
			-May-20	14-Apr-21	04-Sep-20	03-Jun-21	0%	0%	
SHIPPING PR	01_MP176 - MP171 (FABRICATION AT JFE)		6-Sep-20 6-Jul-19	29-Aug-21 29-Nov-21	14-Dec-20 16-Apr-20	23-Oct-21 18-Feb-22	10%	0%	
	-01_MP176 - MP171 (RHS)	728 26		29-Nov-21	16-Apr-20	25-Jan-22	100%	100%	
SHOP DRAWIN		250 26		15-Jul-20	16-Apr-20	24-Dec-20	0%	0%	
CUTTING & DR			-Nov-19	12-Oct-20	15-Oct-20	04-Feb-21	0%	0%	
TRIALASSEM			2-Dec-19 5-Apr-20	31-Dec-20 19-Feb-21	05-Nov-20 10-Feb-21	24-May-21 14-Jul-21	0% 100%	0% 100%	
PAINTING			Jun-20	29-Jun-21	02-Jun-21	23-Dec-21	0%	0%	
SHIPPING PRE			-Sep-20	29-Nov-21	10-Aug-21	25-Jan-22	0%	0%	
SHOP DRAWN	-01_MP176 - MP171 (LHS)		-Aug-19 I-Aug-19	01-Nov-21 13-Aug-20	17-Jul-20 17-Jul-20	18-Feb-22 26-May-21	100%	100%	
CUTTING & DR			-Aug-19 -Nov-19	07-Oct-20	06-Aug-20	18-May-21	0%	0% 0%	
FITTING-UP & 1			-Dec-19	26-Dec-20	24-Aug-20	30-Aug-21	0%	0%	
PAINTING	LNG		-Mar-20	14-Feb-21	15-Dec-20	22-Oct-21	100%	100%	
SHIPPING PRE	PARATION	336 09	-Sep-20	24-Jun-21 01-Nov-21	17-May-21 18-Aug-21	03-Jan-22 18-Feb-22	0%	0% 0%	
The second	RIAL OCEAN FREIGHT TO THE MUMBAI PORT INCLUDING CUSTOM CLEAR			09-Jan-22	01-Sep-20	01-Mar-22	100%	100%	
	01_MP176-MP171 (OCEAN FREIGHT) -01_MP176-MP171 (LHS)		HNov-20	09-Jan-22	28-Sep-21	01-Mar-22	100%	100%	
	-01_MP176-MP171 (RHS)		HNov-20 HNov-20	12-Dec-21 09-Jan-22	28-Sep-21 10-Oct-21	01-Mar-22 • 13-Feb-22	100%	100%	
	02_MP182 - MP177 (OCEAN FREIGHT)	417 10		09-Aug-21	01-Sep-20	13-Sep-21	100%	100%	
	02_MP182 - MP177 (LHS)	294 10		17-Jun-21	01-Sep-20	08-Jun-21	100%	100%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	-02_MP182 -MP177 (RHS) -03_MP186 -MP183 (OCEAN FREIGHT)		-Aug-20	09-Aug-21	21-Sep-20	13-Sep-21	100%	100%	
	E-03_MP186 - MP183 (LHS)		+Nov-20 +Nov-20	05-Nov-21 08-Oct-21	06-Mar-21 06-Mar-21	24-Dec-21 11-Nov-21	100%	100%	
	E-03_MP186 - MP183 (RHS)	316 25	-Dec-20	05-Nov-21	25-Mar-21	24-Dec-21	100%	100%	
A Distance of the owner owner owner owner owner owner owner	NERY TO THE CONTRACTOR'S ASSEMBLY YARD 11 MP176 - MP171 (DELIVERY TO ASSEMBLY YARD)		-Aug-20	24-Jan-22	21-Oct-20		100%	80%	
	1_MP176-MP171 (DELIVERY TO ASSEMBLY YARD) 12_MP182-MP177 (DELIVERY TO ASSEMBLY YARD)		-Jan-21 -Aug-20	24-Jan-22 19-Aug-21	26-Oct-21 21-Oct-20	13-Oct-21	100%	40%	
	3_MP186 - MP183 (DELIVERY TO ASSEMBLY YARD)		Jan-21	20-Nov-21	14-Apr-21	07-Mar-22	100%	100%	
	EM BLY AT THE CONTRACTOR'S ASSEMBLY YARD	455 05		17-Feb-22	23-Nov-20		100%	36.67%	
Contraction of the Owner water and	I_MP176 - MP171 (ASSEMBLY WORKS) EMBLY_MP171 - MP172_G1		-Oct-21 -Nov-21	17-Feb-22			100%	0%	
	EMBLY_MP171-MP172_G2		+vov-21 +Nov-21	06-Jan-22 08-Jan-22	-		100%	0%	
STEEL SPAN AS	EMBLY_MP172-MP173_G1		-Dec-21	19-Jan-22			100%	0%	
	EMBLY_MP172-MP173_G2		Jan-22	17-Feb-22			100%	0%	
	EMBLY_MP173-MP174_G1 EMBLY_MP173-MP174_G2		-Nov-21 -Nov-21	21-Dec-21 30-Dec-21			100%	0%	
	EMBLY_MP174-MP175_G1		-Oct-21	11-Dec-21			100%	0%	
	EMBLY_MP174-MP175_G2	28 02	-Nov-21	11-Dec-21	-		100%	0%	
and the second se	EMBLY_MP175-MP176_G1 EMBLY_MP175-MP176_G2		-Odt-21	02-Dec-21			100%	0%	
and the second s	_MP182-MP177 (ASSEMBLY WORKS)	28 23 381 05	-Oct-21 -Sep-20	02-Dec-21 18-Sep-21	23-Nov-20		100%	0% 91.67%	
						1			
Project Baseline Bai	Critical Remaining Work Summary	EMPLOYER:				9	CONTRACTOR:		25-Mar-22



MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION (CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME ABSTRACT (PACKAGE-2) UNDER IDENTIFICATION NO MMRDA/ENG/000753 Activity ID Activity Name Original BL Project Start BL Project Finish Actual Start Actual Finish Schedule Performance % Complete Complete STEEL SPAN ASSEMBLY_MP176 - MP177_G1 121 218 03-May-21 26-May-21 03-Jul-21 100% 122 STEEL SPAN ASSEMBLY MP176-MP177 G2 1009 120 25-Jun-21 28-Jul-21 02-Nov-21 01-Mar-22 100% 123 STEEL SPAN ASSEMBLY MP177 - MP178 G1 28-Oct-21 100% 100% 68 28-Jun-21 09-Aug-21 05-May-21 124 STEEL SPAN ASSEMBLY MP177 - MP178 G2 100% 1009 75 20-Aug-21 04-Jan-22 18-Sep-21 18-Oct-21 125 STEEL SPAN ASSEMBLY MP178-MP179 G1 1009 71 05-Mar-21 27-Mar-21 09-Mar-21 29-Jun-21 100% 126 STEEL SPAN ASSEMBLY MP178-MP179 G2 100% 1009 74 26-Apr-21 19-May-21 17-Apr-21 30-Aug-21 127 STEEL SPAN ASSEMBLY_MP179 - MP180 G1 77 02-Jan-21 28-May-21 100% 100% 25-Jan-21 19-Jan-21 128 STEEL SPAN ASSEMBLY_MP179-MP180_G2 184 25-Feb-21 20-Mar-21 08-Feb-21 27-Oct-21 100% 1009 129 STEEL SPAN ASSEMBLY_MP180 - MP181_G1 100% 1009 73 02-Nov-20 25-Nov-20 03-May-21 15-Jan-21 130 STEEL SPAN ASSEMBLY MP180 - MP181 G2 55 19-Dec-20 100% 1009 11-lan-21 28-Dec-20 04-km-21 131 STEEL SPAN ASSEMBLY MP181 - MP182 G1 72 05-Sep-20 29-Sep-20 23-Mar-21 100% 1009 23-Nov-20 132 STEEL SPAN ASSEMBLY MP181 - MP182 G2 100% 78 22-Oct-20 14-Nov-20 08-Dec-20 31-Mar-21 100% 133 STEEL MODULE-03 MP186 - MP183 (ASSEMBLY WORKS) 266 06-Jul-21 100% 23-Nov-21 25-May-21 09 38 09-Aug-21 134 STEEL SPAN ASSEMBLY MP182-MP183 G1 100% 09 18-Oct-21 135 STEEL SPAN ASSEMBLY MP182 - MP183 G2 36 24-Aug-21 28-Oct-21 100% 0% 136 STEEL SPAN ASSEMBLY MP183 - MP184 G1 36 04-Od-21 28-Oct-21 24-Jan-22 100% 09 137 STEEL SPAN ASSEMBLY_MP183 - MP184_G2 28 01-Nov-21 23-Nov-21 22-Feb-22 100% 09 138 STEEL SPAN ASSEMBLY MP184 - MP185 G1 100% 238 24-10-21 08-Oct-21 09 139 STEEL SPAN ASSEMBLY MP184 - MP185 G2 79 05-Aug-21 08-Oct-21 02-Dec-21 100% 140 STEEL SPAN ASSEMBLY_MP185 - MP186_G1 242 06-Jul-21 16-Aug-21 25-May-21 100% 0 141 STEEL SPAN ASSEMBLY MP185 - MP186 G2 100% 09 240 10-Jul-21 28-Sep-21 29-May-21 142 STEEL SPAN LOADING AND TRANSPORTING TO THE ERECTION AR 143 STEEL MODULE-01 MP176 - MP171 (LOAD OUT AND TRANSPORT) 42 03-Dec-21 19-Feb-22 100% 144 STEEL MODULE-02 MP182 - MP177 (LOAD OUT AND TRANSPORT) 16.679 100% 60 30-Sep-20 21-Sep-21 30-Dec-21 145 STEEL MODULE-03 MP186 - MP183 (LOAD OUT AND TRANSPORT) 100% 7 01-Sep-21 25-Nov-2* 146 MAIN BRIDGE 3-Sep-18 24-May-22 08-Dec-18 99.79% 62.439 147 MAIN BRIDGE FOUNDATION 148 MAIN BRIDGE PILE FOUNDATION 198 03-Sep-18 23-Jan-21 08-Dec-18 100% 1009 149 1009 PILE LOAD TEST 259 03-Sep-18 11-Nov-19 100% 19-Nov-18 08-Dec-18 150 MAIN BRIDGE PILE FOUNDATION LAND 17+414~18+187 FROM MP250 TO MP266 1009 323 30-Nov-18 15-May-19 17-Jan-19 11-Jun-20 100% 151 MODULE-21_MP261 - MP257 06-Mar-20 1009 126 30-Nov-18 05-Mar-19 23-Aug-19 100% 152 MODULE-22 MP266 - MP262 167 06-Mar-19 15-May-19 17-Jan-19 28-Jan-20 100% 1009 153 MODULE-20 MP256 - MP255 32 05-Dec-18 10-Jan-19 25-Sep-19 19-Mar-20 100% 1009 154 MODULE-19 MP254 - MP250 199 11-Jan-19 16-Apr-19 05-Oct-19 11-Jun-20 100% 1004 155 MAIN BRIDGE PILE FOUNDATION CRZ 15+890~17+414 FROM MP226 TO MP250 268 20-Dec-18 100% 100% 27-Nov-19 12-Jun-19 21-Feb-20 156 MODULE-14 MP231 - MP227 48 17-Aug-19 08-Nov-19 21-Feb-20 100% 100 27-Nov-19 157 MODULE-15 MP236 - MP232 1009 77 08-Mar-19 25-Dec-19 100% 26-Aug-19 08-Aug-19 158 MODULE-16 MP240 - MP237 1009 113 20-Dec-18 08-Mar-19 12- Jun-19 11_Nov-19 100% 159 MODULE-17 MP245 - MP241 94 20-Mar-19 09-Oct-19 04-Jan-20 100% 1009 17-Jun-19 160 MODULE-18 MP249-MP246 100% 100 74 21-Jan-19 26-Mar-19 15-Oct-19 09-Feb-20 161 MAIN BRIDGE PILE FOUNDATION INTERTIDAL 14+800~15+890 FROM MP206 TO MP225 417 27-Feb-19 100% 1009 06-Jun-20 15-Oct-19 26-Aug-20 MODULE-10_MP211 - MP207 162 243 12-Mar-20 06-Jun-20 01-Nov-19 18-Feb-20 100% 1009 163 MODULE-11 MP216 - MP212 1009 277 27-Feb-19 03-Apr-20 15-Oct-19 24-Feb-20 100% 164 MODULE-12 MP221 - MP217 1009 225 06-Apr-19 30-Oct-19 25-Feb-20 26-Aug-20 100% 165 MODULE-13 MP226 - MP222 313 30-Oct-19 100% 1009 06-Feb-20 24-Jan-20 16-Jun-20 166 MAIN BRIDGE PILE FOUNDATION MARINE 13+610~14+800 FROM MP187 TO MP205 100% 100% 531 12-Dec-19 28-Nov-20 07-Feb-22 01-Oct-19 167 MODULE-09 MP206 - MP202 340 12-Dec-19 06-Mar-20 01-Oct-19 13-Oct-20 100% 1009 168 MODULE-08_MP201 - MP197 1009 262 22-Feb-20 19-May-20 19-Feb-20 25-Dec-20 100% 169 MODULE-07 MP196 - MP192 100% 146 02-May-20 08-Sep-20 12-Oct-20 07-Feb-22 100% 170 MODULE-06 MP191-MP187 82 21-Aug-20 28-Nov-20 31-Aug-20 10-Dec-20 100% 1009 171 MAIN BRIDGE PILE FOUNDATION_MARINE (STEEL) 11+880~13+610 FROM MP171 TO MP186 678 27-Nov-19 23-Jan-21 17-Mar-20 21-Feb-22 100% 1009 172 STEEL MODULE-03 MP186 - MP183 80 30-May-20 21-Nov-20 08-04-20 15-Feb-21 100% 1009 173 STEELMODULE-02 MP182 - MP177 336 27-Nov-19 10-Sep-20 17-Mar-20 25-Jan-21 100% 100% 174 STEEL MODULE-01 MP176 - MP171 185 30-Jul-20 21-Feb-22 100% 1009 23-Jan-21 19-Apr-21 175 MAIN BRIDGE PILE FOUNDATION_MARINE 10+380~11+880 FROM MP146 TO MP170 723 24-Nov-18 28-Dec-19 19-Feb-19 21-Dec-21 100% 100% 176 MODULE-05 MP171 - MP167 100% 193 19-Jun-19 16-Oct-19 24-Feb-21 21-Dec-21 100 177 MODULE-04 MP166 - MP162 507 24-Nov-18 19-Feb-19 20-Feb-21 100% 1009 18-Feb-19 178 MODULE-03 MP161-MP157 393 22-Jan-19 18-Apr-19 03-Apr-19 25-Mar-21 100% 1009 179 MODULE-02 MP156 - MP152 94 16-Apr-19 27-Jul-19 21-Dec-20 27-Mar-21 100% 1009 180 MODULE-01_MP151 - MP146 107 04-Oct-19 23-Dec-20 100% 1009 28-Dec-19 03-Apr-21 181 MAIN BRIDGE PILE CAP INSTALLATION 1113 22-Dec-18 23-Mar-21 01-May-19 100% 74929 182 MAIN BRIDGE PILE CAP BOTTOM SLAB INSTALLATION 1007 22-Dec-18 17-Feb-21 19-Aug-19 0% 183 MAIN BRIDGE PILE CAP BOTTOM SLAB CRZ 15+890~17+414 FROM MP226 TO MP250 356 17-Jan-19 12-Dec-19 19-Aug-19 28-May-20 0% Date Project Baseline Bar Critical Remaining Work EMPLOYER: Summary CONTRACTOR: 25-Mar-22 MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY Actual Work Milestone DAEWOO - TPL JV (MMRDA) Remaining Work %Complete

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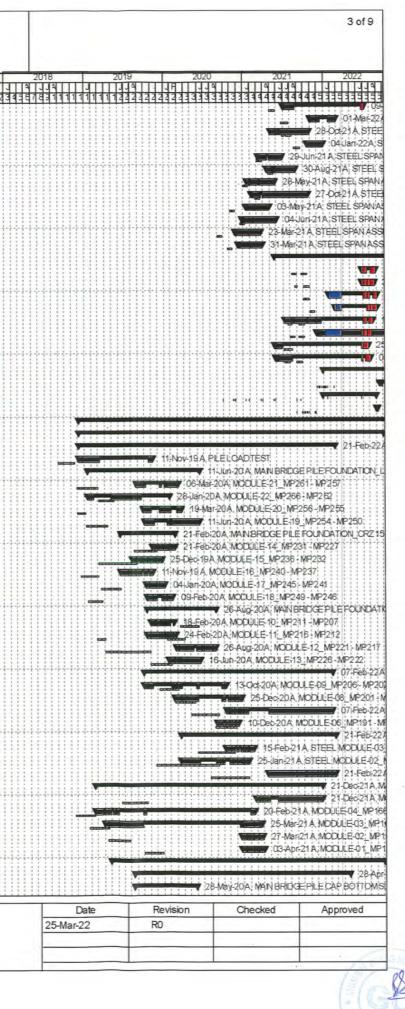
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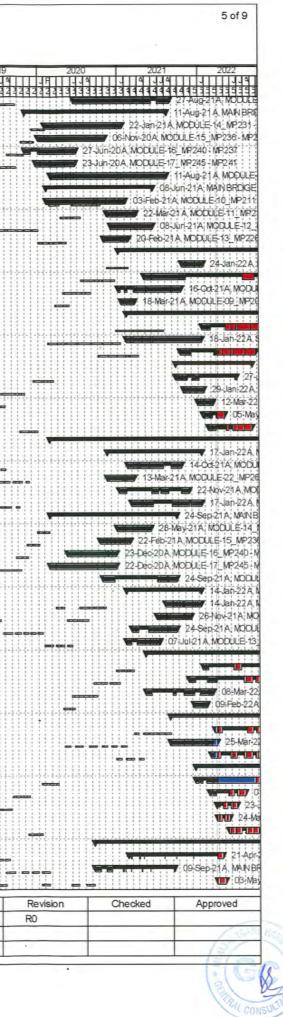
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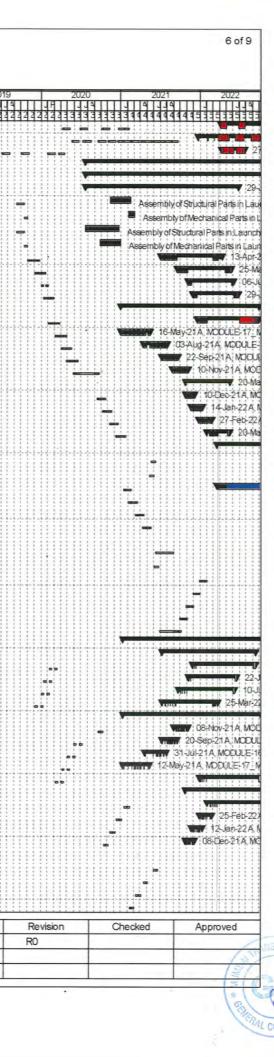


		ION UPDATED (PACKAGE-2)				NGE	HE MUMBAI BAY INCL SHIVAJI NAGAR INTER FICATION NO MMRDA/ENG/000753	
JJA JJA JF JJA J A JA J		Schedule % F Complete	Actual Finish	sh Actual Start	t BL Project Finis	Original BL Project Sta Duration		Activity Name
7831111111111111122222222232233333333333	0%	0%	28-May-20	24-Dec-19	12-Dec-19	168 28-Sep-19		DULE-14_MP231-MP227 DULE-15 MP236-MP232
21-Feb-20A, MODULE-15_MP236-MP232 25-Feb-20A, MODULE-16_MP24D - MP257	0% 0%	0% 0%	21-Feb-20 23-Feb-20	02-Nov-19 19-Aug-19	11-Sep-19 20-Mar-19	71 05-Apr-19 142 17-Jan-19		DULE-15_MP230 - MP232 DULE-16_MP240 - MP237
	0% 0%	0% 0%	04-Jan-20 10-Feb-20	22-Oct-19 08-Nov-19	03-Jul-19 12-Apr-19	44 17-Apr-19 63 19-Feb-19		DULE-17_MP245 - MP241 DULE-18_MP249 - MP246
30-Nov-20A; MAIN BRIDGE P	0%	0%	30-Nov-20	30-Dec-19	18-Jul-20	186 06-Apr-19	TDAL14+800~15+890 FROM MP206 TO MP225	N BRIDGE PILE CAP BOTTOM SLAB_INTERTION
30-Sep-204, NODULE-10_MP2	0%	0%	30-Sep-20 19-Oct-20	30-Dec-19 09-Mar-20	18-Jul-20 15-Apr-20	95 15-Apr-20 128 06-Apr-19		DULE-10_MP211 - MP207 DULE-11_MP216 - MP212
	0%	0%	30-Nov-20	11-Sep-20	12-Nov-19	74 10-May-19		DULE-12_MP221-MP217 DULE-13_MP226-MP222
	0%	0%	26-Oct-20	27-Apr-20 16-Nov-19	18-Feb-20 10-Dec-20	59 03-Dec-19 -420 21-Jan-20	E13+610~14+800 FROM MP187 TO MP205	N BRIDGE PILE CAP BOTTOM SLAB_MARINE
11-Noy-20 A, MODULE-09_MP	0%	0% 0%	11-Nov-20 25-Feb-21	16-Nov-19 11-Nov-20	20-Mar-20 30-May-20	289 21-Jan-20 50 23-Mar-20		DULE-09_MP206-MP202 DULE-08_MP201-MP197
	0%	0%		15-Oct-20	08-Oct-20	153 30-May-20		DULE-07_MP196-MP192
26-Jan-21A, MODULE-06	0%	0%	26-Jan-21	20-Nov-20 11-Oct-20	10-Dec-20 17-Feb-21	77 08-Oct-20 401 08-Jan-20	INE (STEEL) 11+880~13+610 FROM MP171 TO MP186	DULE-06_MP191-MP187 NBRIDGE PILE CAP PRECAST SHELL_MARIN
26Fe6-21A.STEEL W	0%	0%	26 Fab 24	05-Nov-21 11-Oct-20	17-Feb-21	146 02-Nov-20 118 08-Jan-20		EEL.MODULE-01_MP176 - MP171 EEL.MODULE-02_MP182 - MP177
	0% 0%	0% 0%	26-Feb-21	19-Jan-21	26-Sep-20 03-Dec-20	194 07-Aug-20		EEL MODULE-03_MP186 - MP183
	0%	0%	05-Jan-22	28-Jan-21 26-Mar-21	21-Jan-20 28-Oct-19	274 22-Dec-18 108 24-Aug-19	E 10+380~11+880 FROM MP146 TO MP170	NBRIDGE PILE CAP BOTTOM SLAB_MARINE DULE-05_MP171-MP167
22,	0%	0%	22-Jan-22	15-Feb-21	01-Mar-19	199 22-Dec-18		DULE-04_MP166 - MP162
20-06#21 North 17-May-21A, MOD	0%	0%	20-Oct-21 17-May-21	28-Jan-21 15-Feb-21	10-May-19 16-Aug-19	111 01-Mar-19 53 15-May-19		DULE-03_MP161-MP1 <u>57</u> DULE-02_MP156-MP152
······································	0%	0%		11-Feb-21	21-Jan-20	142 01-Nov-19		DULE-01_MP151 - MP146 BRIDGE PILE CAP INSTALLATION
27-JUN-20A, MANBRIDGE PLE CAP	7492% 100%	100%	27-Jun-20	01-May-19 01-May-19	23-Mar-21 13-Jun-19	1097 27-Dec-18 377 27-Dec-18	FROM MP251 TO MP266	BRIDGE PILE CAP_LAND 17+414~18+188 F
27-Jun-20A.MODULE-21, MP261 - MP 16-May-20A.MODULE-22, MP266 - MP2	100%	100%	27-Jun-20 16-May-20	15-Oct-19 01-May-19	30-Mar-19 13-Jun-19	248 27-Dec-18 207 02-Apr-19		DULE-21_MP261-MP257 DULE-22_MP266-MP262
23-May-20A, MODULE-20_MP256 + MP2	100%	100%	23-May-20	29-Nov-19	06-Feb-19	54 01-Jan-19		DULE-20_MP256 - MP255
19-Sep-20A, MAINBRIDGE PILE	100%	100%	20-Jun-20 19-Sep-20	23-Nov-19 28-Aug-19	13-May-19 08-Jan-20	218 08-Feb-19 328 04-Mar-19	ROM MP226 TO MP250	DULE-19_MP254 - MP250 BRIDGE PILE CAP_CRZ 15+890~17+414 FR
19-Sep-20A. MODULE-14_MP23	100%	100%	19-Sep-20	11-Jan-20	08-Jan-20	230 24-Oct-19		DULE-14_MP231-MP227 DULE-15_MP236-MP232
. 16-Sep204, MODULE- 15_MP235	100%	100%	18-Sep-20 05-Mar-20	16-Nov-19 28-Aug-19	22-Nov-19 26-Sep-19	201 02-Sep-19 146 02-Jul-19		DULE-15_MP230 - MP232 DULE-16_MP240 - MP237
24-Jain:20A, MODULE-17_MP245 - MP241	100% 100%	100% 100%	24-Jan-20 14-Feb-20	17-Nov-19 13-Nov-19	16-Aug-19 10-May-19	98 29-Apr-19 84 04-Mar-19		DULE-17_MP245-MP241 DULE-18_MP249-MP246
V 07-Dec-20A, WAIN BRIDGEP	100%	100%	07-Dec-20			199 18-Apr-19	5+890 FROM MP206 TO MP225	BRIDGE PILE CAP_INTERTIDAL 14+800~15+
400;204;204;MODULE:10_MP21	100% 100%	100%	07-Oct-20 24-Oct-20	29-Jan-20 31-Aug-20	05-Sep-20 13-May-20	96 27-Apr-20 157 18-Apr-19		DULE-10_MP211 - MP207 DULE-11_MP216 - MP212
ورون 19-Not 204, MODULE-12 M	100%	100%	07-Dec-20	17-Sep-20	09-Dec-19	111 22-May-19		DULE-12_MP221-MP217 DULE-13_MP226-MP222
	100% 9524%	100%	19-Nov-20	16-Sep-20 13-Jan-20	17-Mar-20 06-Jan-21	94 14-Dec-19 413 01-Feb-20	00 FROM MP187 TO MP205	BRIDGE PILE CAP_MARINE 13+610~14+800
20-Nov-20 A, MODULE-09_M	100% 100%	100% 100%	20-Nov-20 04-Mar-21	13-Jan-20 23-Nov-20	16-Apr-20 06-Jul-20	288 01-Feb-20 63 03-Apr-20		DULE-09_MP206-MP202 DULE-08_MP201-MP197
	83.33%	100%		01-Dec-20	11-Nov-20	79 15-Jun-20		DULE-07_MP196-MP192
3D-Jan-21A-MODULE-96	100% 39.8%	100%	30-Jan-21	14-Dec-20 18-Nov-20	06-Jan-21 23-Mar-21	90 21-Oct-20 467 20-Jan-20	0~13+610 FROM MP171 TO MP186	DULE-06_MP191 - MP187 BRIDGE PILE CAP_MARINE (STEEL) 11+880
08:Mar-21A, STEEL NC	32.5%	100%		13-Dec-21	23-Mar-21	136 21-Nov-20		ELMODULE-01_MP176-MP171 ELMODULE-02_MP182-MP177
	100% 34.46%	100%	08-Mar-21	18-Nov-20 28-Jan-21	02-Nov-20 07-Jan-21	158 20-Jan-20 304 27-Aug-20		ELMODULE-03_MP186 - MP183
	100% 100%	100%	22 Jan 22	08-Feb-21 13-Apr-21	17-Feb-20 25-Nov-19	297 03-Jan-19 119 10-Sep-19	0 FROM MP146 TO MP170	BRIDGE PILE CAP_MARINE 10+380~11+880 DULE-05_MP171 - MP167
	100%	100%	22-Jan-22 23-Mar-22	01-Mar-21	29-Mar-19	283 03-Jan-19		DULE-04_MP166-MP162
دينيون عنه عنه عنه عنه عنه عنه عنه عنه عنه عن	100% 100%	100% 100%	28-Oct-21 27-May-21	08-Feb-21 06-Mar-21	08-Jun-19 26-Sep-19	141 14-Mar-19 54 27-May-19		DULE-03_MP161-MP157 DULE-02_MP156-MP152
	100%	100%	27 1009 21	22-Feb-21	17-Feb-20	166 14-Nov-19		DULE-01_MP151-MP146
Y 	81.14% 90.09%	100%		04-Nov-19 04-Nov-19	24-Sep-21 28-Jul-21	1242 09-Jan-19 1242 09-Jan-19		DGE SUB-STRUCTURE RIDGE PIER INSTALLATION
27-Aug-21A 	100%	100% 100%	27-Aug-21 03-May-21	06-Nov-19 27-May-20	08-Nov-19 12-Jul-19	681 09-Jan-19 301 14-Jan-19	MB251 TO MB266	RIDGE PIER_LAND 17+414~18+188 FROM N ULE-21_MP261 - MP257
02-Feb-21A MODULE-22	100%	100%	02-Feb-21	06-Nov-19	08-Nov-19	315 04-May-19		ULE-22_MP266 - MP262
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	100%	100%	21-Jun-21	11-May-20	17-May-19	225 09-Jan-19		ULE-20_MP256 - MP255
Date Revision Checked Approv 25-Mar-22 R0	25	NTRACTOR:				IPLOYER:	aining Work Summary	
U71 U71 22	PL JV 20-	AEWOO - TPL	RITY. I	MENT AUTHO	ON DEVELOP	JMBAI METROPOLITAN REGI MRDA)		rk Milestone
								Work % Complete
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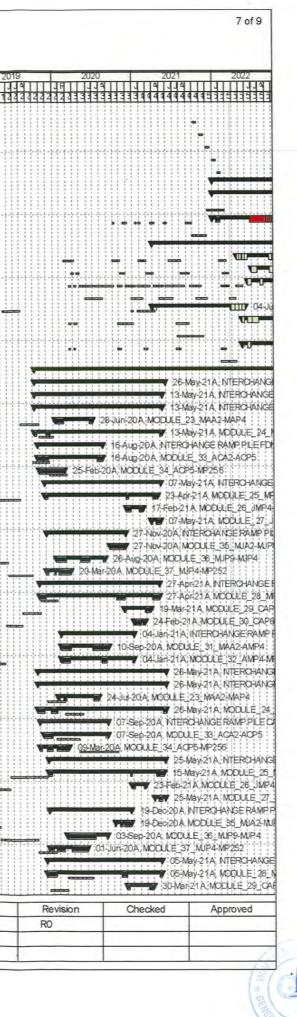
	UNDER IDENTIFICATION NO MMRDA/ENG/000753						ACT (PACKAGE-2)		
tivity ID	Activity Name	Orig Dura		Start BL Project Fin	iish Actual Start	Actual Finish	h Schedule % Complete	Performance %	2018 4 3 4 3 4 3 4 3 6 7 8 3 1 1 1 1 1 1 1 1 1
MODULE-19_MF			336 28-Feb-19	20-Sep-19	15-Jun-20	27-Aug-21	100%	100%	
MAIN BRIDGE PIE MODULE-14_MP	R_CR215+890~17+414 FROM MB226 TO MB250		393 26-Mar-19 228 05-Dec-19	06-Feb-20 06-Feb-20	04-Nov-19	11-Aug-21 22-Jan-21	100%	100%	
MODULE-15_MP			134 16-Oct-19	19-Dec-19	02-Feb-20 06-Jan-20	06-Nov-20	100%	100%	
MODULE-16_MP			85 13-Åug-19	30-Oct-19	04-Nov-19	27-Jun-20	100%	100%	
MODULE-17_MP			171 22-May-19	25-Sep-19	24-Dec-19	23-Jun-20	100%	100%	
MODULE-18_MP MAIN BRDIGE PIE	243 - MIP240 R. INTERTIDAL 14+800~15+890 FROM MB206 TO MB225		238 26-Mar-19 417 11-May-19	06-Jun-19 16-Oct-20	02-Mar-20 10-Feb-20	11-Aug-21 08-Jun-21	100%	100%	
MODULE-10_MP			338 24-Feb-20	16-Oct-20	10-Feb-20	03-Feb-21	100%	100%	
MODULE-11_MP			386 11-May-19	17-Jul-20	13-Nov-20	22-Mar-21	100%	100%	
MODULE-12_MP MODULE-13_MP			97 17-Jun-19 235 06-Jan-20	03-Jan-20 15-May-20	30-Nov-20 29-Oct-20	08-Jun-21 20-Feb-21	100%	100%	
	A MARINE 13+610~14+800 FROM MB187 TO MB205		316 19-Mar-20	18-Feb-21	04-Jan-21	2010021	100%	94%	
MODULE-06_MP			173 13-Nov-20	18-Feb-21	19-Oct-21	24-Jan-22	100%	100%	121.1221.22.122.12
MODULE-07_MP			152 17-Jul-20	19-Dec-20	28-Apr-21	40.0404	100%	81.31%	
MODULE-08_MP MODULE-09_MP			162 25-Apr-20 66 19-Mar-20	03-Sep-20 23-May-20	04-Jan-21 18-Jan-21	16-Oct-21 18-Mar-21	100%	100%	
and the second s	R_MARINE (STEEL) 11+880~13+610 FROM MB171 TO MB186		480 17-Feb-20	28-Jul-21	08-Feb-21	To non-21	100%	50%	
	01_MP176 - MP171		172 23-Dec-20	28-Jul-21	21-Jan-22		100%	16.67%	
and the second se	-02_MP182 -MP177 -03_MP186 -MP183		170 17-Feb-20	15-Jan-21	08-Feb-21 12-Oct-21	18-Jan-22	100%	100% 25%	
the second	03_MP186-MP183 R. MARINE 10+380~11+880 FROM MB146 TO MB170		231 06-Od-20 187 07-Feb-19	03-Apr-21 13-Mar-20	12-Od-21 20-Sep-21		100%	88.52%	
MODULE-01_MP			129 10-Dec-19	13-Mar-20	20-Sep-21		100%	100%	
MODULE-02_MP			77 11-Jul-19	04-Nov-19	25-Oct-21	29-Jan-22	100%	100%	
MODULE-03_MP			61 22-Apr-19	01-Aug-19	31-Dec-21	12-Mar-22	100%	100%	
MODULE-04_MP MODULE-05_MP			58 07-Feb-19 69 10-Oct-19	06-May-19 31-Dec-19	24-Jan-22 18-Feb-22		100%	56.13%	
and the second s	CAP INSTALLATION		903 08-Feb-19	27-Aug-21	25-Feb-20		100%	68.23%	
and the second sec	CAP_LAND17+414~18+188 FROM MB251 TO MB266		313 08-Feb-19	23-Nov-19	13-Nov-20	17-Jan-22	* 100%	100%	
MODULE-21_MP			159 13-Feb-19	05-Aug-19	11-Feb-21	14-Oct-21	100%	100%	
MODULE-22_MP MODULE-20_MP			114 03-Jun-19 182 08-Feb-19	23-Nov-19 01-Jun-19	13-Nov-20 07-Jan-21	13-Mar-21 22-Nov-21	100%	100%	
MODULE-19_MP			212 30-Mar-19	09-Oct-19	01-Mar-21	17-Jan-22	100%	100%	
	CAP_CRZ15+890~17+414 FROM MB226 TO MB250		405 19-Apr-19	25-Feb-20	25-Feb-20	24-Sep-21	100%	100%	
MODULE-14_MP MODULE-15_MP			83 30-Dec-19	25-Feb-20	27-Dec-20	28-May-21	100%	100%	
MODULE-16_MP			64 11-Nov-19 132 21-Sep-19	07-Jan-20 19-Nov-19	12-Oct-20 14-May-20	22-Feb-21 23-Dec-20	100%	100%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
MODULE-17_MP			163 05-Jul-19	16-Oct-19	25-Feb-20	22-Dec-20	100%	100%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
MODULE-18_MP			201 19-Apr-19	02-Jul-19	22-Oct-20	24-Sep-21	100%	100%	
MAIN BRIDGE PIER MODULE-10 MP	RCAP_INTERTIDAL 14+800~15+890 FROM MB206 TO MB225		277 06-Jun-19	05-Nov-20	04-Feb-21	14-Jan-22	100%	100%	
MODULE-11_MP			174 20-Mar-20 209 06-Jun-19	05-Nov-20 18-Aug-20	02-Aug-21 21-Jun-21	14-Jan-22 26-Nov-21	100%	100%	
MODULE-12_MP			100 24-Jul-19	22-Jan-20	01-Mar-21	24-Sep-21	100%	100%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
MODULE-13_MP			187 30-Jan-20	04-Jun-20	04-Feb-21	07-Jul-21	100%	100%	
MAIN BRIDGE PIER MODULE-06_MP	RCAP_MARINE 13+610~14+800 FROM MB187 TO MB205		139 23-Apr-20	10-Mar-21	03-May-21 20-Jan-22		100%	60.09% 20%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
MODULE-07_MP			139 18-Dec-20 110 10-Sep-20	10-Mar-21 07-Jan-21	18-Nov-21		100%	40.74%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
MODULE-08_MP	201 - MP197		114 01-Jun-20	29-Sep-20	03-May-21	08-Mar-22	100%	100%	
MODULE-09_MP			46 23-Apr-20	15-Jun-20	09-Dec-21	09-Feb-22	100%	100%	
	RCAP_MARINE (STEEL) 11+880~13+610 FROM MB171 TO MB186 01_MP176 - MP171		388 30-Apr-20 233 08-Mar-21	27-Aug-21 27-Aug-21	23-Aug-21 17-Mar-22		100%	36.56%	
	02_MP182-MP177		148 30-Apr-20	04-Feb-21	23-Aug-21		100%	94.58%	
	03_MP186 - MP183		140 19-Dec-20	22-Apr-21	24-Feb-22		100%	4.38%	
	RCAP_MARINE 10+380~11+880 FROMMB146 TO MB170		151 15-Mar-19	01-Apr-20	17-Dec-21	1	100%	15.1%	
MODULE-01_MP MODULE-02_MP			101 14-Jan-20 72 05-Sep-19	01-Apr-20 23-Nov-19	17-Dec-21 17-Feb-22		100%	49%	
MODULE-03_MP			51 28-May-19	31-Aug-19	22-Mar-22		100%	3.5%	
MODULE-04_MP	166 - MP162		51 15-Mar-19	24-May-19			100%	0%	
MODULE-05_MP		-	82 15-Nov-19	18-Jan-20	14.0. 00		100%	0%	444-144-144-144-14
Ender state of the	ING PAD AND BEARING INSALLATION RING_LAND 17+414~18+188 FROM ME251 TO ME266		773 22-Feb-19 301 22-Feb-19	24-Sep-21 22-Aug-19	14-Sep-20 11-Feb-21	-	100%	85.86% 87.5%	
	RING_CRZ 15+890~17+414 FROM ME226 TO ME250	2	392 08-May-19	and the second se	14-Sep-20	09-Sep-21	100%	100%	
	RING_INTERTIDAL 14+800~15+890 FROM MB206 TO MB225		40 29-Jun-19	14-Sep-20			100%	0%	
Dminet Deseting D	Official Demolitics Minds						CONTRACTOR		Date
Project Baseline Bar	•	EMPLOYER:			DMENT AUTO		CONTRACTOR:		25-Mar-22
Actual Work	 Milestone 	MUMBAI METRO (MMRDA)	OLITAN RE	GION DEVELO	MENT AUTH	UKITY	DAEWOO - 1	IPL JV	



		18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR IN UNDER IDENTIFICATION NO MMRDA/ENG/000753				PROGRAM	ME_ABSTR	ACT (PACKAGE-2)		
Activity	D	Activity Name	Original Duration	BL Project Start	BL Project Finish	Actual Start	Actual Finis	h Schedule % Complete	Performance % Complete	2018 201 23436783111111111122
		MARINE 13+610~14+800 FROM MB187 TO MB205		07-Apr-20	09-Feb-21			100%	0%	
		ARINE (STEEL) 11+880~13+610 FROM MB171 TO MB186 MARINE 10+380~11+880 FROM MB146 TO MB170		19-May-20	24-Sep-21	22-Dec-21		100%	92.14%	
		RUCTURE BOX GIRDER INSTALLATION		25-Apr-19 12-Sep-19	18-Apr-20 01-Mar-22	20-Jul-20		100%	0%	
		TE GIRDER INSTALLATION		12-Sep-19	02-Feb-22	20-Jul-20		100%	49.8%	
		ER_LAND 15+890~17+414 FROM MP251 TO MP266	666	12-Sep-19	27-Feb-20	20-Jul-20		100%	65%	
	CNLGA 1000	Assembly of Structural Parts in Launching Gantry_1		12-Sep-19	17-Oct-19	12-Nov-20	17-Feb-21	100%	100%	
	ONLGA.1005 ONLGA.1010	Assembly of Mechanical Parts in Launching Gantry_1		17-Oct-19	01-Nov-19	05-Feb-21	06-Mar-21	100%	100%	
	CNLGA 1015	Assembly of Structural Parts in Launching Gantry_2 Assembly of Mechanical Parts in Launching Gantry_2		12-Sep-19 17-Oct-19	17-Oct-19 01-Nov-19	20-Jul-20 28-Sep-20	25-Dec-20 30-Dec-20	100%	100%	
	MODULE-22_MP266 -			01-Nov-19	25-Dec-19	02-Jul-21	30-De0-20	100%	98%	
	MODULE-21_MP261 -			02-Dec-19	23-Jan-20	18-Sep-21		100%	50%	
	MODULE-20_MP256 -		131	31-Dec-19	04-Feb-20	06-Nov-21		100%	50%	
	MODULE-19_MP254 -			11-Jan-20	27-Feb-20	26-Nov-21		100%	50%	
	MAIN BRIDGE PRECAS MODULE-18 MP249 -	TGIRDER_CRZ15+890~17+414 FROM MP226 TO MP250 MP246		04-Feb-20	25-Sep-20	30-Dec-20		100%	90%	
	MODULE-17_MP245 -			04-Feb-20 05-Mar-20	28-Mar-20 27-Apr-20	20-Dec-21 30-Dec-20	16-May-21	100%	50% 100%	
	MODULE-16_MP240 -			03-Apr-20	21-May-20	13-Apr-21	03-Aug-21	100%	100%	
	MODULE-15_MP236 -			27-Apr-20	19-Jun-20	06-Jul-21	22-Sep-21	100%	100%	
	MODULE-14_MP231 -			27-May-20	25-Sep-20	27-Aug-21	10-Nov-21	- 100%	100%	
	MAIN BIDGE PRECAST MODULE-13_MP226 -	GRDER_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225		12-Sep-20 12-Sep-20	23-Jan-21 21-Oct-20	25-Oct-21 25-Oct-21	10-Dec-21	100%	95%	
	MODULE-12 MP221 -			08-Oct-20	20-Nov-20	20-Nov-21	14-Jan-22	100%	100%	
	MODULE-11_MP216 -	WP212		09-Nov-20	19-Dec-20	27-Dec-21	27-Feb-22	100%	100%	
	MODULE-10_MP211 -		85	08-Dec-20	23-Jan-21	31-Jan-22		100%	83.33%	
		TGIRDER_MARINE 13+610~14+800 FROM MP187 TO MP205		12-Jan-21	10-Jun-21	19-Mar-22	1	100%	3.09%	
H	CNLGD1000 CNLGD1010	Dismanting of Launching Gantry_1 Dismanting of Launching Gantry_2		18-May-21	10-Jun-21			100%	0%	
	MODULE-09_MP206-			12-May-21 12-Jan-21	03-Jun-21 17-Feb-21	19-Mar-22		100%	0%	
	MODULE-08_MP201 -			05-Feb-21	19-Mar-21	19-INd1-22		100%	0%	
	MODULE-07_MP196 -			08-Mar-21	17-Apr-21			100%	0%	
1L	MODULE-06_MP191 -			12-Apr-21	18-May-21		141	100%	0%	
	MAIN BRIDGE PRECAS ONLGA 1020	FGIRDER_MARINE 10+380~11+880 FROM MP146 TO MP170		04-Jun-21	02-Feb-22			100%	0%	
	CNLGA 1020	Assembling of Launching Gantry_1 Assembling of Launching Gantry_2		10-Jun-21)4-Jun-21	03-Sep-21			100%	0%	
	MODULE-05_MP171 -			28-Dec-21	26-Jun-21 02-Feb-22			100%	0%	
	MODULE-04_MP166-			29-Nov-21	03-Jan-22			100%	0%	
	MODULE-03_MP161-I			80-Oct-21	04-Dec-21			100%	0%	
	MODULE-02_MP156 -I			29-Sep-21	05-Nov-21			100%	0%	
1	MODULE-01_MP151 -I STITCH JOINT CASTING	/IP146		28-Jun-21	06-Oct-21	40 1-04		100%	0%	
	and the second sec	ONT CASTING_LAND 15+890~17+414 FROM MP251 TO MP266)7-Dec-19)7-Dec-19	12-Feb-22 16-Mar-20	12-Jan-21 08-Jul-21		0%	0% 0%	
	MODULE-19_MP254 -I			0-Feb-20	16-Mar-20	29-Nov-21		0%	0%	
	MODULE-20_MP256 -I			7-Jan-20	20-Feb-20	10-Nov-21		0%	0%	
	MODULE-21_MP261-I			06-Jan-20	08-Feb-20	23-Sep-21		0%	0%	
	MODULE-22_MP266 - I MAIN BRDIGE STITCH J	MP262 DINT CASTING_CRZ 15+890~17+414 FROM MP226 TO MP250	and the second se	07-Dec-19 11-Mar-20	10-Jan-20 13-Oct-20	08-Jul-21 12-Jan-21	25-Mar-22	0%	0% 0%	
	MODULE-14_MP231 -I			9-Sep-20	13-Oct-20	02-Sep-21	08-Nov-21	0%	0%	
	MODULE-15_MP236 -			2-Jun-20	09-Jul-20	10-Jul-21	20-Sep-21	0%	0%	
	MODULE-16_MP240 -I			04-May-20	06-Jun-20	23-Apr-21	31-Jul-21	0%	0%	
	MODULE-17_MP245-1 MODULE-18_MP249-1			9-Apr-20	14-May-20	12-Jan-21	12-May-21	0%	0%	***
	MODULE-18_MP249 - MAIN BRIDGE STITCH JO	IP246 DINT CASTING_INTERTIDAL 14+800~15+890 FROM MP206 TO MP225		1-Mar-20 4-Oct-20	14-Apr-20 10-Feb-21	29-Dec-21 27-Oct-21		0%	0%	
	MODULE-10_MP211 -N			4-00-20 8-Jan-21	10-Feb-21	03-Feb-22		0%	0%	
	MODULE-11_MP216 -N			4-Dec-20	05-Jan-21	30-Dec-21	25-Feb-22	0%	0%	
	MODULE-12_MP221 -M			4-Nov-20	07-Dec-20	24-Nov-21	12-Jan-22	0%	0%	
	MODULE-13_MP226 - M MAIN BRIDGE STITCH JO	IP222 DINT CASTING_MARINE 13+610~14+800 FROM MP187 TO MP205		4-Oct-20	06-Nov-20	27-Oct-21	08-Dec-21	0%	0%	
	MODULE-06_MP191 - N			1-Feb-21 4-Jun-21	21-Jun-21 21-Jun-21			0%	0%	
	MODULE-07_MP196 - M			7-Apr-21	05-May-21			0%	0%	
	MODULE-08_MP201 - M		13 1	3-Mar-21	05-Apr-21			0%	0%	
	MODULE-09_MP206 - M	IP202	13 1	1-Feb-21	06-Mar-21			0%	0%	
Pr	oject Baseline Bar	. Critical Remaining Work Summary	EMPLOYER.				T	CONTRACTOR		Date
	tual Work	Milestone	EMPLOYER: MUMBAI METROPOLI					CONTRACTOR: DAEWOO - T		25-Mar-22
	ALLER LENG		MONDAI WEIROPULI	IAN REGIUI	VULVELOPM	LIVEAUTIC		IIAHW(I)(I = 1)		



Activity ID	Activity Name	Original BL Pr Duration	ijectStart BL Proje	ctFinish Actual Start	Actual Finish	Schedule % Complete		2018
MAINBR	IDGE STITCH JOINT CASTING MARINE 10+380~11+880 FROM MP146 TO MP170	119 06-Oc	21 12-Feb-2	22		0%		4367831111
	E-01_MP151 - MP146	- 24 06-00				0%	0%	
	E-02_MP156 - MP152	24 05-No				0%	0%	
	E-03_MP161 - MP157	24 04-De				0%	0%	
	E-04_MP166-MP162 E-05_MP171-MP167	24 03-Ja 24 27-Ja				0%	0%	
in the second se	GE STEEL GIRDER INSTALLATION	387 03-00				100%	6.67%	
	DGE STEEL GIRDER INSTALLATION_MARINE 11+880~13+610 FROM MP171 TOMF	P186 387 03-00	+20 01-Mar-2	2 01-Jan-22		100%	6.67%	
	MODULE-01_MP176-MP171 (INSTALLATION)	133 07-De			_	100%	0%	
	MODULE-02_MP182 - MP177 (INSTALLATION) MODULE-03_MP186 - MP183 (INSTALLATION)	131 03-00 71 30-Se			-	100%	16.67% 0%	
	NEOUS & FINISHING WORKS	634 16-Ma				97.19%	0%	
	ARRIER & GURARD RAILS	423 20-Fe	b-20 07-Mar-2	2		100%	0%	
WATERP		396 26-Ma				100%	0%	
PAVEMEN		476 16-Ma 364 27-Ma				97.36% 51.79%	0%	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
SUBSTAT		152 16-Ma				100%	0%	
NOISE BA		268 16-Ma				100%	0%	
	NSTALLATION	80 24-Ju				100%	0%	
DRAINAG SIGN BOA		405 16-M		I 1		100%	0%	
NTERCHAN		60 12-Fe 1525 24-De				99.96%	53.63%	
NTERCHA	NGE FOUNDATION	590 24-De			26-May-21	100%	100%	
the second se	INGE RAMP PILE FOUNDATION	475 24-De	c-18 05-Mar-2	20 09-Oct-19	13-May-21	100%	100%	
	ANGE RAMP PILE FDN_MA	182 05-Au			13-May-21	100%	100%	
	E_23_MAA2-MAP4 E_24_MAP4-MP246	75 05-AL 137 02-Nc			28-Jun-20 13-May-21	100%	100%	
1 ()	ANGE RAMP PILE FDN_AC	107 01-0			16-Aug-20	100%	100%	
	E_33_ACA2-ACP5	60 01-00			16-Aug-20	100%	100%	
Contraction of the local division of the loc	E_34_ACP5-IMP256	62 19-De			25-Feb-20	100%	100%	
	ANGE RAMP PILE FDN_JM E_25_MP245-JMP4	178 03-Ja 178 23 A			07-May-21	100%	100%	
	E_26_JMP4-JMP8	178 22-Ap 88 19-Fe			23-Apr-21 17-Feb-21	100%	100%	
	E_27_JMP8-JMA2	64 03-Ja			07-May-21	100%	100%	
INTERCH	ANGE RAMP PILE FDN_MJ	79 03-Ja	n-19 01-Oct-1	9 04-Dec-19	27-Nov-20	100%	100%	
	E_35_MJA2-MJP9	45 03-Ja			27-Nov-20	100%	100%	
	E_36_MJP9-MJP4 E_37_MJP4-MP252	63 22-Ma 52 11-Ju			26-Aug-20 20-Mar-20	100%	100%	
and the second s	ANGE RAMP PILE FDN_CA	100 28-M		the second secon	27-Apr-21	100%	100%	
	E_28_MP249-CAP4	64 08-No		20 01-Nov-19	27-Apr-21	100%	100%	
	E_29_CAP4-CAP8	62 14-AL			19-Mar-21	100%	100%	
	E_30_CAP8-CAA2 ANGE RAMP PILE FDN. AM	49 28-Ma 290 24-Da	the second se	the second	24-Feb-21 04-Jan-21	100%	100%	
	E 31 MAA2-AMP4	187 24-De			10-Sep-20	100%	100%	
MODUL	E_32_AMP4-MP259	237 27-Ma			04-Jan-21	100%	100%	1.1.1.1.1.1.1
	NGE RAMP PILE CAP INSTALLATION	525 08-Ja			26-May-21	100%	100%	
	ANGE RAMP PILE CAP_MA E_23_MAA2-MAP4	182 06-De 95 06-De			26-May-21	100%	100%	
	24 MAP4-MP246	86 24-Fe			24-Jul-20 26-May-21	100%	100%	
And in case of the local division of the loc	ANGE RAMP PILE CAP_AC	183 15-Ja	and the second s		07-Sep-20	100%	100%	
	E_33_ACA2-ACP5	132 15-Ja			07-Sep-20	100%	100%	
	E_34_ACP5-MP256	114 24-Ap	and the second se	A NUMBER OF TAXABLE PARTY.	09-Mar-20	100%	100%	
	ANGE RAMP PILE CAP_JM E 25 MP245-JMP4	136 18-Ja 135 18-Ju			25-May-21 15-May-21	100%	100%	
		92 21-Ma			23-Feb-21	100%	100%	
	_27_JMP8-JMA2	40 18-Ja	n-19 20-Mar-		25-May-21	100%	100%	
	ANGE RAMP PILE CAP_MJ	145 18-Ja			19-Dec-20	100%	100%	
	_35_MJA2-MJP9 _36_MJP9-MJP4	123 18-Ja 62 30-Ar			19-Dec-20 03-Sep-20	100%	100%	
	= 37 MJP4-MP252	58 26-00			03-Sep-20 01-Jun-20	100%	100%	
	ANGE RAMP PILE CAP_CA	158 15-0		The second se	05-May-21	100%	100%	
	_28_MP249-CAP4	87 05-Ma			05-May-21	100%	100%	
MODULE	_29_CAP4-CAP8	70 16-De	c-19 05-Mar-1	20 30-Nov-20	30-Mar-21	100%	100%	



MUMBAI TRANS HARBOUR LINK PROJECT (PACKAGE 2) CONSTRUCTION OF 7.807 KM LONG BRIDGE SECTION (CH 10+380 - CH 18+187) ACROSS THE MUMBAI BAY INCL SHIVAJI NAGAR INTERCHANGE UNDER IDENTIFICATION NO MMRDA/ENG/000753

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ANNEXURE-5 CONSTRUCTION UPDATED PROGRAMME ABSTRACT (PACKAGE-2)

Adivity ID	Activity Name	Origi Durat		BL Project Finish	Actual Start	Actual Finish	n Schedule % Complete		2018 2019 2018 2019 2014 2014 2019 20
MODULE_30			53 15-Oct-19	16-Dec-19	19-Jan-21	02-Mar-21	100%	100%	
MODULE 31	RANP PILE CAP_AM MAA2-AMP4		45 08-Jan-19 76 08-Jan-19	15-Oct-19 09-May-19	15-Feb-20 15-Feb-20	13-Jan-21 21-Sep-20	100%	100%	
	AMP4-MP259		89 10-May-19	15-Oct-19	07-Mar-20	13-Jan-21	100%	100%	
	UBSTRUCTURE & BEARING		96 29-Jan-19	31-May-21	24-Dec-19		100%	86.95%	
	RAMP PIER INSTALLATION		96 29-Jan-19	27-Apr-21	24-Dec-19		100%	86.95%	
MODULE 23			69 18-Mar-20	29-Dec-20	24-Dec-19	18-Sep-21	100%	100%	
	MAP4-MP246		18 18-Mar-20 50 10-Aug-20	10-Aug-20 29-Dec-20	19-Feb-20 24-Dec-19	26-Feb-21 18-Sep-21	100%	100%	
	RAMP PIER_AC		49 16-May-20	27-Apr-21	19-May-20	18-Dec-21	100%	100%	
MODULE_33	ACA2-ACP5		96 16-May-20	30-Nov-20	19-May-20	27-Sep-21	100%	100%	
	ACP5-MP256		49 30-Nov-20	27-Apr-21	17-Jun-20	18-Dec-21	100%	100%	
MODULE_25	RAMP PIER_JM MP245_IMP4		38 08-Feb-19 22 22-Oct-19	18-Mar-20 18-Mar-20	15-Jan-20		100%	77.97%	
MODULE_26			00 09-May-19	22-Oct-19	15-Jan-20 01-Feb-21		100%	70% 75%	
MODULE_27			63 08-Feb-19	08-May-19	12-Apr-21	05-Jan-22	100%	100%	
	RAMP PIER MJ	2	34 08-Feb-19	16-May-20	07-Sep-20	20-Nov-21	100%	100%	
MODULE_35_			34 08-Feb-19	26-Jul-19	02-Nov-20	29-Jul-21	100%	100%	
MODULE_36_ MODULE 37			45 27-Jul-19	18-Jan-20	07-Sep-20	22-Oct-21	100%	100%	
	RAMP PIER CA		00 18-Jan-20 30 08-Jan-20	16-May-20 16-Feb-21	02-Feb-21 27-Apr-20	20-Nov-21	100%	100% 86.78%	
MODULE_28_			59 10-Sep-20	16-Feb-21	27-Apr-20		100%	80%	
MODULE_29_			91 06-Apr-20	10-Sep-20	19-Dec-20		100%	87.5%	
MODULE_30_			54 08-Jan-20	06-Apr-20	19-Jan-21	27-Jan-22	100%	100%	
MODULE_31	RAMP PIER_AM		68 29-Jan-19	08-Jan-20	26-Sep-20		100%	56.14%	
MODULE 32			77 29-Jan-19 87 27-Aug-19	27-Aug-19 08-Jan-20	14-Mar-21 26-Sep-20		100%	53.24% 60%	
	BEARING INSTALLATION		87 27-Feb-19	31-May-21	08-Sep-21		. 0%	0%	
NTERCHANGE S	UPERSTRUCTURE INSTALLATION		70 20-Sep-19	15-Feb-22	18-Sep-21		100%	13.2%	
	BOX GIRDER INSTALLATION_MA		79 09-Jan-21	03-Jan-22	18-Sep-21		100%	75.43%	
	IAA2-MAP6-MAP5-MAP4 30TTOM SLAB		34 09-Jan-21	21-Jun-21	18-Sep-21	08-Mar-22	100%	- 100%	
SIDE WALLS &			35 09-Jan-21 57 05-Mar-21	04-Mar-21 26-Apr-21	18-Sep-21 22-Dec-21	31-Dec-21 09-Feb-22	100%	100%	
	DESTAGGING		40 27-Apr-21	21-Jun-21	15-Feb-22	08-Mar-22	100%	100%	
MODULE_24_N	IAP4-MAP3-MAP2-MAP1-MP246		50 21-Jun-21	03-Jan-22	01-Oct-21		100%	57%	
	BOTTOMSLAB		28 21-Jun-21	20-Sep-21	01-Oct-21		100%	90%	
SIDE WALLS & STRESSING &			45 20-Sep-21	18-Nov-21	22-Jan-22		100%	50%	
	BOX GIRDER INSTALLATION AC		35 18-Nov-21 58 27-Feb-21	03-Jan-22 27-Dec-21	12-Mar-22 01-Nov-21		100%	29.33%	
	CA2-ACP8-ACP7-ACP6-ACP5		30 27-Feb-21	08-Sep-21	01-Nov-21		100%	66%	
STAGGING & E	OTTOM SLAB		73 27-Feb-21	16-Apr-21	01-Nov-21	21-Mar-22	100%	100%	
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	CP5-ACP4-ACP3-ACP2-ACP1-MP256 BOX GIRDER INSTALLATION JM		30 31-May-21	27-Dec-21		-	100%	0%	
	IP245-JMP1-JMP2-JMP3-JMP4		50 11-Mar-20 30 19-Aug-20	26-Feb-21 09-Feb-21	1		100%	0% 0%	
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500	SIDE WALLS & TOP SLAB STRESSING & DESTAGGING		14-May-20	17-Aug-20	
500	MODULE 37 MJP4-MJP3-MJP2-MJP1-MP252	-	17-Aug-20 30-Jun-20	29-Oct-20 08-Jan-21	
502	STAGGING & BOTTOM SLAB		30-Jun-20	29-Sep-20	
503 504	SIDE WALLS & TOP SLAB		29-Sep-20	24-Nov-20	
505	STRESSING & DESTAGGING INTERCHANGE BOX GIRDER INSTALLATION_CA		25-Nov-20 30-Oct-20	08-Jan-21 15-Feb-22	
506	MODULE_28_MP249-CAP1-CAP2-CAP3-CAP4		08-Sep-21	15-Feb-22	
507	STAGGING & BOTTOM SLAB	41	08-Sep-21	08-Nov-21	
508 509	SIDE WALLS & TOP SLAB STRESSING & DESTAGGING		08-Nov-21	30-Dec-21	
510	MODULE 29 CAP4-CAP5-CAP6-CAP7-CAP8		30-Dec-21 09-Apr-21	15-Feb-22 23-Nov-21	
511	STAGGING & BOTTOM SLAB		09-Apr-21	11-Jun-21	
512	SIDE WALLS & TOP SLAB	50	11-Jun-21	28-Sep-21	
513 514	STRESSING & DESTAGGING MODULE 30 CAP8-CAP9-CAP10-CAA2		28-Sep-21	23-Nov-21	
515	STAGGING & BOTTOM SLAB		30-Oct-20 30-Oct-20	08-Apr-21 24-Dec-20	
516	SIDE WALLS & TOP SLAB		25-Dec-20	19-Feb-21	
517	STRESSING & DESTAGGING		20-Feb-21	08-Apr-21	
518 519	INTERCHANGE BOX GIRDER INSTALLATION_AM MODULE_31_AMA2-AMP8-AMP7-AMP6-AMP5-AMP4		14-Oct-19	19-Aug-20	
520	MODULE_32_AMP4-AMP3-AMP2-AMP1-MP259		14-Oct-19 10-Feb-20	11-Mar-20 19-Aug-20	
521	NTERCHANGE RETAINING STRUCTURE		11-Mar-19	06-Nov-20	5-Ma
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529	PROJECT HANDINGOVER		24-May-22	22-Sep-22	
29 30			24-May-22 22-Sep-22	22-Sep-22 21-Sep-24	
31	DEFECT LIABILITY PERIOD (DLP)		22-Sep-22 23-Mar-18		22.14
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ANNEXURE-5 CONSTRUCTION UPDATED

PROGRAMME ABSTRACT (PACKAGE-2)

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CONTRACTOR:

DAEWOO - TPL JV

Performance %

Actual Finish

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15-May-21 25-Mar-22

(SZ)

Attachment 8- Package-3's Construction Programme Updated as of 25th March 2022



	vised Construction Schedule					_			Classic So	chedule Layout										0	05-Apr-22	2 17:30
	Activity Name	Original BL1 S Duration	tart	BL1 Finish	Start	Finish	Activity % Complete	Schedule %	Performance % Complete	Earned Value Cost	Planned Value Cost	Schedule		FIMI	April May Ju	2022 Inel July	A	S O	N	DJ	2023 F M	April
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	ent of Mumbai Trans	1541 23-Ma		03-Mar-23	23-Mar-18A	01-Oct-23		89.08%	84.05%	Rs6,737,658,644	Rs7,141,151,176	0.94	-			-		1	1 1		1	1 1
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Attachment 9- Project Progress Photos for March 2022



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Package 1- Site Progress Photos

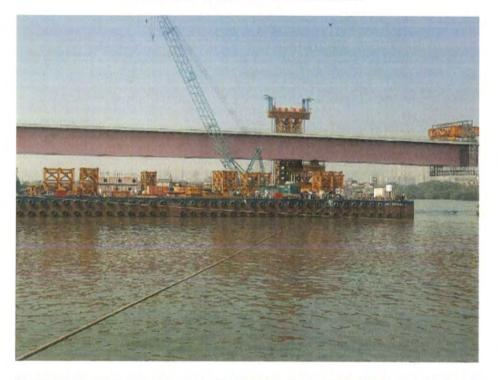


Photo No. 1: OSD 4 N span 3 Girder Transporting to MP 126 N through Barge



Photo No. 2: LG 6 EP 22-23 Segment lifting in progress





Photo No. 3: LG 08 MP 54-55 S Segment lifting in progress



Photo No. 4: LG 05 FP 04-05 Segment lifting in progress



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Photo No. 5: A view of MTHL Bridge taken from the LG-8 looking towards Navi Mumbai

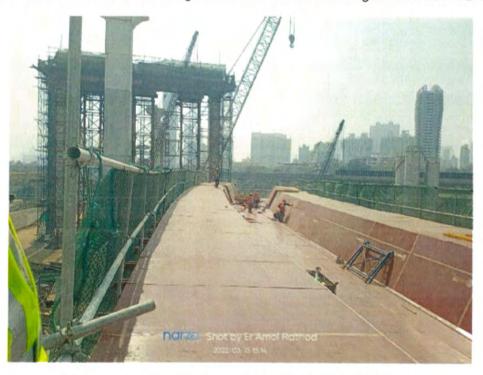


Photo No. 6: EP 14 Cast In-Situ Shuttering work in progress

1st January to 31st March 2022

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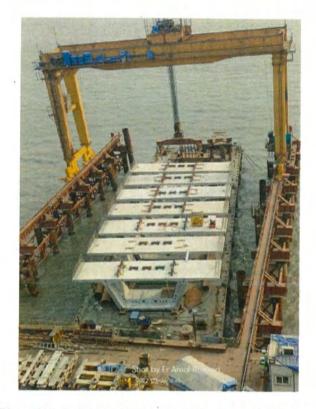


Photo No. 7: Segments Shifting to L-3 & 4 in progress



Photo No.8: OSD-1 assembly works in progress



Photo No. 9: BP 13 Pier Reinforcement in progress



Photo No. 10: AP 41 Portal Beam Shuttering Works in progress



Photo No. 11: MP 68 S Pier Shuttering Works in progress

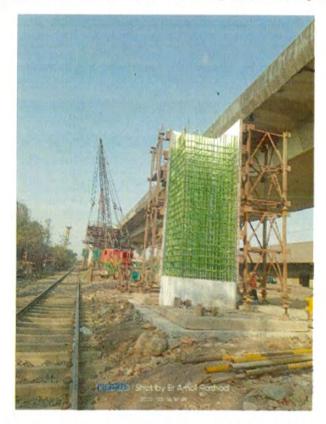


Photo No. 12: AP 08 Pier Reinforcement in progress

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Package 2 - Site Progress Photos



Photo No. 1: LG-3 Wet joint formwork fixing at Span MP 264-265 RHS in progress



Photo No. 2: Cantilever slab and strut concrete in progress at Span MP 256-257 LHS

1st January to 31st March 2022

Page 52 of 63



Photo No. 3: Pier head segment concrete at MP 246 RHS in progress



Photo No. 4: Pier final lift concrete at MP 167 LHS in progress



1st January to 31st March 2022



Photo No. 5: Integral Pier head segment concrete at MP 195 LHS in progress



Photo No. 6: Pier cap concrete at JMP-1 in progress



Photo No. 7: Pile cap concrete at MP 175 LHS in progress



Photo No. 8: Retaining wall raft concrete at Ramp CA in progress

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Photo No. 9: PC shell wall formwork alignment at MP 183 RHS in progress



Photo No. 10: Pier cap reinforcement tying at MP 177 RHS in progress





Photo No. 11: Cast in situ bottom slab concrete at Ramp AC Span ACP-7 to ACP-8 in progress



Photo No. 12: Pier cap reinforcement tying at CAP-4 in progress



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Mumbai Trans Harbour Link Project - Quarterly Progress Report No. 20 (Jan-Mar 2022)

Package 3 - Site Progress Photos



Photo No. 1: Gavan Span RMP 266-267, interface location, segment erection work in progress



Photo No. 2: RMP 274-275 ROB structural steel erection work in progress





Photo No. 3: A view of MTHL Bridge at Gavan area

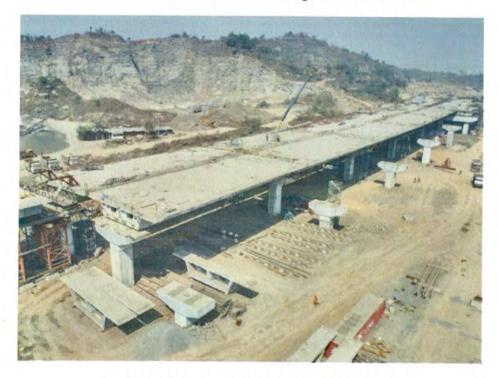


Photo No. 4: A view of MTHL Bridge at Jasai area



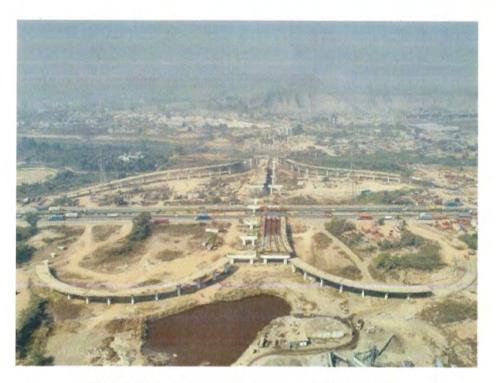


Photo No. 5: A view of MTHL Bridge at Chirle Interchange

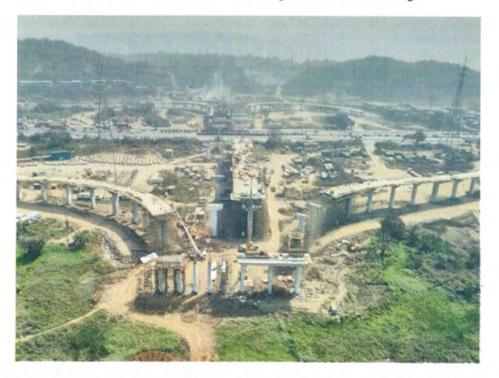


Photo No. 6: A view of MTHL Bridge - MPP & JMP Ramps at Chirle Interchange

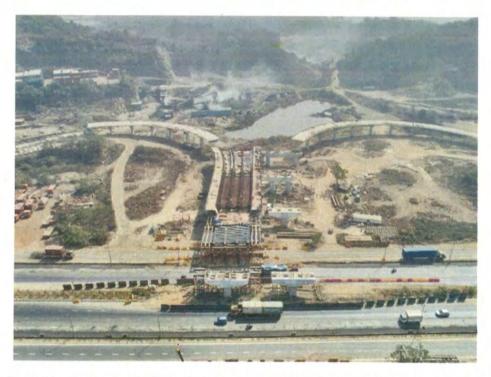


Photo No. 7: A view of MTHL Bridge - MJP & PMP Ramps at Chirle Interchange



Photo No. 8: DRB Officials Site Visit



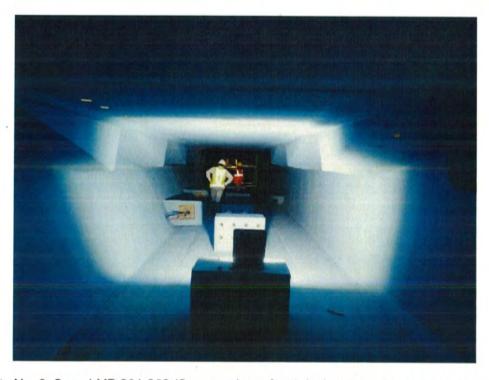


Photo No. 9: Span LMP 281-282 (Segment inner face) Anti-carbonation paint coating work



Photo No. 10: Gavan span RMP 269-270 1st stage prestressing work in progress

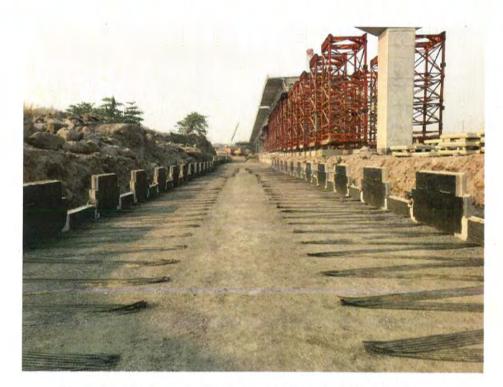


Photo No. 11: Jasai JM Ramp RE wall Panel erection in progress



Photo No. 12: Rock fill embankment work at CH 19+440 to CH 19+500 RHS in progress



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MMRDA RESIDUAL DEV. FUND - (2021-23)

C - 14 / 15, MMRDA Office Bulding Bandra Kurla Complex, Bandra (E). Mumbai - 400051 PAN : AAATM7106R

EXPENSES ON MTHL

Group Summary

1-Jan-2022 to 30-Jun-2022

				Page 1 Figures in Crores	
Particulars	Opening	Transactions		Closing	
	Balance	Debit	Credit	Balance	
Administrative Charges (MTHL)	1.15 Dr			1.15 Dr	
Advertisement & Publicity (MTHL)	0.35 Dr			0.35 Dr	
Civil Work (MTHL) - Package-I	4,846.07 Dr	1,617.74	294.97	6,168.84 Dr	
Civil Work (MTHL) - Package-II	4,156.67 Dr	983.71	123.21	5,017.17 Dr	
Civil Work (MTHL) - Package-III	810.62 Dr	195.46	25.42	980.66 Dr	
Compensation to Fisheries (MTHL)	116.31 Dr	5.10	2.50	118.91 Dr	
Compensation to Leaseholders-MTHL	13.25 Dr	0.10	2.00	13.25 Dr	
Counter Guarantee Fees (MTHL) (MOF)	71.49 Dr	88.20		159.69 Dr	
Deposit with CIDCO for MTHL	11.21 Dr			11.21 Dr	
Forex Loss/ Gain Against JICA Loan No IDP-255	45.62 Dr		527.47	481.85 Cr	
Forex Loss/ Gain on Mobilisation Advance (MTHL)	6.33 Cr		23.12	29.44 Cr	
Front End Fees for JICA Loan (MTHL)	27.23 Dr		20.12	27.23 Dr	
General Consultants Fees (MTHL)	121.69 Dr	18.34		140.03 Dr	
General Consultants Fees (MTHL) - Taxable	4.69 Dr	2.71		7.39 Dr	
Geotechnical Investigation (MTHL)	19.60 Dr			19.60 Dr	
Interest & Bank charges on JICA Loan (MTHL)	11.78 Dr	7.47	3.74	15.52 Dr	
Land Acquisition Cost (MTHL)	852.60 Dr	9.65	4.83	857.43 Dr	
Land Acquisition Cost (MTHL) Taxable	60.21 Cr	84.01	0.61	23.19 Dr	
Legal Charges (MTHL)	0.09 Dr			0.09 Dr	
Other Miscellaneous (MTHL)	79.55 Dr	1.08	0.08	80.55 Dr	
Professional Charges (MTHL)	0.12 Dr			0.12 Dr	
Repairs & Maintainance (MTHL)	0.08 Dr			0.08 Dr	
Security Deposits - Land (MTHL)	11.10 Dr			11.10 Dr	
Service Tax on Mobilisation Adv. on MTHL	3.07 Dr			3.07 Dr	
Stamp Duty Reimbursement (MTHL)	0.10 Dr			0.10 Dr	
Surveys & Studies (MTHL)	47.47 Dr			47.47 Dr	
Grand Total	11,185.37 Dr	3,013.47	1,005.94	13,192.91 Dr	



Office of the Additional Principal Chief Conservator of Forests, Mangrove Cell, Mumbai

And Executive Director, Mangrove and Marine Biodiversity Conservation Foundation of Maharashtra

302, Wakefield House, 3rd Floor, Ballard Estate, Above Britannia & Co. Restaurant, Fort,



Mumbai-400 001 Ph: 022-2694984 / 85 Email: <u>ccfmmumbai@gmail.com</u> / <u>ccfmangrove@mahaforest.gov.ir</u>

MFN/DDR&CB/ 462 /2021-22

Date: - 03.02.2022

To, The Engineer in Chief MTHL-PIU MMRDA

> Sub: Report regarding the mangrove plantation carried out as a part of the MMRDA-MTHL Project

Ref: Minutes of the third PIC meeting with respect to the Bird Monitoring Programme of the MTHL Project

With reference to the above subject, during the third PIC meeting of the Bird Monitoring Programme of the MTHL Project, it was decided that a report regarding the 200 hectare mangrove plantation carried out by the Maharashtra Forest Dept. through the funds provided by MMRDA (as compensatory afforestation) should be submitted to the MMRDA.

In this regard, kindly find attached the said report with this letter.

(Virendra Tiwari), Addl. Principal Chief Conservator of Forests, Mangrove Cell, Mumbai & Executive Director, Mangrove Foundation

MMRDA – MTHL Mangrove Restoration Report





Mangrove Cell

Forest Department of Maharashtra

About Project

Mangrove plantation in lieu of the mangrove area likely to be affected during the construction of Mumbai Trans Harbour Link (MTHL) project.

AS per the CRZ clearance for MTHL Project MMRDA was instructed to restore 5 times the mangroves cut/ disturbed by the project. As per the mandate, 200 hectares of plantation was carried out as compensatory Afforestation. All the plantations done under the project are maintained for the period of five years as per approved estimate and amount received.

For this MMRDA had requested mangrove Cell to prepare a mangrove plantation program 200 hectares. Mangrove Cell had identified 200 hectares area for mangrove plantation and total amount of Rs 49,59,822 was paid vide T O dated 9.05.2016 for 30 hectares. Further amount of Rs. 4,56,29,600 was paid vide cheque no 216609 dated 13.10.2016 for 170 hectares. The mangrove planation involves plantations of 4444 sapling per hectare and therefore total of 888800 saplings and additional 20 percent causality was replaced for the period of three years as per the estimate.

Details of Restoration work

Sr No	Division	Year	Range	Place	S. No	На	Survival percentage	GPS Locations
1	Dahanu	2016- 17	Boisar	Mouje Pamtembi	161	15	71.02	19.571982; 72.821682
2			Saphale	Mouje Karwela	47	15	72.00	19.553711; 72.845790
3		2017- 18	Boisar	Chandigaon	729	10	64.05	19.936829; 72.730574
4			Boisar	Pamtembi	161	10	75.20	19.805105; 72.705118
5			Boisar	Salwad	107	10	68.0	19.810528; 72.715928
6			Saphale	Makunsar	283/A	20	63.50	19.604865; 72.763378
7	MMCU		TCFS	Kanjur	275 C.S.N 657A	10	20	19.065557; 72.565564
8			TCFS	Mulund/ Bhandup	157 C.S.N 1318	15	57	19.084174; 72.580663
9	Dahanu	2018- 19	Palghar	Shirgaon	1287	10	54.09	19.688655; 72.711506
10			Palghar	Dhansar I	64	20	46	19.708259; 72.732071
11			Palghar	Dhansar 2	64	25	51.1	19.709843; 72.727397
12			Boisar	Navapur	161	10	71.87	19.800481; 72.692326
13			Boisar	Salwad	107	10	69.79	19.810528; 72.715928
14			Saphale	Karwela	47	20	82	19.552433; 72.841222

Mouje Pamtemhi (2016-17)



Mouje Karwela (2017-18)





Chandigaon (2017-18)





Pamtembhi (2017-18)





Salvad (2017-18)



Makunsar (2017-18) Survey No.283/A







Kanjurmarg(2018-19)





Mulund/ Bhandup(2018-19)





Shirgaon (2018-19) Survey no-1287



Latitude: 19.688655 Longitude: 72.711506 Elevation: 64.66±26 m Accuracy: 8.7 m Note: Shirgaon



Dhansar 2 (2018-19)



Navapur (2018-19)





Salvad (2018-19)





Karwale (2018-19)







CITY AND INDUSTRIAL DEVELOPMENT CORPORATION OF MAHARASHTRA LIMITED

(CIN - U99999 MH 1970 SGC - 014574)

REGD. OFFICE:

"NIRMAL", 2nd Floor, Nariman Point, Mumbai - 400 021. PHONE : 00-91-22-6650 0900 FAX : 00-91-22-2202 2509 HEAD OFFICE: CIDCO Bhavan, CBD Belapur, Navi Mumbai - 400 614. PHONE: 00-91-22-6791 8100 FAX : 00-91-22-6791 8166

Date : 25.11.2019

Ref. No. NO.CIDCO/Hort/2019/19)

To, Shri. G.G.Ddeshpande, Executive Engineer (MMRDA), Mumbai Trans Harbour Link (MTHL), Bandra Kurla Complex, Bandra East, Mumbai – 400051.

Sub: - Permission for removal of existing trees falling in the alignment of construction of Mumbai Trans Harbour Link (MTHL) Project (CH.18+187-CH.19+607KM and CH.20+087-CH.21+800KM) on Navi Mumbai side.

Ref:- MTHL/CIDCO/Tree Removal Permission/19/012/MTHL dt.14.05.2019

Sir,

With reference to above it is to inform that your request for removal of 348 no of trees falling in the alignment of construction of Mumbai Trans Harbour Link (MTHL) Project (CH.18+187-CH.19+607KM and CH.20+087-CH.21+800KM) on Navi Mumbai side has been considered by the Tree Authority under section 8(3) of the Maharashtra (Urban Areas) Protection and Preservation of Trees Act, 1975 & rules called the Maharashtra (Urban Areas) Protection and Preservation of Tree rules – 2009 & amendment up to 2016 subject to the following conditions.:

 The Tree Authority Committee of CIDCO has granted the permission to cut 266 no of existing trees and to transplant 82 no of existing trees. You should retain 504 no of existing trees. The details are as below;

Sr. No	Description	Tree no.
1	Trees to be cut	1, 3, 4, 5, 6, 7, 8, 9, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 59, 66, 67, 80, 90, 101, 102, 103, 104, 105, 118, 119, 120, 121, 123, 143, 144, 147, 148, 149, 150, 151, 153, 156, 157, 158, 159, 162, 165, 166, 173, 174, 175, 176, 177, 178, 179, 186, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 225, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 277, 278, 279, 289, 325, 327, 330, 336, 346, 350, 355, 356, 363, 367, 382, 384, 385, 386, 387, 389, 390, 391, 401, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436,

In case of any corruption related complaints, please visit : cidco.maharashtra.gov.in / CIDCO VIGILANCE MODULE NEW / Userlogin.aspx

	1	1	497 438 430 440 441 444 445 447 440 450 451 454 455 456 457
	1		437, 438, 439, 440, 441, 444, 445, 447, 449, 450, 451, 454, 455, 456, 457,
	1		458, 459, 460, 461, 462, 463, 496, 497, 498, 499, 500, 501, 503, 504, 517, 570, 571, 572, 573, 574, 575, 577, 578, 570, 580, 507, 500, 601, 571, 572, 573, 574, 575, 577, 578, 570, 580, 507, 500, 501, 503, 504, 517, 517, 517, 517, 517, 517, 517, 517
	1		570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 597, 599, 600, 601,
			602, 603, 604, 624, 627, 628, 637, 639, 640, 641, 642, 643, 644, 658, 659,
			661, 662, 663, 667, 678, 679, 680, 682, 683, 684, 688, 696, 698, 699, 700, 201, 203, 204, 205, 207, 707, 709, 709, 709, 709, 709, 709, 7
			701, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 715, 730, 731,
		1	744, 745, 754, 756, 758, 760, 761, 762, 773, 775, 776, 778, 779, 780, 783, 794, 785, 786, 787, 780, 780, 780, 780, 780, 780, 780
	1		784, 785, 786, 787, 789, 790, 792, 793, 794, 795, 797, 824, 825, 826, 827,
	2	Trans to be	831, 832.
	*	Trees to be	2, 14, 19, 20, 21, 58, 65, 68, 79, 91, 122, 152, 154, 155, 160, 161, 163,
		Transplant	164, 274, 275, 276, 324, 326, 328, 329, 331, 332, 333, 334, 335, 347, 348,
			349, 354, 357, 364, 365, 366, 383, 388, 413, 448, 452, 598, 638, 647, 660,
	1		664, 665, 666, 668, 669, 670, 671, 672, 675, 676, 677, 681, 685, 686, 687,
			689, 690, 691, 692, 693, 694, 695, 697, 702, 714, 732, 743, 755, 757, 759,
	10		777, 781, 788, 791, 796.
	3	Trees to be	10, 11, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 51,
		Retain	52, 53, 54, 55, 56, 57, 60, 61, 62, 63, 64, 69, 70, 71, 72, 73, 74, 75, 76, 77,
			78, 81, 82, 83, 84, 85, 86, 87, 88, 89, 92, 93, 94, 95, 96, 97, 98, 99, 100,
			106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 124, 125, 126,
			128, 129, 130, 131, 132, 133, 135, 136, 137, 138, 139, 140, 141, 142, 145,
			146, 167, 168, 169, 170, 171, 172, 180, 181, 182, 183, 184, 185, 187, 188,
			189, 190, 191, 192, 193, 194, 218, 219, 220, 221, 222, 223, 224, 226, 227,
			228, 229, 230, 231, 232, 233, 234, 249, 250, 251, 252, 253, 254, 255, 256,
			257, 258, 259, 260, 261, 262, 263, 280, 281, 282, 283, 284, 285, 286, 287,
			288, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303,
	100	Same and	304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318,
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			402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 414, 415, 416, 417,
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			502, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 518, 519,
			520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534,
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			565, 566, 567, 568, 569, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590,
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			634, 635, 636, 645, 646, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657,
	100		673, 674, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728,
	5022		729, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 746, 747, 748, 749,
		all and the state	750, 751, 752, 753, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 774,
	1		782, 798, 799, 800, 801, 802, 803, 805, 806, 807, 808, 809, 810, 811, 812,
	1		813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 828, 829, 830, 833,
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1	1		834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848,
L	I		849, 850, 851, 852, 853, 854, 855, 856, 857, 858.

2) As per the provision under Section 8(3) (a) of the said Act, you are hereby directed that no tree shall be cut/transplanted until fifteen days (15) after the permission is given by the Tree Authority.

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- 3) It is mandatory on your part to plant 2 no of trees against each tree to be cut. As per the provision of Maharashtra (Urban Areas) Protection and Preservation of Trees (amendment) Act, 2016-the new trees shall be plant within fifteen days from the date of tree (s) is felled.
- 4) You have to plant 532 no of new trees (against cutting of 266 no of trees) & to transplant 82 no of existing trees at Survey No. 347, Village- Gavhan, Tal-Uran, Dist-Raigad. While planting trees, suitable distance should be kept from the boundary of the plots, so that the newly planted trees will not obstruct the construction of compound wall or any other civil structure in future.

You shall maintain & protect the new tree plantation (532 no of trees) and transplanted trees (82 no of existing trees) for the period of three years & care should be taken so that tree grows properly & give a report to the tree officer about the condition of these trees once in six months for a period of three years as per the form – G under section 9(2).

- Your attention is kindly drawn to the provisions under section of 21 of the Maharashtra (Urban Areas) Protection & Preservation of Trees Act. 1975, as modified on 9th June, 2004.
 - 21 (1) Whoever fells any tree or causes any tree to be felled in contraventions of the provision of the Act or without reasonable excuse fails to comply with any order issued or condition imposed by the Tree Officer or the Tree Authority or voluntarily obstructs and member of the Tree Authority or the Tree Officer or any officers and Servants subordinate to him in the discharge of their functions under this Act. Shall, on convection, be punished with the fine of not less than one thousand rupees which may extend up to five thousand rupees for every offence and also with imprisonment for a term of not less than one week, which may extent up to one year.
 - (3) The felling or causing of felling of each tree without the Permission of The Tree Authority shall constitute a separate offence.
- 6) At the time of transplanting or cutting of trees, if any social problem occurs, you will have to resolve the same at your end.
- 7) You shall submit the report for Cutting and transplantation of the trees carried out to Tree officer, CIDCO.
- 8) Tree authority Committee, CIDCO has granted the permission for removal of 348 no of trees (To Cut 266 nos and to transplant 82 nos). At the time of actual execution of work, applicant Executive Engineer, MTHL Project, MMRDA should take care to remove only those trees which are falling in alignment of construction activities.
- 9) The said permission is valid only up to 90 days from the receipt thereof. Thanking You.

Yours faithfully

Tree Officer (Tree Authority Committee, CIDCO)

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To,

The Engineer, General Consultant

AECOM Asia Company Ltd. - PADECO Co. Ltd. - DAR Al-Handasah Consultants (Share & Partners)- T.Y.Lin International (Consortium), A-Wing, 6th Floor, Old MMRDA Building, Bandra Kurla Complex, Bandra (East), Mumbai – 400051

Sub :- Mumbai Trans Harbour Link Project (MTHL)

- Permission for Removal of Tree Coming In The Proposed construction of Mumbai Harbour Link Project (Package 1) 10.380 Km long bridge section (CH-0+000 – Ch- 10+380) across The Mumbai bay including Sewri F/South'Ward.
- **Ref :** Letter from Tree Authority, MCGM DySG/C/27/Prop dated 24th December 2020.

Sir,

MMRDA is in receipt of Permission letter for Removal of Tree for Package 1 of Mumbai Harbour Link Project.

The copy of letter alongwith duely signed drawing by MCGM officials is enclosed herewith for further necessary action please.

This letter is issued with the approval of the Chief Engineer.

Thanking you

Encl: MCGM permission letter & drawing

Yours faithfully,

(A.R. Bhisikar) Executive Engineer, MTHL-PIU

Copy to: Project Manager, L&T –IHI Consortium MTHL Pkg-1, Project office, Gate no.1, Sewri Timber Pond (STP) Yard, Near Gadi Adda, Sewti (E), Mumbai 400015 for necessary action please.

Mumbai Metropolitan Region Development Authority

Office of the Supdt of Gardens Veennata Jijabai Bhosale Udyan. Penguin Building, 2nd Floor Dr.Ambedkar Road, Byculla (East). Mumbai-400 027. Prop DySG/C/27 (Prop/CE/LP/OB/MC 2 4/12/2020

Additional Metropolitan Commissioner (MMRDA) Bandra – Kurla Complex. Bandra (E). Mumbai - 400051

Sub : Permission for Removal Of Trees Coming In The Porposed Construction Of Mumbai Line Project (Package – 1) – 10.380 km Long Bridge Section (CH-0+000-CH-10+380) Across The Mumbai Bay Including Sewri In 'F/South' Ward.

SE Madam.

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Please refer to your letter No. <u>MMRDA/MTHL-PIU/L&T-IHI/Tre-</u> Proposal-Pkg-1/107/07-2018 (2), 18.06.2018 for Permission for Removal Of Trees Coming In The Porposed Construction Of Mumbai Line Project (Package – 1) – 10.380 km Loog Bridge Section (CH-0+000-CH-10-380) Across The Mumbai Bay Including Sewri In 'F/South' Ward, Mumbai, has been considered by the Tree Authority under Section 8(3) of The Maharashtra (Urban Areas) Protection & Preservation of Trees Act 1975, as modified up to January 2018.

Hence . You are hereby directed to plant 840 nos trees in lieu of Cutting 420 (Four Hundred Twenty) trees (Tree no.- 19, 22 to 25, 34, 35, 39, 40, 44, 45, 51, 52, 57, 58, 61, 63, 67, 71, 72, 74, 75, 75, 80 to 82, 87, 91, 92, 101, 104, 106, 108, 110 to 112, 113, 118, 121 to 124, 128, 130, 137, 140, 141, 143 to 152, 154 to 159, 161 to 165, 167 to 177, 179 to 186, 188 to 196, 199, 201 to 205, 207 to 230, 232 to 234, 236, 238, 239, 241, 242, 244, 245, 249, 250, 253, 256 to 261, 267, 269, 272, 274 to 290. 292, 293, 295 to 300, 302, 307 to 311, 314, 319, 321, 324, 325, 327, 328, 330 to 333, 336 to 342, 345 347, 750 to 360, 363 to 367, 370 to 381, 384, 385, 389, 391, 391A, 392, 396, 399, 431, 432, 435, 443. 448, 459, 451, 458, 459, 461, 462, 463, 465, 466, 467, 469 to 472, 477, 478, 484 to 487, 493, 499, 502 504 to 509, 517, 521, 524 to 538, 541 to 543, 545, 547, 549 to 551, 553, 557, 561, 563 to 565 568. 57(+ 575, 579, 580, 584, 591, 595, 609, 618 to 620, 623 to 626, 629, 630, 633, 634, 636, 566, 668, 67. a. 2. 674 to 676, 678, 679, 683, 699, 704, 705, 709, 710, 713, 716, 719, 765, 768, 779, 781, 784, 785, 755, 756, 793, 833, 342, 913, 916, 918, 920, 921, 928, 929, 934, 936, 941, 942, 947 to 949, 552, 755 960, 962 to 965, 976, 979, 981, 986, 988, 989, 996, 997, 1001, 1007 to 1009, 1011, 1014, 1023, 1046, 1061 to 1064, 1066, 1072, 1073, 1079, 1082 to 1084, 1090, 1094, 1095, 1097, 1132, 1137 to 1146, 1142 to 1152, 1154, 1158,) within 15 days from the execution of tree cutting, Transplant 526 (Five Handred Twenty Six) trees (Tree no.- 04, 33, 36 to 38, 41 to 43, 46 to 50, 53 to 56, 59, 60, 62, 64 to 66. 65 to 30, 75, 76, 77, 79, 83 to 86, 88 to 90, 93 to 100, 102, 103, 105, 107, 109, 112A, 114 to 117, 119, 120, 125 to 127, 129, 131 to 136, 138, 139, 142, 153, 160, 166, 178, 187, 197, 198, 200, 206, 231, 235, 237, 240, 243, 246 to 248, 251, 252, 254, 255, 262 to 266, 268, 270, 271, 273, 291, 294, 301, 303 to 306, 312, 313, 315 to 318, 320, 322, 323, 326, 329, 334, 335, 343, 344, 346, 348, 349, 361, 362, 368, 369, 382, 383, 386 to 388, 390, 393 to 395, 397, 398, 46 to 402, 481, 482, 491, 492, 494 to 498, 500. 501, 503, 510 to 516, 518 to 520, 522, 523, 539, 540, 544, 546, 548, 552, 554 to 556, 558 to 560m. 562, 566, 567, 569, 571 to 574, 576 to 578, 581 to 583, 585 to 590, 592 to 594, 608, 610 to 612, 614, 615, 621, 622, 627, 628, 631, 632, 635, 663 to 665, 667, 669, 670, 673, 677, 680, 681, 682, 684 to 693, 693.A. 694 to 698, 700 to 703, 706 to 708, 711, 712, 714, 715, 716A, 716B, 717, 718, 720 to 765. 765A, 767, 769 to 778, 780, 782, 783, 786, 788, 789, 791, 792, 794 to 800, 800A, 801 to 825, 825A. 826. 826A, 827 to 832, 834 to 841, 843 to 848, 911, 911A, 912, 914, 915, 917, 919, 922 to 927, 930 to 933, 935, 937 to 940, 943 to 946, 950, 951, 953, 954, 956, 957, 958, 959, 961, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 977, 978, 980, 982, 983, 984, 985, 987, 990, 991, 992, 993, 994, 995, 998, 999, 1000, 1002, 1003, 1004, 1005, 1005A, 1006, 1010, 1012, 1013, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1065, 1067, 1068, 1069, 1070, 1071, 1074, 1075, 1076, 1077, 1078, 1080, 1081, 1085, 1086, 1087, 1088, 1089, 1091, 1092, 1093, 1096, 1098, 1133, 1134. 1135, 1136, 1141, 1153, 1155, 1156, 1157,) is sanctioned by the Tree Authority's vide its Resolution no. 05 dt. 02.12.2020.

You are further requested to execute the work of cutting / Transplanting of trees phase wise and when required.

The remaining **226** (Two Hundred Twenty Six) trees (01, 02, 03, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 26, 27, 28, 29, 30, 31, 32, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 433, 434, 436, 437, 438, 439, 440, 441, 442, 444, 445, 446, 447, 449, 452, 453, 454, 455, 456, 457, 460, 464, 468, 473, 474, 475, 476, 479, 480, 483, 488, 489, 490, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 613, 616, 617, 637, 638, 638A, 638B, 639 to 662, 849 to 910, 1099; 1101, 1101A, 1100, 1102, 1103, 1104 to 1128, 1129, 1130, 1131) shall be **Retained** as it is, as per plan attached.

Whoever fells any tree or causes any tree to be felled in contraventions of the provisions of the Act or without reasonable excuse fails to comply with any order issued or condition imposed by the Tree Officer or the Tree Authority or voluntarily obstructs any member of the Tree Authority or the Tree Officer or any Officers and Servants subordinate to him in the discharge of their functions under this Act, shall, on convection, be punished with the fine of not less than one thousand rupees which may extend up to five thousand rupees for every offense and also with imprisonment for a term of not less than one week. Which may extent up to one year. The felling or causing of felling of each tree without the permission of the Tree Authority shall constitute a separate offense.

As per provision under section 19 (b) you are directed to plant trees in open spaces as well as R.G. Area as per the norms of Tree Authority before getting occupation /completion certificate of the constructed propose work.

As per direction of the Tree Authority, you are hereby directed to submit the photographs taken while transplanting of trees and the C.D. of the transplantation of the trees, you are also requested to plant indigenous variety of trees having circumference of 6" above and height of 10'-12' above. The list of indigenous variety of trees is enclosed herewith for your ready reference and compliance.

Thanking you.

Yours faithfully. L Supdt.of Gardens & Tree Officer

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY महानगर प्रदेश विकास प्राधिकरण

ED/MTHL/CRZ Clearance/publish/16

Engineering Division Dt. 29th Jan 2016

To. Additional Chief Secretary (Environment) Environment Department, Govt. of Maharashtra, Mantralaya, Mumbai - 400 032

Sub: Mumbai Trans Harbour Link (MTHL) project

CRZ Clearance reg.

Ref: Ministry of Environment, Forest and Climate Change, Govt of India letter No. F.No.11-65/2012-IA.III Dt. 25th January 2016

Sir.

Ministry of Environment, Forest and Climate Change, vide letter referred above, has accorded CRZ clearance to the Mumbai Trans Harbour Link (MTHL) project. The copy of the clearance is submitted herewith for your information for ready reference.

Thanking you,

Yours faithfully,

(P.D.Mamdadure) Engineer-in-Chief

Encl: Copy of CRZ clearance letter

Copy submitted to

The Member Secretary, Maharashtra Pollution Control Board, Sion (E), Mumbai with a request to publish the CRZ Clearance on your website.

Copy submitted for information to,

- The Secretary (Forest), Revenue & Forest Dept, Govt. of Maharashtra, Mantralaya, Mumbai 1 Encl: Copy of CRZ clearance letter
- The Chairman, Maharashtra Coastal Zone Management Authority, Mumbai 2 Encl: Copy of CRZ clearance letter
- The Director, Bombay Natural History Society, Hornbill house, Dr. Salim Ali Chowk, Shaheed Bhagat Singh Road, Mumbai – 400 001 Encl: Copy of CRZ clearance letter
- 4. The Chief Executive Officer, Raigad Zilla Parishad, Alibaug Encl: Copy of CRZ clearance letter
- > 5. The Assistant Commissioner (F-South ward), MCGM, 'F/S' ward Office, Jagganath Bhatankar Marg & Dr. B. A. Road Junction, Parel Naka, Mumbai-400 012 Encl: Copy of CRZ clearance letter
 - 6. The Block Development Officer, Uran Taluka Encl: Copy of CRZ clearance letter
 - 7. Sarpanch, Jasai Village, Tal: Uran, District Raigad
 - 8. Sarpanch, Gavan Village, Tal: Panvel, District Raigad

 - 9. Sarpanch, Chirle Village, Tal: Uran, District Raigad 10. The Block Development officer, Panvel-Taluks: End: Only of CR2 clearance letter, Bandra Kurla Complex, Bandra (East), Mumbai 400 051.

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY

मुंबई महानगर प्रदेश विकास प्राधिकरण

No. ED/MTHL/CRZ Clearance/publish/16

Engineering Division Dt. 29th Jan 2016 12011

To, Additional Chief Secretary (Environment) Environment Department, Govt. of Maharashtra, Mantralaya, Mumbai – 400 032

> Sub: Mumbai Trans Harbour Link (MTHL) project - CRZ Clearance reg.

Ref : Ministry of Environment, Forest and Climate Change, Govt of India letter No. F.No.11-65/2012-IA.III Dt. 25th January 2016

Sir, Ministry of Environment, Forest and Climate Change, vide letter referred above, has accorded CRZ clearance to the Mumbai Trans Harbour Link (MTHL) project. The copy of the clearance is submitted herewith for your information for ready reference.

Thanking you,

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Yours faithfully,

(P.D.Mamdapure) Engineer-in-Chief

Referci: Copy of CRZ clearance letter

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- The Assistant Commissioner (F-South ward), MCGM, 'F/S' ward Office, Jagganath Bhatankar Marg & Dr. B. A. Road Junction, Parel Naka, Mumbai-400 012
 Encl: Copy of CRZ clearance letter
- 6. The Block Development Officer, Uran Taluka Encl: Copy of CRZ clearance letter
 - . Sarpanch, Jasai Village, Tal: Uran, District Raigad
 - Sarpanch, Gavan Village, Tal: Panvel, District Raigad

Sarpanch, Chirle Village, Tal: Uran, District Raigad 10. The Block Development officer, Panvel-Taluks: End: Opp of CR2 clearance letter, Bandra - Kurla Complex, Bandra (East), Mumbai - 400 051. SP 605 DILMA P.0 446.054 EDEC 486577671N Conster Hot.07 Cost96K In: NE PIRETOR.BORGA NATURAL HARSED REPEAL, PIN:44000 From LEPENT PERFORMANCE REGION, DEVLOPTEN W1:250rams, Ant:17.0) .01/62/2016 .11:19 Taxes:Re.2.00KGrack on wew.indiapost.gov.in

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MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY मंबई महानगर प्रदेश विकास प्राधिकरण

No.ED/MTHL/CRZ/2016

Engineering Division Date: 16/02/2016

To, **Chief Conservator of Forests,** Near Micro Wave Tower, Bara Banglow Area, Thane (East) – 400 603.

Sub.: Mumbai Trans Harbour Link Road.

- CRZ Clearance for Mumbai Trans Harbour Sea Link (MTHL) by M/s. Mumbai Metropolitan Region Development Authority Reg.
- Ref.: Letter obtained from Ministry of Environment & Forests (IA.III Division) No. F.No.11-65/2012-IA-III dated 25/01/2016.

Sir,

Ministry of Environment & Forests (IA.III Division) has accorded Costal Regulation Zone Clearance (CRZ) for Mumbai Trans Harbour Link Project vide above referred letter.

As required under point no. 8 of General Conditions, the project proponent – Mumbai Metropolitan Region Development Authority has published CRZ clearance in two local Newspapers i.e. India Express – English language and Loksatta – Marathi language on 29/01/2016. The copies of same are enclosed herewith for your information and record please. A copy of CRZ clearance is also enclosed herewith for your ready reference.

Thanking you.

Yours faithfully,

(P.D. Mamdapure)

Engineer-In-Chief

Encl.: 1. Copy of Notice published in Newspapers.2. Copy of CRZ clearance from MoEF.

भारतीय डीक India Post

SF AUDIT BHAVAN PO (400051) EM9172056091M India Po Counter No:1,0P-Code:SVM To:ADDL PRINCIPAL CON.CIVIL LINES NAGPUR, PIN:440001 From:MMRDA , BANDRA E Wt:30grams, Amt:40.00 ,17/02/2017;12:02

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२०१२-१३ या आर्थिक वर्षात देशातून झालेली एकूण निर्यात ढोवळ राष्ट्रीय उत्पादनाच्या १७.३ टक्के इतकी होती. त्याआधीच्या वर्षात ही निर्यात १७.६

टक्के होती.

 नीचांकी पातळीच्या टप्प्यावर नेहमीप्रमाणे रिझर्व्ह बँक मैदानात आली. सरकारी बँकांच्या माध्यमातून रिझर्व्ह बँकेने डॉलर विक्री सुरु केली. त्यामुळे

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बँकेने बाजाराकडे लक्ष ो गाठली तेव्हा बँकेने र मागणी नोंदवीतात. येतो

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800 020 indianrailways.gov.in

भेल-dp@mrvc.gov.in मेल-ceeprj@mrvc.gov.in

साव्हसस

, बिल्डिंग चेलाबा, मुंबई-शेत कामाफ्र ला निविदा जारी । एमईएसमध्ये कंत्राटदोराच्या शास. विभागासोबत कार्यरत ।. पात्र वर्गापेक्षा एक वर्ग खाली मरू शकतील. तथापि, अशा मिळाल्यावरच विचार करण्यात

ो बिल्डिंग क्र. 'एस' ची विशेष (रु. लाखात) : रु. १०७ ा रकमेची राशी लागू असेल . १०००/- जीई (एनडब्ल्यू) रात्रता निकष : वर्ग ''बी'' व >९ सप्टेंबर २०१३.-निविदा ादा स्वीकारण्याची तारीख

/बैंकर्स चेक संलग्न नसलेल्या येणार नाही. निविदेची किंमत या तारखेपासून सहा महिन्याचे ोड्यूल्ड बँकेंच्या डीडी/वॅकर्स



जो शेड्यूल्ड बँक/ राष्ट्रीयीकृत बँकेने वरिष्ठ मंडल वित्त व्यवस्थापक, उत्तर मध्य रेल्वे, झांशी यांचे नावे जारी केलेला असावा

४. निविदा फॉर्मची विक्री: निविदा प्रपन्न दिनांक ६.९.२०१३ ते २६.९.२०१३ पर्यंत कोणत्याही कामकावाच्या दिवशी

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में पहिली. काणतेही कारण न देता काणतीही किवा सब कुर्रेए गर में के मंग्रिस सक्षम, 'उमेर्फ़्रमें' के स्थ .जास उपलब्ध आहे.

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हमकी एमाध्यम जन्म छाडालट कृषिति गिरि मनूम ई ਤਸੰਸਿ) ਸ਼ਸ਼ਿੰਦੀ: असीवेदी आणि जिनि- है. जिसह ग्रीग्रह 'कि' तमात्मली ,'प्र' तमात्मली मामका किलीए तीफ्वर गिरिट गेव क्षेक्षमम तक्षीव्ये इसंस ਗੀਸਿਟ .ਤਿ.ਲ੍ਹਿਅਡ.ਸਿ ਲੱਲਸ਼ਮੁਟ ਬਮਾਜੁਣ ਕਿਸ ਸ਼ਿਕਾਂਸ਼ਨ ,ਸਿਆ कामान्या मूल्याच्या ३०% अभिमितिचे किमान एक 300 प्रमण डाया च अडरगाभ्रेड सेवर पाइंग गल, २००३ पासून माच, २०१३ पर्यंत मागील १०

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इ९०९ उसमिह इ९ तत्नीमिडी ४१-९१०९

न्द्रयक राहोल.

म्वांची पूर्तता करावी.

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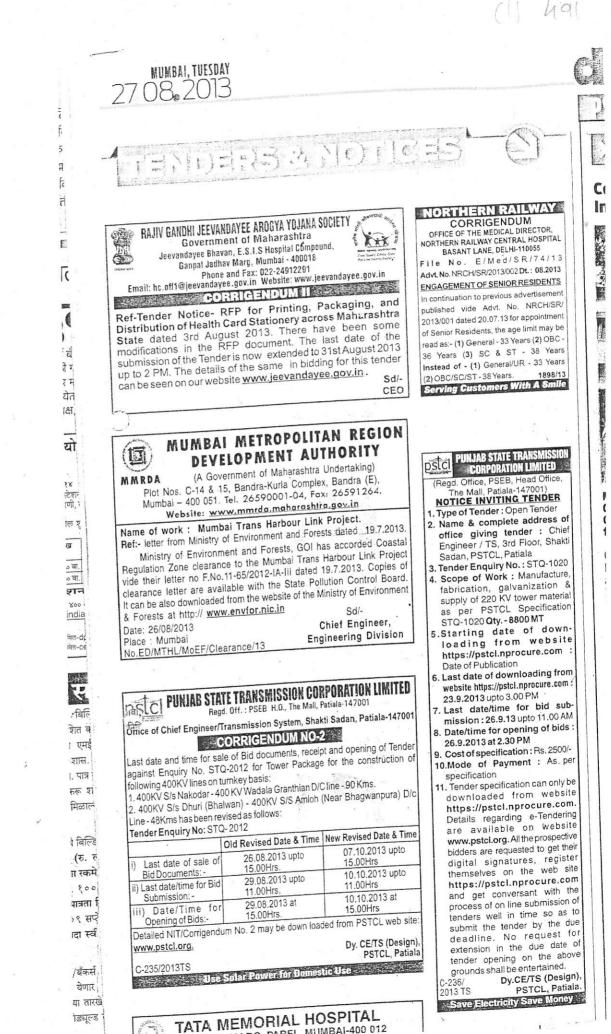
तित्रम करण्यासारी आवश्यक इसी तिहाम लिगा

लन्न संस्तेल्या आजीचा निविदा जारी करण्यासाठी विवार

इंडीईसीरि विस्तिध किकिके सिल्याचे अपित ह

वाची कामे समाधानकारकरीला पूर्ण केली असणे

ल, खेळले भाडवल, स्थिरमता ओदीविषयी एमईएसच्या



E. BORGES MARG, PAREL, MUMBAI-400 012







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REATRACE RULE BRORESDEPARTIESTE NOTICE INVITING E-TENDERS

The Executive Engineer, Mumbal Central Division No. II, CPWD, Nirman Sadan, 2nd Floor, Kane Nagar, Antop Hill, Mumbai-37 invites on behalf of President of India online item rate tenders for following works :-

1. NIT No.58/EE/MCD II/2015-16 [Recall]

Name of Work :- Addition/Alteration to CGH at S.M.Plot, Sector-VII, Antop Hill, Mumbai-37 during 2015-16. SH:Upgradation of Bldg.No.51 (Flat 10 Nos.2063, 2064, 2066, 2073, 2074, 2075, 2084, 2085, 2087, 2089). Estimated Cost :- Rs.9,68,484/-, Earnest Money :- Rs.19,370/-, Period of completion:- 05 (Five) Months, Last Date and Time of Submission of Tender :- 15.00 hrs. of 06/02/2016 and opening on 06/02/2016 at 3.30 PM 2. NIT No.97/EE/MCD II/2015-16

Name of Work :- A/R & M/O to CGH at SPL, Kane Nagar, Sector-II & III, Mumbai-37, during 2015-16. SH:Repairs to nternal rooms by plastering and painting. Estimated Cost - Rs 260/-, Earnest Money :- Rs.15,645/-, Period of completion:- 03 (Three) Months, Last Date and Time of Submission of Tender :- 15.00 hrs. of 06/02/2016 and opening on 06/02/2016 at 3.30 PM

3. NIT No.98/EE/MCD II/2015-16

Name of Work :- Urgent internal repairs and painting of 35 Nos. new allotted vacant and dilapidated quarters of building No.53, 54, 55 and 58 Revenue pool (Income Tax Department), Estimated Cost :- Rs.14,66,365/-, Earnest Money :-Rs.29,327/-, Period of completion:- 06 (Six) Months, ast Date and Time of Submission of Tender :- 15.00 rs. of 06/02/2016 and opening on 06/02/2016 at 3.30 PM NIT No.99/EE/MCD II/2015-16

lame of Work :- Structural repairs to distressed building of 3GH, SPL,Kane Nagar in Sector-III, Antop Hill, Mumbai-37 uring 2015-16. SH:Minor repairs with external painting to uilding No.31, Estimated Cost :- Rs.7,41,875/-, Earnest loney :- Rs.14,838/-, Period of completion:- 03 (Three) lonths, Last Date and Time of Submission of Tender :-5.00 hrs. of 06/02/2016 and opening on 06/02/2016 at 3.30 PM .NIT No.100/EE/MCD II/2015-16

ame of Work :- Special Repair to S.M.Plot, Phase-II, Sector-II, Antop Hill, Mumbai-37 during 2015-16 SH:Repairs to anholes, gully traps and sewerlines building No.1 to 51, stime d Cost :- Rs.17,69,072/-, Earnest Money :-3.35,301/-, Period of completion:- 12 (Twelve) Months, ist Date and Time of Submission of Tender :- 15.00 s. of 06/02/2016 and opening on 06/02/2016 at 3.30 PM NIT No.102/EE/MCD II/2015-16

ime of Work :-Aesthetic improvement of CGS Colony at M.Plot, Phase-II, Sector-VII, Antop Hill, Mumbai-37 during 15-16. SH:Development of pump house area by surface issing, cement concrete, repairs to sluice chamber, pump use near building No.25 (Section A), Estimated Cost :-.7,37.019/-, Earnest Money :- Rs.14,740/-, Period of mpletion:- 02 (Two) Months, Last Date and Time of bmission of Tender :- 15.00 hrs. of 06/02/2016 and ening on 06/02/2016 at 3.30 PM

VIT No.103/EE/MCD II/2015-16

me of Work :-Providing concertina coil over existing grill compound wall, north side of the building No.186,188 & 2, around the garden at Sector-VI, Kane Nagar, Mumbai-

Estimated Cost :- Rs.6,92,458/-, Earnest Money :-13,849/-, Period of completion:- 01 (One) Month, it Date and Time of Submission of Tender :- 15.00 of 06/02/2016 and opening on 06/02/2016 at 3.30 PM tender forms and other details can be obtained from website www.tenderwizard.com/CPWD or w.cpwd.gov.in, www.tenderhome.com and w.eprocure.gov.in.

at ECHS Polvelinic Solapur, Osmanabad, Latur and Beed for six months (may extended) on contractual basis. 2. Conversant with Hindi and Marathi, min. gualification SSC. 3. Fixed salary - Rs 8000 - pm. 4. Send application with CV by E-mail Registered Post or through ECHS Polyclinic by 10 Feb 2016 to undermentioned address. Contact 0241-2321233 (working hours) (Excluding Sundays and Gazzated Holidays) ECHS Cell, Station Headquarters PO : Camp, Jamkhed Road, Ahmednagar-414002 Contact No: 0241-2323565, 2321233 E-mail: echscellstnhqnagar@yahoo.com मुंबई महानगर प्रदेश विकास प्राधिकरण 15) (महाराष्ट्र शासन अंगिकृत) सी - १४ व १५, बहि-कुली संयुग्ण, बहि (पुर्व), मुंबई-४०० ०५१ MMRDA दुरध्वनी : २६५९४००५-०४ फॅक्स : २६५९५२६४ ई-मेल : ce.mmrda@gmail.com वेचसाईट : https://www.mmrda.maharashtra.gov.in विषय : मुंबई पारबंदर प्रकल्प संदर्भ : केंद्रीय पर्यावरण विभागाचे दिनांक २५/०१/२०१६ रोजीचे पत्र 2 मुंबई पारबंदर प्रकल्पास केंद्रीय पर्यावरण व वने विभागाने पत्र क्र.F.No.11-65/2012-IA-III दिनांक २५/०१/२०१६ अन्वये सागरी 3 नियंत्रण क्षेत्र विषयक (CRZ) मान्यता दिलेली आहे. सदर पत्राची प्रत केंदीय 4 पर्यावरण व वन विभागाच्या http://environmentclearance.nic.in 5 या सांकेतिक स्थळावर उपलब्ध आहे. क्र.अभि/मुं.पा.प्र/के.प.वि/मान्यता/१६ 6 सहा/-दिनांक : २९/०१/२०१६ प्रमुख स्थळ : मुंबई अभियांत्रिकी विभाग । सिडको

Lotsatta 30/1/2018 paseno. 11

EX-SERVICEMEN CONTRIBUTORY HEALTH SCHEME (ECHS)

1. Application invited for appointment of one 'HELPER' each

शद्धिपत्रक- २

शहर आणि औद्योगिक विकास महामंडळ (महाराष्ट्र) मर्यादित

सिडको नवी मुंबई प्रकल्पग्रस्तांसाठी UPSC (Civil Services) - २०१७ स्पर्धा परीक्षेच्या तयारी करिता दिल्ली येथील नामवंत कोचिंग इंस्टोटयूट्मध्ये नि:शुल्क कोचिंग मूळ जाहिरात दिनांक - २३.१२.२०१५, शुद्धिपत्रक-१-०९.०१.२०१६ सदरील बदल बार्टी, पुणे यांनी कळविला आहे.

सिडको नवी मुंबई प्रकल्पग्रस्तांसाटी कौशल्यवृढी कार्यक्रम सिडकोतारा अंतर्गत पान्न प्रकल्पग्रस्त पदवीधरांसाठी दिल्ली यंथील नामवंत कोचिंग इंस्टीटयूटमध्ये (वार्जाराम एंड रवी, अल्टरनेटीव्ह लर्निंग सिस्टीम प्रा.ली., श्रीराम आच.ए.एस.) UPSC Civil Services-2017 - Preliminary and Mains या दोन्ही स्पर्धा परीक्षा पूर्व तयारीसाठी उमेदवारांना पुरस्कृत (Sponsor) करण्यात येणार आहे. सदर नामवंत कोचिंग इंस्टीटयूटमध्ये प्रवेशपर्राक्षा COMMON ENTRANCE TEST (CIDCO-DELHI-CET-2017) बार्टी, पुणे च्या माध्यमाने वेण्यात येईल, तरी त्यासाठी ऑनलाईन अर्ज मागविण्यात येत आहे.

ऑनलाईनद्वारे अर्ज स्विकारण्याची अंतिम तारीख	दि. १९ मार्च, २०१६	
ई- प्रवेश पत्र (Admit Card) मिळण्याची तारीख	दि. १९ माच, २०१६	
CIDCO-DELHI-CET-2016 परीक्षेची तारीख	दि. २७ मार्च, २०१६	1.00

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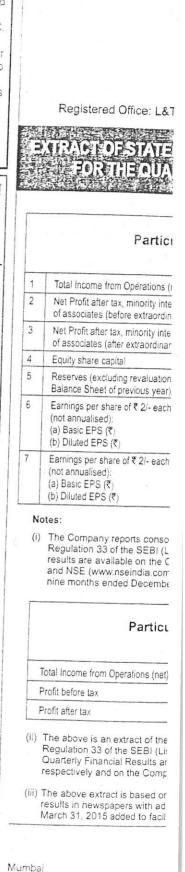
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व्यवस्थापक (पनवंसन)

सिडको जनमंत्रक /३६६/वी) २०१५-१६

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Ref No: MMRDA/MTHL/P1/GC/EOT-1//2021 /75/

To,

The Team Leader,

M/s AECOM Asia Company Ltd. (In Consortium with PADECO Co. Ltd – Dar-Al-Handasah - T.Y. Lin International) 6th floor, A Wing, MMRDA Bldg (Old), E-Block, BKC, Bandra (East) Mumbai-51

	HL Consultant
INWARD NO:	MMRDA 1275
DATE	23.11.202

Date: 22.11.2021

Project: Procurement of Mumbai Harbour Link Project (package 1) Construction of 10.380 Km Long bridge section (CH-0+000 – Ch- 10+380) across the Mumbai bay including Sewri Interchange under Identification NO MMRDA/ENG1/000752

--- Extension of Time limit to M/s L&T for completion of contract for Pkg-1

- Ref:- 1. Contract Agreement: MMRDA/ENG/000752 dated 26.12.2017
 - 2. MMRDA's Letter of Acceptance (LOA) to M/s L&T-IHI Consortium dated 17.11.2017
 - 3. GC's letter of Commencement to M/s L&T-IHI Consortium dated 23.03.2018
 - M/s L&T-IHI Consortium letter to GC 09.04.2021 requesting EOT to contract of Pkg-1
 - 5. M/s L&T-IHI Consortium letter to GC 24.06.2021 on additional clarification on EOT proposal Pkg-1
 - GC's recommendation to MMRDA vide letter no. MTHL/P1/GC/MMRDA/LT/CNT-2292/2021 dated 07.09.2021.
 - MMRDA letter to JICA vide No. MMRDA/MTHL-PIU/P1/EOT-1/0698/2021dt29/10/2021.
 - 8. Letter from JICA vide No. JICA (ID) 2021-662 dt. 22/11/2021.

Dear Sir,

This has reference to the various letters received by Employer referred above for EOT for MTHL Package 1 Contract. The Contract was awarded to M/s L&T-IHI Consortium with the commencement date 23.08.2018 and as per the Contract; the original completion period is 22.09.2022.

The GC vide their letter dated 07.09.2021, verified the reasons for delay and critical path for completion of the balance work and recommended to MMRDA for approving EOT up to 30.09.2023 (374 days).

It is observed that unavoidable delays beyond the control of Contractor i.e permission from various authorities, realignment at OSD-02 and OSD-03 foundations due to mismatch in ONGC Pipeline and laying of new MbPT pipeline, Covid-19 pandemic restrictions etc is the governing delay affecting the completion of the overall project.

Therefore, the Engineer has recommended an interim Extension of Time for a period of 374 days to be granted to the Contractor under 8.4(b) of the General Conditions of the Contract. The contractor is entitled to claim under the clause 20.1 of GCC and shall be paid the actual costs incurred by him for

Mumbai Metropolitan Region Development Authority

Emailed to TL on. 23.11. 2021

such extension of validity of insurances & PBG etc upon submission of proof of payment to the satisfaction of the Engineer

Employer has received concurrence from JICA for EOT to Package 1 for the period of 374 days i.e. till 30th September 2023. Copy of letter of JICA is enclosed herewith for your reference.

In the JICA letter, they have requested MMRDA to setup a mechanism for rigorous review of the safety protocols, processes and mechanism adopted by the contractor to avoid recurrence of safety incidents under the captioned packages. GC is also requested to take note of JICA's point set up a mechanism for rigorous review of the safety at worksite.

This is for your kind information. Thanking you.

> Yours faithfully, Alandhelia; (Sunil Wandhekar)

Sunil Wandhekar) Engineer-In-Chief

Encl: As Above.

TL Find to O chandrokant Bansod O Kishore Rajn po O SIM ahlsh pr. 23.11. 2021

General Consultant [Pkg -]			
Department	А	1	Rmk
Resident Engineer			
Contract Administration			
Quantity Survey / Billing			
Planning & Monitoring			
Quality Control			
Safety / Environment			
Utilities / Social			
Design Related			
Foundation			
Substructure			
Superstructure PC/Steel			
Geotechnical			
Administration			

Japan International Cooperation Agency



JICA (ID) 2021- 652 November 22, 2021

Mr. Sunil Wandhekar, Engineer-in-Chief, MMRDA Mumbai

Sub: Mumbai Trans Harbour Link Project (MTHL): ID-P 255 & ID-P 283 Extension of Time for Package 1

Ref: MMRDA/MTHL-PIU/P1/EOT-1/0698/2021 dated October 29, 2021

Dear Mr. Wandhekar,

This has reference to your captioned letter wherein MMRDA has submitted a proposal for Extension of Time (EoT) for package 1 under the captioned project.

Upon review, it is understood by JICA that the GC of the project has recommended that Extension of Time (EoT) for a period of 374 days (With Revised Completion date as September 30, 2023) shall be granted to the Contractor of Package 1 under 8.4 (b) of the GCC and the same has been accepted and agreed by MMRDA. In view of the above, MMRDA is requested to go-ahead with your proposal and issue the EoT to the contractor of the captioned package in accordance with your proposal.

We wish to take this opportunity to reiterate that amendment to the contract documents concurred by JICA (including amendment in contract price, variations and additional items among others) shall require prior written concurrence from JICA in accordance with the Loan Agreement of the captioned project.

In view of frequent accidents during civil works under Package 1 of the captioned project, we wish to request MMRDA to set up a mechanism for rigorous review of the safety protocols, processes and mechanisms adopted by the contractor to avoid recurrence of safety incidents under the captioned package.

Your kind cooperation in this matter shall be highly appreciated.

Yours sincerely,

NAGAI Shinsuke

Senior Representative

CC:

Mr. Avanish Mishra, Deputy Director General, DEA, Ministry of Finance, New Delhi Mr. SUNOUCHI Tatsuhiko, Director, SAD1, JICA HQ, Tokyo



No.MMRDA/MTHL-PIU/GC/2021/674

The Engineer, General Consultant AECOM Asia Company Ltd. - PADECO Co. Ltd. - DAR Al-Handasah Consultants (Share & Partners)- T.Y.Lin International (Consortium) A-Wing, 6th Floor, Old MMRDA Building, Bandra Kurla Complex, Bandra (East), Mumbai – 400051

MTHL General Consultant	
INWARD NO:	MMRDA 1238
Der FE	14.10.22.

Sub: Mumbai Trans Harbour Link (MTHL) Project (Package-2) **Extension of Time (EOT)**

General consultant letter no. MTHL/GC/MMRDA/LT/EOT-2314/2021dated 15th Ref: October 2021.

Sir,

To

The work of MTHL Package -2 has been awarded to M/s Daewoo-TPL JV at a contract value of Rs. 5612.61 crs. The original time given to the contractor for package -2 is 54 months from commencement of work (ie up to 22/09/2022). The contractor M/s Daewoo-TPL JV has submitted proposal requesting EOT accounting for delays up to 25/09/2020.

General Consultant has submitted that the governing delays which are affecting the completion of overall project and recommended for interim Extension of Time for a period of 372 days to be granted to the contractor. General Consultant has arrived at projected completion date as 27/09/2023 i.e. extended time of 372 days for all the delays.

In view of above, General Consultant is requested to confirm that the extension of time limit does not increase the original estimated project cost.

Thanking you,

Yours faithfully

(S. A. Wandhekar) **Engineer- In- Chief**

Mumbai Metropolitan Region Development Authority

Bandra-Kurla Complex, Bandra East, Mumbai 400 051. T +91 22 2659 1234 EPABX +91 22 2659 0001 / 4000 F +91 22 2659 1112 / 1264 https://mmrda.maharashtra.gov.in

22.09 2021



Ref No: MTHL/P3/GC/MMRDA/LT/EOT- 0605/2021

To,

The Team Leader, M/s AECOM Asia Company Ltd. (In Consortium with PADECO Co. Ltd – Dar-Al-Handasah - T.Y. Lin International) 6th floor, A Wing, MMRDA Bldg (Old), E-Block, BKC, Bandra (East) Mumbai-51



Project: Procurement of Mumbai Trans Harbour Link Project (Package 3), Construction of 3.613km long viaduct section (CH 18+187 – CH 21+ 800) including interchanges at State Highway-54 and at National Highway-4B near Chirle in Navi Mumbai Contract No.:MMRDA/ENG/000754 dated 26thDecember 2017.

--- Extension of Time limit to M/s L&T for completion of contract for Pkg-3

- Ref:- 1. Contract Agreement: MMRDA/ENG1/000754 dated 26.12.2017
 - 2. MMRDA's Letter of Acceptance (LOA) to M/s L&T dated 17.11.2017
 - 3. GC's letter of Commencement to L&T dated 23.03.2018
 - 4. L&T's letter to GC 12.04.2021 requesting EOT to contract of Pkg-3
 - 5. L&T's letter to GC 20.05.2021 on additional clarification on EOT proposal Pkg-3
 - 6. GC's recommendation to MMRDA vide letter no. Letter MTHL/P3/GC/MMRDA/LT/CNT-2230/2021 dated 04.08.2021 and 28.08.2021.
 - 7. JICA letter no MTHL/P3/GC/MMRDA/LT/EOT-573/JICA/21 dt 15/09/2021.

Dear Sir,

This has reference to the EOT for MTHL Package 3 Contract. The Contract awarded to Larsen & Toubro Limited. The commencement date was issued on 23.08.2018 and as per the Contract, the original completion period is 21.09.2021.

The GC vide their letter dated 04.08.2021 & 28.08.2021 has verified the reasons for delay and critical path for completion of the balance work and recommended to MMRDA for approving EOT upto 03.03.2023 (529 days).

It is observed that due to unavoidable delays in handing over of casting yard land, removal of encumbrances, approval from Railway departments, Covid-19 pandemic restrictions etc. is the governing delay affecting the completion of the overall project.

Therefore, the Engineer has recommended an interim Extension of Time for a period of 529 days to be granted to the Contractor under 8.4(b) of the General Conditions of the Contract. The contractor is entitled to claim under the clause 20.1 of GCC and shall be paid the actual costs incurred by him for such extension of validity of insurances & PBG etc upon submission of proof of payment to the satisfaction of the Engineer

We have reviewed the GCs recommendations and received concurrence from JICA, hence agreed to consider the EOT. Copy of letter of JICA is enclosed herewith for your reference.

This is for your kind information.

Thanking you.

Yours faithfully,

(Sunil Wandhekar) Engineer-In-Chief

Encl: As Above.

Mumbai Metropolitan Region Development Authority

Bandra-Kurla Complex, Bandra East, Mumbai 400 051. T +91 22 2659 1234 EPABX +91 22 2659 0001 / 4000 F +91 22 2659 1112 / 1264 https://mmrda.maharashtra.gov.in

Japan International Cooperation Agency

JICA(ID) 2021- 419 September/6,2021

Mr. Sunil Wandhekar Engineer In Chief MMRDA Mumbai

Sub: Mumbai Trans Harbour Link Project (MTHL) (ID-P 255) Extension of Time for Package 3

Ref:

Letter No. MTHL/P3/GC/MMRDA/LT/EOT-573/Jica.2021 dated September 15, 2021

Dear Mr. Wandhekar,

This has reference to the captioned letter wherein MMRDA has submitted a proposal for Extension of Tender (EOT) of Package 3 under the captioned project.

Upon review, it is understood by JICA that the GC of the project has recommended that an interim EOT for a period of 529 days (with completion date as March 3, 2023) to be granted to the contractor of Package 3 in accordance with Clause 8.4 (b) of the GCC and the same has been accepted and agreed by MMRDA. In view of the above, MMRDA is requested to go-ahead with your proposal and issue the EoT to the contractor of the captioned package in accordance with your proposal.

We wish to take this opportunity to reiterate that amendment to the contract document (, c concurred by JICA (including amendment in contract price, variations in scope, additional items etc.) shall require prior written concurrence from JICA in accordance with the Loan Agreement of the captioned project.

Your kind cooperation in the matter will be highly appreciated.

Yours sincerely,

et The

NAGAI Shinsuke Senior Representative

CC:

Mr. A.K Mishra, Deputy Director General, DEA, Ministry of Finance, Govt. of India, New Delhi.

Mr. Takuro Takeuchi, Senior Director SAD I, JICA HQ, Tokyo.