

Environmental and Social Due Diligence Report

Project Number: 47083-004
September 2021

INDIA: Accelerating Infrastructure Investment Facility in India – Tranche 3

Ashoka Ankleshwar Manubar Expressway Private Limited (Part 19 of 24)

Prepared by India Infrastructure Finance Company Limited for the India Infrastructure Finance Company Limited and the Asian Development Bank.

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HSE BUDGET FOR ROAD CONSTRUCTION PROJECT for VME

Sr. No.	HSE Budget	Account Category	Data for Year 2019-2020	Detailed Working
		CAPITAL (C)/ RECURRING (R)	Budget 2019-2020	
1	Safety Implementation			
a	Personal Protective Equipment for considering 500 Employee (Staff + labour) if employee strength increase budget will be increases (PPE- Shoes, Helmet, Reflective jacket, Dust Mask @1250	R	625,000.00	
b	Hard Barricading (Rs.3500/ per New Jersey Barrier) calculated for 1500 Barriers. Transportation and Manpower Cost is not calculated	C	3,000,000.00	
c	Signage's & Boards, with Paints (MS-Metal for Diversions (4 feet * 5 feet) at @ of 5000 for One Diversion (Calculated for 100 Boards)	C	500,000.00	
	Boards for School, Villages and Hospitals- Warning Signage's, Speed Limit Signage's bilingual (local + Hindi) (50 Numbers of Boards) (Size -3feet X 3 Feet) @ Rs.4000	C	200,000.00	
e	Barricading for Road (Temporary & Permanent) Bamboo, Ribbon and Cement Blocks)	R	400,000.00	
	Tin Sheet Barricading in Urban Area Work Zone @ Rs.12,000 Per 8 feet X 7 Feet (Total 125 Boards)	R	1,500,000.00	
g	Safety promotional activities such as celebration of Road Safety week, National Safety Day, Environment Day	C	100,000.00	
i	Expenditure in connection with usage of emergency External vehicle or ambulance other than ABL /EPC	R	50,000.00	
j	Competent person certificates for Stability Certificates, Lifting Gears, once in year (HMP, RMC, WMM Crusher @ Rs.25,000) for one Set of Equipment) & Crane, Hydra and lifting equipments @ Rs.7500	R	150,000.00	Stability certificates of HMP. RMC, WMM & Crusher, Lifting tools, Rope and hoist. This Cost may increase if P&M Increases
k	Expenditure in connection of clearances and permissions with various safety statutory / regulatory authorities.	R	100,000.00	Govt. Licenses & compliance
l	Fire-Fighting Facility & maintenance (25 Number of Fire extinguishers) @ 2700	R	67,500.00	Office area , Diesel stock yard , EDP Room, Store Etc.
m	Structures (Bridges, Culverts & Under passes) : Safety Net, Full Body Harness & Energy absorber with fall arrester for @1500 for 50 labours,	C	150,000.00	
o	One Utility Vehicle with Driver for 30 km for Jr. Safety Officer (calculated for 90 km Road)	C	612,000.00	
	Safety :- Sub Total (1)		7,454,500.00	
2	Environmental Activities A/C Code :xx ...)			
a	Clearances and permissions for One set Plant & Machinery (HMP, Crusher, RMC & WMM)	R	200,000.00	Licenses & there compliance, Consent to Establishment & operate
c	Water tankers for Suppression for Dust (2 Tanker / day) @ Rs.1000/day	R	730,000.00	
d	Treatment facility for waster water treatment	R	200,000.00	
e	Environment Audits / Environment Statement	R	75,000.00	For EMS audits & expenditure on papers, printing , binding etc. for the environmental statement
f	Water cess to State Pollution Control Board, as per Govt Requirement	R	40,000.00	

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g	Testing of effluents / Noise, Air monitoring, Stack Monitoring by Third party @ Rs.17,000 per sample (Calculated for Five Samples for one quarter)	R	408,000.00	
h	Maintenance & Running of Bag House/ Dust collector	R	150,000.00	
i	Wind breaking wall for Crusher, HMP AND RMC Unit	R	100,000.00	
	Sub Total (2)		1,903,000.00	
	Environment Protection (A/C Code DEF)			
(a)	Maintenance of existing plantation (2 Labour @ Rs.7000)	R	168,000.00	
(b)	Expenditure of New plantation @ Rs.100 per Sapling (Calculated for 700 Saplings /KM) for 100 km Road	C	5,600,000.00	
(c)	Maintaining Plantation, Gardener (25 workers), Water Tanker (2 Tanker / day) @ Rs.1000/day	R	905,000.00	
(d)	Transplantation @ Rs 20,000 / Tree (Calculated for 50 Trees)	C	1,000,000.00	
(e)	Fertilizer, Manure for median and avenue plantation	R	30,000.00	
(f)	Rain Water harvesting per well (feasibility study and actual construction cost & implementation)	C	500,000.00	
	Sub Total (3)		8,203,000.00	
	Environmental : Sub Total (2+3)		10,106,000.00	
3	Health Hygiene (A/C Code : 00 00)			
a	Water Purifier Two / Camp (i.e. office and labour camp)	C	35,000.00	
	Drinking Water Facility & Testing of Drinking Water every Month @ Rs.1200 /per Bore well or water Source	R	14,400.00	
b	Retainer Doctor for weekly camp visit and consulting @ 10000 /month	R	120,000.00	
c	Medical Check up (pre & post);250 employee (staff & labour) @ Rs.850	R	212,500.00	
d	Mosquito Repellent, Snake Repellent or Pest Control / DDT - Labour camp & office area, @ 5000 /per visit /Camp (Calculated for 4 Times)	R	20,000.00	Calculated for one camp
e	Labour Camp water usage (1Tanker /day)	R	219,000.00	
	Health Hygiene -Sub Total -04		585,900.00	
4	HR (Award & Training)			
	1. Rewards			
a	1.3 Individual Reward (Two Award / month - 1st. award-1000, 2nd -500) + General Expenses	R	24,000.00	
	2. Training			
b	Safety Training	R	500,000.00	External & Internal Trainer or agencies
	Environmental Training	R	100,000.00	
	Road Safety Month-2017	R	2,50,000	
c	Environmental Awareness Program	R	50,000.00	
	HR - Sub Total -05		674,000.00	
	Grand Total (1+ 2+ 3+4+5)		18,820,400.00	

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		CAPITAL (C)/ RECURRING (R)	Budget 2019-2020	
	Under Construction Road Project			
	HSE Budget		Data for Year 2019-2020	
			Budget Provided 2019-2020	
	Health Hygiene		585,900.00	
	Safety		7,454,500.00	
	Environment		10,106,000.00	
	HR (Award & Training)		674,000.00	
	Budget Cost		18,820,400.00	
	HSE-Manpower			
	Jr.HSE Officers (Three) @ 22,500/ Month		810,000.00	
	Safety Supervisor (Four) @ 10,000/ Month		480,000.00	
	Manpower Budget		1,290,000.00	
	Contingency 5 % of Budget Cost		941,020.00	
	Total HSE Budget		21,051,420.00	