



CONTRACT AGREEMENT

between

MUMBAI METROPOLITAN REGION DEVELOPMENT AUTHORITY

and

LARSEN AND TOUBRO LIMITED

MUMBAI TRANS HARBOUR LINK PROJECT (MTHL)

PACKAGE-3

**Procurement of Mumbai Trans Harbour Link Project (Package 3)
Construction of 3.613 km 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**

(JICA LOAN: Mumbai Trans-Harbour Link Project (I) ID-P255)

MADE ON 26TH DECEMBER 2017

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Package-3
Larsen & Toubro Limited

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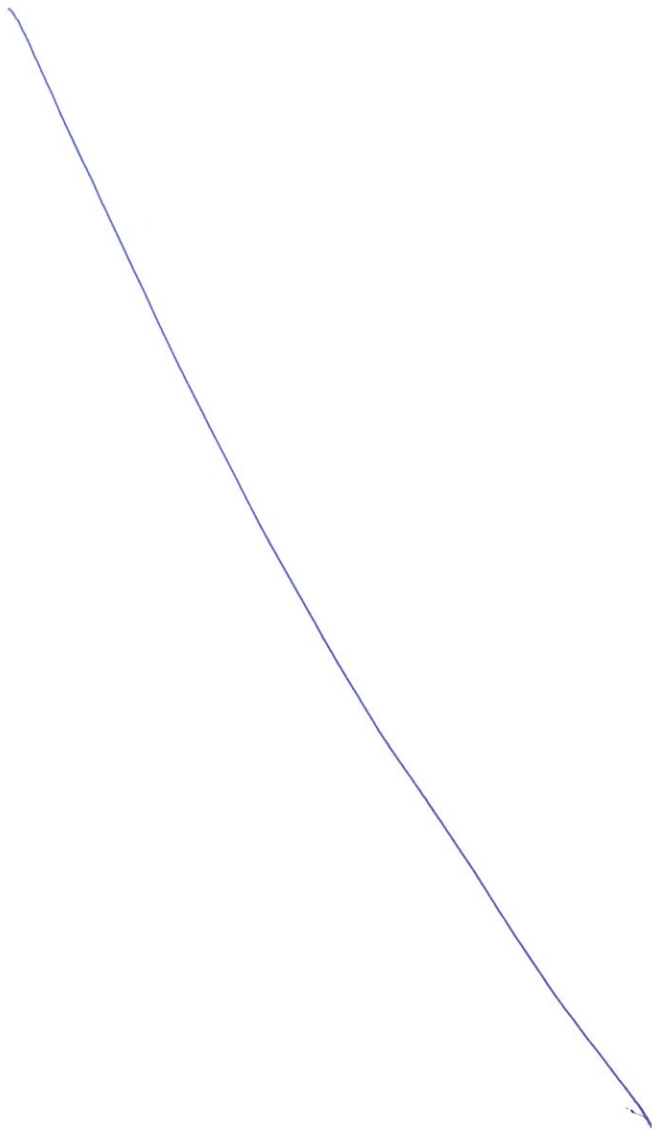
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PACKAGE-3

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Amounts Payable for Respective Price Schedule

Contract Name: Package-3 of the Project (Construction of a 3.613 km 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

IFB No: **MMRDA/ENG1/000754**

Description of Price Schedule	Limits expected by Employer (% of Accepted Contract Amount)	Percentages proposed by Bidder (% of (A) in Grand Summary)
Schedule No. 1: General Item	1.7 to 2.3	2.298
Schedule No. 2: Contractor Documents	1.1 to 1.7	1.697
Schedule No. 3: Construction of foundation for piers and abutments	21.7 to 25.7	25.613
Schedule No. 4: Construction of piers, pier caps and abutments, abutment caps and including pile caps	10.5 to 13.5	12.813
Schedule No. 5: Construction of Concrete superstructure	24.4 to 28.4	24.454
Schedule No. 6: Fabrication and erection of steel superstructure	6.0 to 8.0	7.902
Schedule No. 7: Construction of Earthwork	21.2 to 25.2	21.210
Schedule No. 8: Fabrication and installation of bridge ancillaries	1.8 to 2.4	2.321
Schedule No. 9: Construction of asphalt pavement	0.6 to 1.2	0.609
Schedule No. 10: Fabrication and installation of miscellaneous items	1.0 to 1.6	1.084
Total % of Schedules No 1 to 10 mentioned at (A) in Grand Summary		100



Schedule No. 1: General Items

Item No.	Item Description	Unit	Qty	Amount			
				Local (Ind. Rs)	Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
101	Performance Security (Section VII GC Sub-Clause 4.2)	Lump sum	1	9,143,750	-	-	-
102	Insurance for Works (Section VII GC Sub-Clause 18.2)	Lump sum	1	20,874,227	-	-	-
103	Insurance for Contractor's Equipment (Section VII GC Sub-Clause 18.2)	Lump sum	1	3,938,534	-	-	-
104	Insurance against Injury to Persons and Damage to Property (Section VII GC Sub-Clause 18.3)	Lump sum	1	4,726,240	-	-	-
105	Insurance for Contractor's Personnel (Section VII GC Sub-Clause 18.4)	Lump sum	1	-	-	-	-
106	Insurance for Design Liability (Section VIII PC Sub-Clause 18.5)	Lump sum	1	8,270,920	-	-	-
107	Automobile Liability Insurance	Lump sum	1	1,575,414	-	-	-
108	Allow for DNP Services (Section VII GC Clause 11)	Lump sum	1	1,000,000	-	-	-
109	Provision and maintenance of health and safety measures during the Time for Completion (Section VII GC Sub-Clause 6.7)	Lump sum	1	21,363,810	-	-	-
110	Provision (construction) of office facilities with furniture and office equipment for the Employer and unfurnished office for the Engineer/General Consultants (Section VII GC Sub-Clause 6.6)	Lump sum	1	112,791,965	-	-	-
111	Maintenance of above office facilities for the Employer during the Time for Completion (Section VII GC Sub-Clause 6.6)	Lump sum	1	8,400,000	-	-	-
112	Removal/clearing of above office facilities for the Employer and for the Engineer (Section VII GC Sub-Clause 6.6)	Lump sum	1	1,000,000	-	-	-
113	Provision and removal of diversion roads (Section VII GC Sub-Clause 4.15)	Lump sum	1	1,000,000	-	-	-
114	Operation and maintenance of diversion roads during the Time for Completion (Section VII GC Sub-Clause 4.15)	Lump sum	1	2,100,000	-	-	-
115	Clearing from Site and Works after Taking-Over (Section VII GC Sub-Clause 4.23)	Lump sum	1	1,000,000	-	-	-
116	Supply of vehicles, etc. for the Employer (Section VII GC Sub-Clause 6.6)	Lump sum	1	16,800,000	-	-	-
117	Operation and maintenance of above vehicles, etc. for the Employer during the Time for Completion (Section VII GC Sub-Clause 6.6)	Lump sum	1	3,360,000	-	-	-
Total for Price Schedule No. 1				217,344,860			
				<i>(To be carried forward to Grand Summary)</i>			





Schedule No. 2: Contractor's Document

Item No.	Item Description	Unit	Qty	Local (Ind. Rs)	Amount		
					Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
201	Technical Design documents of highway and interchange alignments	Lump sum	1	24,300,000	-	-	-
204	Aesthetic Strategy Report	Lump sum	1	286,875	-	-	-
203	Technical Design documents of earthwork	Lump sum	1	1,501,875	-	-	-
202	Technical Design documents of foundation	Lump sum	1	6,210,000	-	-	-
205	Technical Design documents of substructure	Lump sum	1	19,372,500	-	-	-
206	Technical Design documents of superstructure (concrete)	Lump sum	1	49,150,625	-	-	-
207	Technical Design documents of superstructure (steel)	Lump sum	1	29,413,125	-	-	-
208	Technical Design documents of pavement	Lump sum	1	1,215,000	-	-	-
209	Technical Design documents of bridge ancillaries	Lump sum	1	16,200,000	-	-	-
210	Construction Design documents of earthwork	Lump sum	1	168,750	-	-	-
211	Construction Design documents of foundation	Lump sum	1	691,875	-	-	-
212	Construction Design documents of Substructure	Lump sum	1	2,160,000	-	-	-
213	Construction Design documents of superstructure (concrete)	Lump sum	1	5,467,500	-	-	-
214	Construction Design documents of superstructure (steel)	Lump sum	1	1,003,750	-	-	-
215	Construction Design documents of pavement	Lump sum	1	135,000	-	-	-
216	Construction Design documents of bridge ancillaries	Lump sum	1	1,805,625	-	-	-
217	Preparation and supply of as-built documents (GC Sub-Clause 5.6)	Lump sum	1	1,391,250	-	-	-
218	Preparation and supply of Maintenance Manual (Section VII GC Sub-Clause 5.7)	Lump sum	1	-	-	-	-
219	Submission of samples (GC Sub-Clause 7.2)	Lump sum	1	-	-	-	-
220	Tests	Lump sum	1	-	-	-	-
				160,513,750	-	-	-

Total for Price Schedule No. 2
(To be carried forward to Grand Summary)



Schedule No. 3: Construction of Foundation for Piers and Abutments

Item No.	Item Description	Unit	Qty	Local (Ind. Rs)	Amount	
					Foreign (US\$)	Foreign (J. Yen)
301	Materials on the Site (refer to GC Sub-Clause 14.5 (c) (i)): steel reinforcing bars	Lump sum	Lot	135,635,236	-	-
302	Ditto: steel liner pipes	Lump sum	Lot	-	-	-
303	Construction of pier foundation piles / Spread foundation including geotechnical investigation	Lump sum	Lot	2,221,898,003	-	-
304	Loading tests and test reports on pier foundation piles	Lump sum	Lot	22,916,075	-	-
305	Construction of abutment foundation piles / Spread foundation including geotechnical investigation	Lump sum	Lot	32,737,250	-	-
306	Loading tests and test reports on abutment foundation piles	Lump sum	Lot	9,821,175	-	-
Total for Price Schedule No. 3				2,423,007,739	-	-
(To be carried forward to Grand Summary)						
Note: The payment of items for variation in open foundation/spread foundation/Raft foundation, etc., shall be paid as per PWD, DSR for the respective year for Raigad region.						
Country of Origin Declaration (ITB 14.1)						
Item No	Material/Description	Code		Country of Origin		
301	Steel Reinforcing Bars	IS Code		India/China		
302	Steel Liners	IS Code		India/China		
303-306	Basic Materials for the Works	IS code		India		



Schedule No. 4: Construction of Piers, Pier caps and Abutments, Abutment caps and including Pile Caps

Item No.	Item Description	Unit	Qty	Amount		
				Local (Ind. Rs)	Foreign (US\$)	Foreign (Euro)
401	Materials on the Site (refer to GC Sub-Clause 14.5 (c) (i)): steel reinforcing bars	Lump sum	1	160,735,893	-	-
402	Ditto: structural steel shapes	Lump sum	1	-	-	-
403	Ditto: pre-stressing cables	Lump sum	1	-	-	-
404	Construction of cast-in-situ concrete pile caps for pier.	Lump sum	1	22,259,651	-	-
405	Construction of cast-in-situ concrete pile caps for abutment.	Lump sum	1	-	-	-
406	Construction of cast-in-situ concrete pier and pier caps.	Lump sum	1	902,966,414	-	-
407	Construction of cast-in-situ concrete abutment structure including caps.	Lump sum	1	118,718,143	-	-
408	Construction of earthwork (backfill, compaction, etc.) and other works for abutments	Lump sum	1	7,419,883	-	-
Total for Price Schedule No. 4				1,212,099,984		

(To be carried forward to Grand Summary)

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
401	Steel Reinforcing Bars	IS Code	India/China
402	Structural Steel Shapes	IS Code	India/China
403	Pre-Stressing Cables	IS Code/ASTM	India/Japan
404-407	Basic Materials for the Works	IS Code	India



Schedule No. 5: Construction of Concrete Superstructure

Item No.	Item Description	Unit	Qty	Amount		
				Local (Ind. Rs)	Foreign (US\$)	Foreign (Euro)
501	Materials on the Site (refer to GC Sub-Clause 14.5 (c) (i)): steel reinforcing bars	Lump sum	1	508,914,691	-	-
502	Ditto: pre-stressing cables	Lump sum	1	-	7,899,013	-
503	Fabrication of precast concrete structural elements for bridges	Lump sum	1	702,311,127	-	-
504	Fabrication of precast concrete structural elements for electrical platforms	Lump sum	1	57,844,972	-	-
505	Transportation and erection of precast concrete structural elements for bridges	Lump sum	1	64,272,191	-	-
506	Transportation and erection of precast concrete structural elements for electrical platforms	Lump sum	1	6,427,219	-	-
507	Construction of cast-in-situ/precast concrete structures	Lump sum	1	464,334,354	-	-
Total for Price Schedule No. 5				1,804,104,554	7,899,013	-

(To be carried forward to Grand Summary)

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
501	Steel Reinforcing Bars	IS Code	India/China
502	Prestressing Cables	IS Code/ASTM	India/Japan
503-507	Equipments for Works	as per relevant codes	India/Italy
503-507	Basic Materials for the Works	IS Code	India/Italy



Schedule No. 6: Fabrication and Erection of Steel Superstructure

Item No	Item Description	Unit	Qty	Local (Ind. Rs)	Amount		
					Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
601	Materials on the Site (refer to GC Sub-Clause 14.5 (c) (i)): structural steel materials	Lump sum	1	203,366,070	-	-	-
602	Fabrication of steel structural elements for bridge superstructure	Lump sum	1	390,605,953	-	-	-
603	Fabrication of steel structural elements for other components	Lump sum	1	-	-	-	-
604	Transportation to and erection at the Site of fabricated steel structural elements for bridges	Lump sum	1	113,737,302	-	-	-
605	Transportation to and erection at the Site of fabricated steel structural elements for other components	Lump sum	1	-	-	-	-
606	Surface anti-corrosion coating of erected steel structure for bridges	Lump sum	1	39,808,055	-	-	-
607	Surface anti-corrosion coating of erected steel structure for other components	Lump sum	1	-	-	-	-
Total for Price Schedule No. 6				747,517,380			

(To be carried forward to Grand Summary)

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
601	Structural Steel Materials	IS Code	India
602-605	Equipments for Fabrication & Erection Works	as per applicable code	India
602-605	Basic Materials for the Works	IS Code	India
606-607	Paint Material	IS Code	India



Schedule No. 7: Construction of Earthworks

Item No.	Item Description	Unit	Qty	Amount		
				Local (Ind. Rs)	Foreign (US\$)	Foreign (Euro)
701	Materials on the Site (refer to GC Sub-Clause 14.5 (c) (i)): steel reinforcing bars for retaining walls, etc.	Lump sum	1	43,601,175	-	-
702	Construction of reinforced concrete retaining/compound walls	Lump sum	1	69,936,300	-	-
703	Construction of earthwork (fill, compaction, etc.)	Lump sum	1	1,892,958,001	-	-
Total for Price Schedule No. 7				2,006,495,476	-	-
<i>(To be carried forward to Grand Summary)</i>						

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
701	Steel Reinforcing Bars	IS Code	India/China
702-703	Basic Materials for the Works	IS Code	India/China



Schedule No. 8: Fabrication and Installation of Bridge Ancillaries

Item No.	Item Description	Unit	Q'ty	Amount			
				Local (Ind. Rs)	Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
801	Materials on the Site (refer to GC Sub-Clause 14.5 (c) (f)): bridge bearings (shoes)	Lump sum	1	147,188,336	-	-	-
802	Ditto: expansion joints	Lump sum	1	18,464,119	-	-	-
803	Installation of bridge bearings (shoes)	Lump sum	1	8,424,771	-	-	-
804	Installation of expansion joints	Lump sum	1	2,029,926	-	-	-
805	Crash barriers including Materials	Lump sum	1	37,196,387	-	-	-
806	Deck waterproofing including Materials	Lump sum	1	6,259,406	-	-	-
				Total for Price Schedule No. 8			
				(To be carried forward to Grand Summary)			

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
801	Bridge Bearings for Concrete Bridge	IS Codes	India/ South Korea/ Japan
802	Expansion Joints	IS Codes	India/ South Korea/ Japan
805	Equipment and Materials for Crash Barrier	as per applicable IS code	India
806	Deck Water Proofing Material	as per applicable IS code	India



Schedule No. 9: Construction of Asphalt Pavement

Item No.	Item Description	Unit	Q'ty	Amount		
				Local (Ind. Rs)	Foreign (US\$)	Foreign (Euro)
901	Asphalt pavement including Materials	Lump sum	1	57,599,766	-	-
<i>Total for Price Schedule No. 9 (To be carried forward to Grand Summary)</i>				57,599,766	-	-

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
901	Equipment and Materials for Asphalt Works	as per applicable code	India



Schedule No. 10: Fabrication and Installation of Miscellaneous Items

Item No.	Item Description	Unit	Qty	Amount			
				Local (Ind. Rs)	Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
1001	Safety fences including materials	Lump sum	1	1,132,200	-	-	-
1002	Drainage facility including Materials	Lump sum	1	18,178,819	-	-	-
1003	Kerbs including Materials	Lump sum	1	32,723,522	-	-	-
1004	Road furniture including Materials	Lump sum	1	4,544,705	-	-	-
1005	Pavement marking including Materials	Lump sum	1	4,544,705	-	-	-
1006	Road signage including Materials	Lump sum	1	9,089,410	-	-	-
1007	Gantry/overhang (cantilever)-type signage support structures including Materials	Lump sum	1	500,000	-	-	-
1008	Median openings including Materials for movable barrier	Lump sum	1	13,634,114	-	-	-
1009	Traffic signals including Materials and testing	Lump sum	1	4,544,705	-	-	-
1011	Restoration of removed items	Lump sum	1	4,544,705	-	-	-
1012	Other miscellaneous items including Materials and testing as required	Lump sum	1	9,089,410	-	-	-
				102,526,295			
				<i>Total for Price Schedule No. 10 (To be carried forward to Grand Summary)</i>			

Country of Origin Declaration (ITB 14.1)

Item No	Material/Description	Code	Country of Origin
1001	Safety Fences	IS Codes	India
1002-1013	Material and Installation for above works	IS Codes	India





Schedule No. 11: Provisional Sums

Item No.	Item Description	Amount	
		Local (Ind. Rs)	Foreign (US\$)
1101	Factory/ Shop Inspection Trips	3,000,000	-
1102	Bridge Illumination	20,000,000	-
1103	Tree-cutting/ Transplanting/ Clearing/ Compensatory plantation	10,000,000	-
1104	Additional Environmental Mitigation Measures	20,000,000	10,000
1105	Landscaping/ Beautification	65,000,000	-
1106	Additional Safety and Security Measures	50,000,000	-
1107	Utility Shifting/Relocation	150,000,000	-
1108	Additional Tests during construction and/OR after completion	5,000,000	10,000
1109	Seminars/Workshops	2,000,000	10,000
1110	Dispute Board Cost and Expense*	5,000,000	10,000
1111	Additional Progress Recording	5,000,000	-
1112	Dayworks	10,000,000	-
1113	Public relations, awareness programs, exhibition rooms, etc.	25,000,000	5,000
1114	Pedestrian Facilities	200,000,000	-
1115	Firefighting arrangements	100,000,000	-
1116	Underpinning & / other protection measures	5,000,000	-
Total for Price Schedule No. 11		675,000,000	45,000
<i>(To be carried forward to Grand Summary)</i>			

Provisional Sums included and so designated in the Price Schedules shall be expended in whole or in part at the direction of the Engineer, except for the provisional sum for the cost of the DB, which requires no prior instruction of the Engineer, in accordance with Sub-Clauses 13.5 and 13.6 of the General Conditions.

[*One-half of the Employer's cost estimate of the Disputes Board is included in the Provisional Sums. Contractor's overheads and profits shall not be included in this amount.]



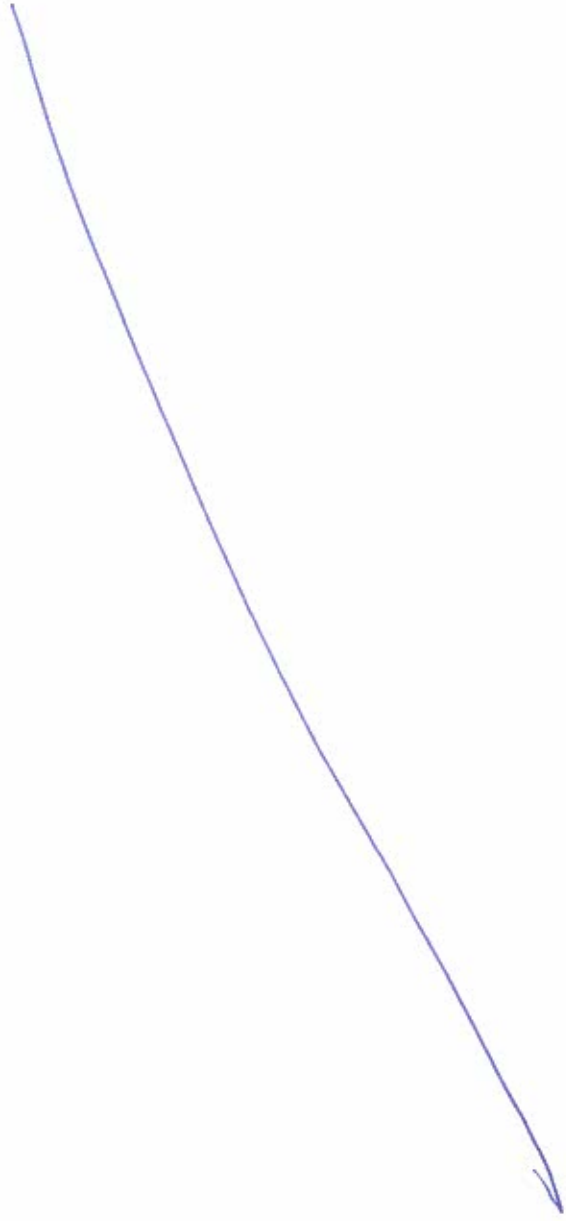
Grand Summary

Contract Name: Package-3 of the Project (Construction of a 3.613 km 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

IFB No: **MMRDA/ENG1/000754**

Grand Summary	Amount			Foreign (Euro)
	Local (Ind. Rs)	Foreign (US\$)	Foreign (J. Yen)	
Schedule No. 1: General Items	217,344,860	-	-	-
Schedule No. 2: Contractor Documents	160,513,750	-	-	-
Schedule No. 3: Construction of foundation for piers and abutments	2,423,007,739	-	-	-
Schedule No. 4: Construction of piers, pier caps and abutments, abutment caps and including pile caps	1,212,099,984	-	-	-
Schedule No. 5: Construction of Concrete superstructure	1,804,104,554	7,899,013	-	-
Schedule No. 6: Fabrication and erection of Steel Superstructure	747,517,380	-	-	-
Schedule No. 7: Construction of Earthworks	2,006,495,476	-	-	-
Schedule No. 8: Fabrication and installation of Bridge Ancillaries	219,562,945	-	-	-
Schedule No. 9: Construction of asphalt pavement	57,599,766	-	-	-
Schedule No. 10: Fabrication and installation of Miscellaneous items	102,526,295	-	-	-
Subtotal of Schedules No. 1 - No. 10: (A)	8,950,772,749	7,899,013	-	-
Schedule No. 11: Provisional Sums: (B)	675,000,000	45,000	-	-
Bid Price: (C=A + B) (Carried forward to Form of Price Bid)	9,625,772,749	7,944,013	-	-





Package 3
 "Mumbai Trans Harbour Link Project (Package-3) Construction of a 3.613 km 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"

Grand Summary	Limits expected by Employer (% of Accepted Contract Amount)		Larsen & Tourbo LTD			
	Minimum	Maximum	Amount			
			Local (Ind. Rs)	Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
Schedule No. 1: General items	1.7	2.3	217344860	0	0	0
Schedule No. 2: Contractor's Documents	1.1	1.7	160513750	0	0	0
Schedule No. 3: construction of foundation for piers and abutments	21.7	25.7	2423007739	0	0	0
Schedule No. 4: construction of piers, pier caps and abutments, abutment caps and including pile caps.	10.5	13.5	1212099984	0	0	0
Schedule No. 5: Construction of concrete superstructure	24.4	28.4	1804104554	7899013	0	0
Schedule No. 6: Fabrication and erection of steel superstructure	6	8	747517380	0	0	0
Schedule No. 7: Construction of earthworks	21.2	25.2	2006495476	0	0	0
Schedule No. 8: Fabrication and installation of bridge ancillaries	1.8	2.4	219562945	0	0	0
Schedule No. 9: Construction of asphalt pavement	0.6	1.2	57599766	0	0	0
Schedule No. 10: Fabrication and installation of miscellaneous items	1	1.6	102526295	0	0	0
Subtotal of Schedule 1 to 10 (A)			8950772749	7899013	0	0
Schedule No.11: Provisionsal Sums (B)			67,50,00,000	45,000	0	0
Bid Price (C= A+B) (Carried forward to Form of Price Bid)			9,62,57,72,749	79,44,013	0	0
Currency type:			Local (Ind. Rs)	Foreign (US\$)	Foreign (J. Yen)	Foreign (Euro)
Exchange Rate:			1	64.4672	0.578	71.9583
Submission Date:	18-07-2017					
Base Date (28 days prior to submission date):	20-06-2017					
Source of Exchange Rate:	RBI					
Bid Price Converted into Single Currency)INR			₹ 9,62,57,72,749.00	₹ 51,21,28,274.87	₹ 0.00	₹ 0.00
Final Bid Price in INR						₹ 10,13,79,01,023.87

Online Quoted Rates
 Difference
 Remark:

₹ 10,13,79,01,023.87
₹ 0.00

