

Halcrow Consulting India Pvt. Ltd. a CH2M HILL (India) Pvt. Ltd. Plot No. 184, 2nd Floor, Platinum Tower, Udyog Vihar Phase I, Gurgaon, Haryana, 122016, India

TEL.: +91-124-3317 000, FAX:+91-124 337 2999 www.jacobs.com

Dated 22 April 2022

To, Punjab National Bank Zonal SASTRA 6 - 3 - 865, Myhome Jupally Ameerpet, Green Lands Hyderabad - 500016

Our Ref: THSLSH/19/16767

**Kind Attn: Deputy General Manager** 

Sub: Surat Hazira NH-6 Tollways Private Ltd (formerly known as Soma-Isolux Surat Hazira Tollways Private Ltd.) - Lenders' Engineer (LIE) Quarterly Progress Report Jan to Mar 2022.

Dear Sir,

We are pleased to enclose Lenders' Engineer Quarterly Progress Report for the quarter January to March 2022 of the subject project for your perusal and record please.

Thanking you and assuring our best services

Yours sincerely,

J K Prasad

**Project Manager** 

Jkumar.Prasad@jacobs.com

+91 9810689967

Encl: As above

CC 1) Mr Vivek Sood Chief Finance Officer Vatika Business Park, Block-2, 2<sup>nd</sup> Floor, Sector-49, Gurgaon-122101

2) Mr Ajay Kumar Soni Deputy General Manager Suart-Hazira NH-6 Tollways Private Limited C-201 to 204 & 206 to 208, 2<sup>nd</sup> Floor, Aagam Shopping World Vesu, Surat, Gujarat- 395007

# **JACOBS**

# Halcrow

Lender Engineer Services for
Four Laning of Gujarat Maharashtra
Border - Surat - Hazira Section of NH6 in Gujarat.



# Quarterly Progress Report

# Lender's Engineer Services for (Phase III) for Gujarat Maharashtra Border – Surat – Hazira Section of NH-6 in Gujarat

## **Oriental Bank of Commerce**

January to March 2022



Plot No.184, 2<sup>nd</sup> Floor, Platinum Tower, Udyog Vihar Phase-I, Gurgaon, Haryana 122016[India] Tel: +91 124 3317000 Fax: +91 124 3372999

www.Jacobs.com

# Disclaimer

This report has been prepared, based on the inputs provided by the Concessionaire and EPC Contractors. Every effort is made to submit realistic details as available, statistics and information obtained/furnished at site by SPV during the Monthly visit.

"In preparing this report, CH2M Halcrow relied, in whole or in part, on data and information provided by the Concessionaire and EPC Contractors, which information has not been independently verified by CH2M Halcrow and which CH2M Halcrow has assumed to be accurate, complete, reliable, and current. Therefore, while CH2M Halcrow has utilized its best efforts in preparing this report, CH2M Halcrow does not warrant or guarantee the conclusions set forth in this report which are dependent or based upon data, information, or statements supplied by third parties or the client.

This report is intended for the client's sole and exclusive use and is not for the benefit of any third party and may not be distributed to, disclosed in any form to, used by, or relied upon by, any third party without prior written consent of CH2M Halcrow, which consent may be withheld in its sole discretion.

Use of this report or any information contained herein, if by any party other than the client, shall be at the sole risk of such party and shall constitute a release and agreement by such party to defend and indemnify CH2M Halcrow and its affiliates, officers, employees and subcontractors from and against any liability for direct, incidental, consequential or special loss or damage or other liability of any nature arising from its use of the report or reliance upon any of its content. To the maximum extent permitted by law, such release from and indemnification against liability shall apply in contract, tort (including negligence), strict liability, or any other theory of liability."

# **Amendment Record**

This report has been issued and amended as follows:

Version	Date	Description	Created by	Reviewed / Approved by
R0	15 April 2022	Quarterly Progress Report Ending March 2022	Taslim Arif	J K Prasad
R1	16 April 2022	Quarterly Progress Report Ending March 2022	Taslim Arif	J K Prasad
Final	19 April 2022	Quarterly Progress Report Ending March 2022	Taslim Arif	J K Prasad

# **Contents**

Chapte	r 1: Executive Summary	1
1.1	Project Description	1
1.2	Salient Dates as per CA	1
1.3	Status of the Project	2
1.4	Toll Plaza and Toll Collection	2
	1.4.1 Details of Toll Plazas	2
	1.4.2 Summary of Toll Collection	
1.5	Land acquisition	
1.6	Expenditure	
1.7	Critical Issues	
1.8	Critical Maintenances for Keeping Highway in traffic worthy condition	
1.9	Road Condition after Critical Maintenance	
1.10	Annuity Payment as O&M Support	
1.11	Site Visit Observations	
-	r 2: Project Description	
2.1	Introduction	
2.2	Description of Project	
	2.2.1 Project Details	
	2.2.2 Administrative Details	
	2.2.3 Facilities	
	2.2.4 Health and Safety	2
Chante	r 3: Scope of Service	3
•	·	
-	r 4: Balance works and Variations	
4.1	Project Milestones	
	4.1.1 Status PCODs/COD.	
4.2	Balance/Descoping of works	
	4.2.1 Balance works in progress	
	4.2.2 Descoping work	
4.3	Work programme For Major Maintenance works	
4.4	Land acquisition	
4.5	Variations	5
Chapte	r 5: Toll Fee Collection	8
5.1	Toll Plaza and Toll Fee Collection System	
	5.1.1 Toll Plaza	
	5.1.2 New Fee Collection System /FASTags	
	5.1.3 Toll Fee Collection System	
5.2	Toll Management and Cash Handling	
5.3	Traffic Details	
2.0	5.3.1 Suspension and resuming of Toll Collection	
5.4	Toll Collection	
J. F	5.4.1 Toll Collection – Comparison with Financial Model	
5.5	Toll Leakage	
5.6	Traffic Operation and Safety	
-	r 6: Toll Plaza Installation and Functions	
6.1	Integrated Modern Toll Collection System	
	6.1.1 Toll Operation Overview	
6.2	Organization Structure	
	6.2.1 Head Office	10

		6.2.3 R	oll Operation Systemeporting	20
	<i>c</i> 2		eller Description	
	6.3 6.4		ions on Toll Plazae Details of Toll Collection	
	7.1		mance of O&M Activities (Maintenance and Others)	
	7.1		Maintenance Manual	
			Naintenance Equipment/arrangements	
			nnual Maintenance Programme (2021-22)	
			eriodic Maintenance and Tests during O&M period	
	7.2		Critical Maintenance works for keeping Highway in traffic worthy condition	
			outine Maintenance	
	7.3	Maintena	nce Budget	25
		7.3.1 B	udget allocation and expenditures	25
	7.4	Annuity P	ayment as O&M Support	25
	7.5	Traffic an	d Safety	26
			lack spot	
	7.6	•	ts	
	7.7	Accidents	/Incident	28
	Chapte	r 8: Misce	llaneous	31
	8.1		Furniture	
			orticulture and Landscaping	
	8.2		Project Completion	
			roject Completion Certificate	
			pprovals/Toll collection	
	8.3		ntractor	
	0.4		pproval and Permits	
	8.4	Force Ma	jeure Events	31
List of	Tables			
Table :	1-1 : Pro	gress statu:	S	2
Table :	1-2: Toll	Plaza Loca	tions	2
		•	oll Collection	
Table 1	1-2 : A st	atement o	n proposed and actual expenditure on maintenance works is given below,	3
			of Project	
			Details of Project	
			ce	
			one	
			D/COD	
			works	
			coped works	
			oved in principle against COSs but approval awaited	6
		•	Average Daily Tollable Traffic at Bhatia and Mandal toll plazas in between	10
•	_		rch 2022 & quarter ending Jan to March 21.	
		-	toll collection Jan-Mar 22 as compared to Jan-Mar 21	
		•	toll collection in quarter Oct-Dec 2021 & quarter Jan-Mar22 terly Toll collection, Projected toll and shortfalls upto quarter ending March22	
			Collections details	
			support Annuity	
			omplaints during January-March 22	
			dents	
		-		

Table 7-5: Classification of accidents	29
Table 7-6: Weather condition	30
List of Figures	
Figure 2-1 : Location of Project Road	2
Figure 7-1: Cause of Road Accidents	28
Figure 7-2: Classification of accidents	29
Figure 7-3: Weather condition	30

## **Appendixes**

A Routine Maintenance

B List of Patch works and overlaying

C Pictures

D Organization chart & Manpower details

Annexure-I PCOD-III letter

Annexure-II Annual Maintenance programme

# **Acronyms and Abbreviations**

BOQ	Bill of Quantities		
ВС	Bituminous Concrete		
CA	Concession Agreement		
CAPEX	Capital Expenditure		
COD	Commercial Operation Date		
CRPF	Central Reserve Police Force		
C & G	Clearing and Grubbing		
DBFOT	Design, Build, Finance, Operate and Transfer		
DBM	Dense Bitumen Macadam		
DG	Diesel Generating		
PR	Detailed Project Report		
EPC	Engineering Procurement & Construction		
FCI	Food Corporation of India		
GAD	General Arrangement Drawing		
GFC	Good for Construction		
GOI	Government of India		
GSB	Granular Sub Base		
IPC	Interim Payment Certification		
IE	Independent Engineer		
HT	High Tension		
LIE	Lenders' Independent Engineer		

LHS	Left Hand Side		
LT	Low Tension		
MORT&H	Ministry of Road Transport & Highways		
MOEF	Ministry of Environment and Forest		
NOC	No Objection Certificate		
OFC	Optical Fibre Cable		
OPEX	Operation Expenditure		
O & M	Operation and Maintenance		
NOC	No Objection Certificate		
OFC	Optical Fibre Cable		
OPEX	Operation Expenditure		
O & M	Operation and Maintenance		
PD	Project Director		
PPP	Public Private Partnership		
PQC	Pavement Quality Concrete		
UP	Pedestrian Under pass		
PWD	Public Works Department		
RCC	Reinforced Cement Concrete		
RHS	Right Hand Side		
ROW	Right of Way		
ROB	Rail Over Bridge		

# **Chapter 1: Executive Summary**

The Project is "Four laning of Gujarat/Maharashtra Border – Surat – Hazira Port Section of NH-6 (Approx. 131.500 km) in the State of Gujarat under NHDP Phase-III through Public Private Partnership (PPP) on Design, Build, Finance, Operate and Transfer ("DBFOT")". The Concession period for the project is 19 years with Appointed Date being 30 March 2010 between the National Highways Authority of India, the "Authority" and Surat Hazira NH-6 Tollway Pvt Ltd (formerly known as Soma-Isolux Surat Hazira Tollway Private Limited) the "Concessionaire". The Concession Agreement for the project was signed on 11 May 2009.

The Lenders appointed Halcrow Consulting India Private Limited (subsequently became part of CH2M and thereafter of Jacobs) as Lender's Independent Engineer to render services for this project.

This report is divided into eight chapters. The Executive Summary is presented in Chapter 1, followed by project description in Chapter 2, Scope of Services in Chapter 3, Balance Work and Variation in Chapter 4. Toll Fee Collection and Traffic Details discussed in Chapter 5, followed by Toll Plaza Installation and Functions in Chapter 6, Performance of O&M Activities in Chapter 7 and miscellaneous issues in Chapter 8.

## 1.1 Project Description

The project is 4/6 lane divided carriageway with 39.68 km service roads, 6 Major Bridges, 32 Minor Bridges, 9 Flyovers, 6 ROBs, 25 Vehicular and 13 Pedestrian Underpasses, 255 Culverts, 2 Toll Plazas, 2 Truck Laybys and 42 Bus bays/bus shelters.

Salient features of the Project as per the Schedules mentioned in the Concession Agreement (CA) are presented in the Table 2-1 and Table 2-2 of Chapter- 2.

# 1.2 Salient Dates as per CA

Date of Agreement 11 May 2009

Appointed date
 30 March 2010

• Concession period 19 years

• Extension in Concession period As per CA clause 29.2.1, IE has recommended 3.80 Years increase in concession period vide IE letter no. MSV-AV/NH53/SHP/2020/679 dated 31 Dec 2020.

Schedule Project Completion date (SPCD)
 24 September 2012

Dates of Provisional COD (I,II &III) respectively
 19 August 2015, 5 October 2016 & 29 March 2018

Case for Extension of Time
 5 years and 86 days (pending with NHAI)

Final COD
 29 March 2018

# 1.3 Status of the Project

Status of project as on date is as under;

Table 1-1: Progress status

Sn o	PCOD/COD	Date of Grant	Length (Km)	IE Letter Reference	Remarks
1.	PCOD-I	19 August 2015	117.400	5406/NHAI/6003	
2.	PCOD-II	05 October 2016	11.60	FPI/165003/PVK/05A	
3.	PCOD-III	29 <sup>th</sup> March 2018	2.50	FPPM/165003/PVK/15	
4.	COD (Final) effective from 29 <sup>th</sup> March 2018	06 November 2020	131.50	Letter MSV- AV/NH53/SHP/2020/611 dated 06 November 2020 issued by the Independent Engineer on Final COD. Letter enclosed as Annexure -I	

## 1.4 Toll Plaza and Toll Collection

### 1.4.1 Details of Toll Plazas

Project road has 2 toll plazas and locations thereof are mentioned in Table 1-2 below;

Table 1-2: Toll Plaza Locations

	Location	Chainage	Influence Length	Remarks
1	Mandal	28.500 Km	69.00 Km	
2	Bhatia	89.450 Km	62.500 Km	

## 1.4.2 Summary of Toll Collection

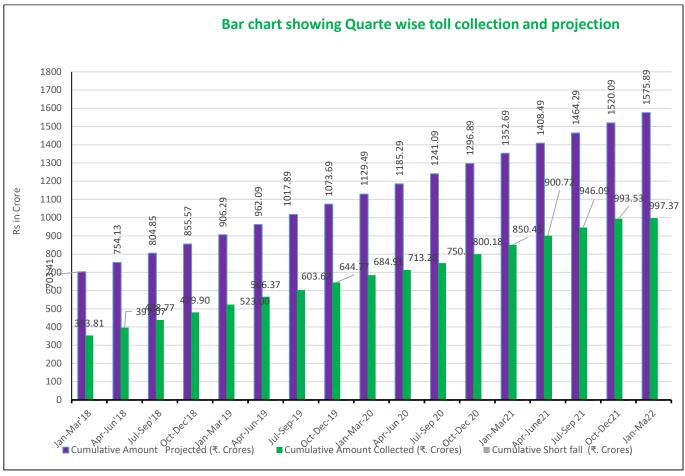
Due to COVID-19 Pandemic, the Concessionaire had received communication from PD NHAI, on 25<sup>th</sup> March 2020 for suspension of complete toll operation with immediate effect until 20 April 2020. Toll Operations were suspended from 12:00 Noon, 25<sup>th</sup> March 2020. However, emergency services i.e. ambulance/patrol vehicles etc. were operational.

NHAI on 17<sup>th</sup> April 2020 had issued a letter for resuming toll collection from 20<sup>th</sup> April 2020. Toll collection figures for each plaza as provided by the concessionaire are tabulated below. Summary of Tolls collected during the quarter July to September 2021 and accumulated till September 2021 is tabulated inTable 1-3 below.

**Table 1-3: Summary of Toll Collection** 

S.	Toll Plaza	Toll Amount Collected (INR	)	Remarks			
No		Up to Dec 2021	During Quarter Jan-Mar22	Up to Mar 2022			
1.	Mandal toll plaza	6,466,984,453	309,744,155	6,776,728,608			
2.	Bhatia toll plaza	3,421,569,547	203,092,174	3,624,661,721			
	Grand total	9,888,554,000	512,836,329	10,401,390,329			

Following are the graphical view of toll collection against the projected toll money.



# 1.5 Land acquisition

Consequent to descoping of some balance works which could not be executed due to non-availability of land. As the balance scope is excluded further acquisition of land is not required.

# 1.6 Expenditure

The Company has carried out routine maintenance works for an amount ₹53.44 crore against the planned budget of ₹46.54 crore as indicated in resolution Plan Financial Model 2018.

Table 1-4: A statement on proposed and actual expenditure on maintenance works is given below, The variation in base case business plan as per the information available is mentioned in the Table below;

SI. No.	Year	ear Budgeted in Budgeted in A Restructuring 3 Resolution Plan Financial Model (2016) Financial Model (2018)		Actual	Remarks
1.	2017-18	5.71	4.99	4.99	
2.	2018-19	73.67	5.21	9.77	
3.	2019-20	76.05	5.43	8.11	
4.	2020-21	6.29	46.28	18.95	
5	2021-22	6.48	46.54	53.44	
Tota	al =	168.20	108.45	95.26	

The project highway is operational since 2015 and its some sections are operational since 2012 and due to which the existing pavement has developed cracks, rutting, revelling and pothole etc. Although the concessionaire are doing continuous repair works to keep highway in traffic worthy condition but it is advisable to do overlaying of the entire project.

## 1.7 Critical Issues

**Toll Revenue**: Total Toll Collection during the quarter January to March 2022 is ₹51.28 crore against projection in Financial model ₹55.80 crore. There is shortfall of about 8.1%.

**Leakage**: Three major traffic revenue leakage points were identified by the SPV. Action to plug the leakages is under process by SPV/IE/NHAI. For this, Refer para 5.5 of this report.

**Accident**: During the quarter January – March 2022, 106 nos. of accident occurred on the project highway which is very high nos. Out of 106 accidents, 4 (3.77%) were fatal, 15 (14.15%) were grievous injury, 27 (25.47%) were minor injuries and 60 (56.60%) were of non-injuries.

At critical junctions, rumble strips were provided to reduce the speed of vehicles.

To reduce the number of accidents as pointed out earlier has yielded result and the Authority has proposed 4nos. of new VUPs at Kabeni, Afwa, Budhiya and Khajot junctions. These junctions are currently at-grade crossings and critical from accident point of view. On completion of the underpasses, the chances of accidents should reduce.

# 1.8 Critical Maintenances for Keeping Highway in traffic worthy condition

BI test was conducted in October 2021, on the basis of BI test it was observed that some areas are in immediate need of rectification to keep the highway in traffic worthy conditions. Subsequently, on the basis of BI test, observation of IE and visual inspection of SPV team/ Concessionaire decided to make rectification through milling out damaged surfaces, doing overlay with BC, sealing cracks by slurry seal, road marking, kerb painting and rehabilitation of some structures for which an estimated for Rs 39.72 Crore was made.

Accordingly critical repair works were executed between Jan 22 to March 22, with the help of 25 nos. of sub-contracts, to whom different activities were awarded. Now, most all the works identified in this heads have been completed within three months period from Jan 22 to Mar22.

Running IPCs were checked and certified by the LIE team to the Lenders

Following is the status of critical maintenance works awarded and executed during Jan-March 22.

S.No.	Work Order No.	Work Order Dates	Vendor Name	Activities to be carried out by Sub contractors	Contract Value (₹)	Total Executed till Mar22 (₹)	%age completed	Remarks
1	6100001202	12.01.2022	M/S JM Shah	Critical Maintenance - MCW CH-0+1 to 100	175,023,881	175,017,563	100.00%	
2	6100001203	12.01.2022	M/S JM Shah	Critical Maintenance - SR	8,106,564	8,106,564	100.00%	
3	6100001204	12.01.2022	M/S Ramera Buildcon pvt	Critical Maintenance - MCW CH-100+to131.5	122,438,929	122,438,158	100.00%	
4	6100001205	13.01.2022	M/S Sanrachana Structural	Carbon Fibre Wrapping	11,760,140	11,740,433	99.83%	
5	6100001206	13.01.2022	M/S Hitech Project	Repair of Major & Minor Bridge	2,906,189	2,529,225	87.03%	
6	6100001207	13.01.2022	M/S Aarya Ites Pvt Ltd	Restoration of CCTV Camera	182,240	182,240	100.00%	
7	6100001208	14.01.2022	M/S Sunrise Engineering	Repair of Expansion Joint	653,761	565,398	86.48%	
8	6100001209	19.01.2022	M/S SYMS CONSTRUCTION PVT	Critical Maintenance - MCW	34,540,547	32,745,532	94.80%	
9	6100001210	19.01.2022	M/S PRATIBHA ENTERPRISES	Slurry Seal	8,784,384	8,784,384	100.00%	
10	6100001219	24.01.2022	M/S HV Construction	Supply & Fixing of Road Studs	107520	107,520	100.00%	
11	6100001220	24.01.2022	M/S H V Construction	Supply & Fixing of Delineators	24,640	24,640	100.00%	

S.No.	Work Order No.	Work Order Dates	Vendor Name	Activities to be carried out by Sub contractors	Contract Value (₹)	Total Executed till Mar22 (₹)	%age completed	Remarks
12	6100001221	24.01.2022	M/S Nitya Construction	Road Marking	2,017,205	2,016,476	99.96%	
13	6100001222	25.01.2022	M/S Softstar Intelligent Transactions Sys.	Restoration of VMS (Installation)	488,520	488,520	100.00%	
14	6100001223	27.01.2022	M/S Dagar Construction	Slurry Seal	13,685,112	13,685,112	100.00%	
15	6100001225	07.02.2022	M/S Saifi Fabrication	Repair & Painting of VMS Boards	400,500	400,500	100.00%	
16	6100001226	07.02.2022	M/S HV Constriction	Kerb Casting	560,000	560,000	100.00%	
17	6100001228	11.02.2022	M/S Abhishek Engineering	Slurry Seal	4,902,912	4,902,912	100.00%	
18	6100001230	15.02.2022	M/S Atul Desai	Inspection of ROBs	75,000	75,000	100.00%	
19	6100001233	18.02.2022	M/S Aasvi enterprises	Repair of Wim control	424,800		0.00%	Awarded to contractor, Work in progress
20	6100001242	28.03.2022	M/S JM Shah	Construction of rumble strip	60,306	60,306	100.00%	
21	6000000898	13.01.2022	M/S H V Construction	Guard Rails	1,977,940	1,977,940	100.00%	
22	6000000899	13.01.2022	M/S Delta Signs Corporations	Signboards	158,770	158,770	100.00%	
23	600000900	13.01.2022	M/S AARYA ITES PRIVATE LIMITED	Restoration of CCTV Camera	1,642,744	1,642,744	100.00%	
24	6000000903	25.01.2022	M/S Softstar Intelligent Transactions Sys.	Restoration of VMS (Supply)	5,628,600	5,612,400	99.71%	
25	6000000909	18.02.2022	M/S Aasvi enterprises	Supply of Wim material (Load cell)	108,560		0.00%	Purchase order given to Vendor, supply in progress.
	Total=				396,659,764	393,822,337		

## 1.9 Road Condition after Critical Maintenance

Since project is operational since 2015 and some of its part were constructed in 2012 and it is in operation since then, it was requiring immediate repair and maintenance Now, after critical maintenance, the Pavement condition has improved fairly and also commented by the IE that the road condition is satisfactory. But some portion need to be overlaid to keep pavement condition fair for longer duration .

## 1.10 Annuity Payment as O&M Support

As per Clause 25.1.1 of the Concession Agreement, Authority is to provide cash support for ₹. 556.00 Crore.

As per this, "the Grant shall be disbursed to the Concessionaire by way of Equity Support in accordance with the provisions of Clause 25.2 and the balance remaining, if any, shall be disbursed as O&M Support in accordance with the provisions of Clause 25.3 of CA. Accordingly, during construction phase, Rs 301.82 Crore was released by the Authority against equity support. Rs 231.93 Crore was released against O&M support from 01st to 16th Installments.

## 1.11 Site Visit Observations

During site visit on 27 to 29 March 2022, the following activities were under progress and noted down as mentioned below;

- Milling and Patch works at different location for Critical Repair & Maintenance Work were completed
- Slurry sealing work at identified places were completed
- Rehabilitation work (with carbon wrapping) of Ichapur flyover was completed
- Road cleaning with mechanize bloomers was in progress
- ROW cleaning, drain cleaning, median plant trimming, were also in progress at site.
- Kerb painting completed
- Road marking was also completed at site.
- Earthen shoulder repair was also completed.
- VMS boards were functional at site.

# **Chapter 2: Project Description**

## 2.1 Introduction

National Highways Authority of India (NHAI) has been entrusted by the Ministry of Road Transport & Highways the task of capacity augmentation of the existing two-lane highway to Four lane from Gujarat/Maharashtra Border – Surat – Hazira Port Section of NH-6 (Approx. 131.500 Km) in the State of Gujarat under NHDP Phase III through Public – Private/ Public Sector Partnership (PPP) on Design, Build, Finance, Operate and Transfer ("DBFOT") basis. Concession Agreement is dated 11 May 2009 between the NHAI as the "Authority" and Surat Hazira Toll way Pvt Ltd (formerly known as Soma-Isolux Surat Hazira Toll way Private Limited) as the "Concessionaire" for the Project of Four/Six laning of existing road from Km 00.000 to Km 131.500 (131.500 Km) on the Surat Hazira Section of NH-6 in Gujarat State on DBFOT basis.

Oriental Bank of Commerce (now Punjab National Bank) Hyderabad is the Lead Banker. M/s Halcrow Consulting India Pvt. Ltd. is Lenders' Independent Engineer.

M/s Isolux Corsan Engineering India Private Ltd and M/s Soma Enterprise Ltd were initially engaged as EPC Contractors for package-1 (Km 55.57) and package-2 (Km 75.930) respectively. SPV composition has since been changed.

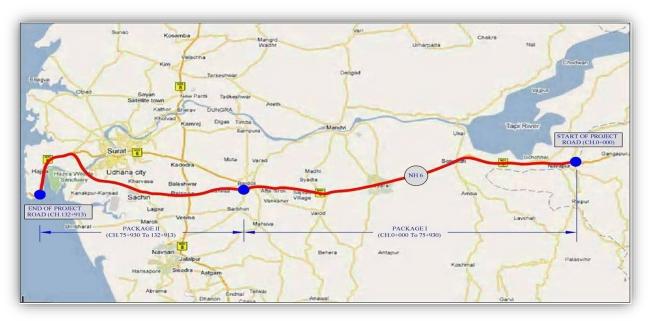
## 2.2 Description of Project

The main objective of the project includes developing the existing two-lane carriageway to four lane dual carriageway configuration including strengthening of existing two-lane highway from Gujarat/Maharashtra Border –Surat – Hazira Port Section of NH-6 (Approx. 132.913 km and subsequently revised to 131.500 km) Km 0+000 (Maharashtra/Gujarat border Existing Km 103+000) to km 131+913.

The alignment comprises of part lengths of NH-6, SH-187 and SH-188 and some new alignments/bypasses.

The location of project highway is as shown in Figure 2-1.

Figure 2-1 : Location of Project Road



# 2.2.1 Project Details

Salient features of the project are given in Table 2-1

The details of proposed structures for package 1 and 2 are shown in the following Table.

Table 2-1 : Salient feature of Project

Particulars	Package-1 – 75.930 km (Design km 0.000 to 75.930)	Package-2 – 56.983 km (Design km 75.930 to 131.500)	Total					
Length	75+930 km	55+570 Km	131.500					
Carriageway	9.0 m paved width on each side of the carriageway (including 1.5 m paved shoulder) with 1.2 m to 4.5 m wide median in urban/rural areas as per site conditions and 2.0 m wide earthen shoulder.							
Service Roads on both sides	29.07 Km	50.30 km	79.373 km					
Major Bridges	2 Nos New Construction	3 Nos. Rehabilitation, 1 No. New Construction	6 Nos					
Minor Bridges	20 Nos New construction	11 Nos. New Construction 1 No. Widening	32 Nos					
ROB	3 Nos. New construction	3 Nos. New construction	6 Nos.					
Flyovers	5 Nos. New construction	4 Nos. New construction	9 Nos.					
VUP	18 Nos. New construction	7 Nos. New construction	25 Nos.					
Pedestrian/Cattle underpass	11 Nos. New construction	2 Nos. New construction	13 Nos.					
Culverts	142 Nos.	113 Nos.	225 Nos.					
Truck lay-byes	1 No. on both sides.	1 No. on both sides	2 Nos.					
Bus bays & Bus shelters	26 Nos. on both sides	16 Nos. on both sides	42 Nos.					
Toll Plaza	Km 28+500	Km 89+850	2 Nos.					

## 2.2.2 Administrative Details

Administrative Details of the Project are given in Table 2-2

Table 2-2: Administrative Details of Project

Name of Work	Four/Six laning of Gujarat/Maharashtra Border – Surat – Hazira Port Section of NH-6 (approx. 132.913 km) in the State of Gujarat under NHDP Phase III through Public-Private/Public Sector Partnership (PPP) on Design, Build, Finance, Operate and Transfer ("DBFOT") basis
Concessionaire	Surat Hazira Tollway Pvt Ltd (formerly known as Soma- Isolux Surat Hazira Tollway Private Limited)
Appointed date	30 March 2010
Independent Consultant	Appointed (M/S MSV International Inc in association with Avanza engineering Pvt Ltd.)
Total EPC Cost	INR 2,017 crores
Total Project Cost (Original)	INR 2,418.64 crores
Total Project Cost (Revised)	INR 3,237.87 crores
Date of Concession Agreement	11 May 2009
Period of Completion as per Concession Agreement	30 months (24 September 2012)
Actual completion	PCOD for 117.400 Km & 129 Km was awarded on 19 August 2015 & 5 October 2016 respectively.
Concession Period	19 years from appointed date (till 30 Mar 2029).  IE has recommended 3.80 years of extension in concession period, vide letter no. MSV-AV/NH53/SHP/2020/679 dated 31 Dec 20. Now, the revised concession period is for 22.80 years.

## 2.2.3 Facilities

The facilities that have been provided for the project are as follows:

- Road side furniture e.g. Road Signs, Road Markings, Crash Barriers, Guard Rails, MS Railing/Separators,
   Delineators/Cats Eye, Hectometre/ Kilometre Stones, Boundary Stones.
- Highway Lighting at 71 locations
- Pedestrian Facilities e.g. Pedestrian Guard Rails, Pedestrian Walkway, Ramps/Steps, Pedestrian Crossings (at service roads).
- Landscaping and arboriculture including Median Plantation
- Truck Parking/Lay byes at 4 nos. (LHS 2nos., RHS 2nos.)
- Bus Bays 85 nos. each side and bus shelters
- Development of site including wayside amenities.
- Traffic aid posts (in porta cabins)
- Vehicle Rescue posts (in porta cabins)

- Telecom System
- Highway Traffic Management System
- Highway Patrol Vehicles
- Ambulances
- Cranes

## 2.2.4 Health and Safety

The Concessionaire will conduct the activities in a manner such as:

- Ensure healthy and safe working environment for all workers involved
- Encourage raising of safety and environmental standards through use of proper tools, plants and equipment
- Accord equal importance to progress and safety aspects

Objectives of safety program are as follows:

- To provide safe working environment at all times
- To promote safety awareness
- To observe work with high Safety standards
- To ensure Health and Safety of all workers/staff
- To protect Public and Users from injury and damage to property
- To ensure minimum disruption to work process
- To provide Training on Safety at all levels

The Concessionaire shall also ensure that all site staff must wear retro-reflective safety vests/jackets and safety helmets at all times while working at site and also ensure proper planning of the movement of construction vehicles in working areas. The concessionaire shall target for Zero accident by avoiding unsafe acts or conditions and advised accordingly to improve further at site.

# Chapter 3: Scope of Service

The Scope of services for the project are mentioned in the Table 3-1 below,

Table 3-1: Scope of Service

S. No.	Description	Remarks
1.	The LIE shall advise Lender on the adequacy of O&M with respect to the stipulations in the Project contracts through quarterly reports during the entire term of the debt to the Project;	Chapter 7
2.	The LIE shall review the annual maintenance programs;	Chapter 7
3.	The LIE shall monitor and report on budgets, revenues and O&M costs;	Chapter 1 & 6
4.	The LIE shall advise the Lender on the warranty claims required to be raised by the Company, if required by the Lender;	
5.	The LIE shall monitor adherence to environmental regulations;	Chapter 0
6.	The LIE shall review the safety measures provided for the traffic;	Chapter 7.3
7.	The LIE shall review the traffic management of the Project, if required by the Lender;	
8.	The LIE shall review the toll management of the Project and ascertain that the toll management carried out by the Company is in accordance with the Concession Agreement, if required by the Lender;	Chapter 6
9.	The LIE shall review any leakage of tolable traffic on the Project road	Chapter 5
10.	The LIE shall verify on a semi-annual basis, the tollable traffic passing through the Project by a 3 days continuous classified traffic volume count; if required by the Lender	
11.	The LIE shall bring to the notice of the Lender of the occurrence any event which may lead to an Force Majeure event as laid down in the concession agreement;	Chapter 8.4
12.	The LIE shall analyze the alternative routes with respect to volume of traffic, if required by the Lender;	NA
13.	The LIE shall review the procedure of depositing the toll proceeds into the designated account with regard to the procedure set out in the Escrow Agreement to be entered into between inter-alia the Lenders' and the Company & analyze deviations, if any, if required by the Lender.	Chapter 5

# Chapter 4: Balance works and Variations

# 4.1 Project Milestones

The schedule for achieving the milestones completion of the project is already included in the concession agreement. A comparison of schedule milestone completion vis-à-vis actual completion is mentioned in the Table below;

Table 4-1: Project Milestone

Project	Milestone	Scheduled		Achieved dates
Milestone		By Nos. of Days	By Date	
I	10% of the Project Cost (Commenced construction of Project Highway)	270 <sup>th</sup> Day of Appointed Date	24 December 2010	24 December 2010
II	35% of the Project Cost (Commenced construction of all Bridges)	455 <sup>th</sup> Day of Appointed Date	27 <sup>th</sup> Jun 2011	27 June 2011
III	70% of the Project Cost (Commenced construction of all Project Facilities)	650 <sup>th</sup> Day of Appointed Date	8 <sup>th</sup> Jan 2012	Achieved. IE confirmed vide letter dated 20 January 2015
IV	Scheduled Four Laning Date (Completion of Four-Laning in accordance with Concession Agreement)	910 <sup>th</sup> Day of Appointed Date	24 September 2012	Independent Engineer vide letter MSV- AV/NH53/SHP/2020/611 dated 06 November 2020 has issued Final COD wef 29 March 2018

## 4.1.1 Status PCODs/COD.

Status of PCOD/COD is as under

Table 1-2: Status of PCOD/COD

Sn o	PCOD/COD	Date of Grant	Length (Km)	IE Letter Reference	Remarks
1.	PCOD-I	19 August 2015	117.400	5406/NHAI/6003	
2.	PCOD-II	05 October 2016	11.60	FPI/165003/PVK/05A	
3.	PCOD-III	29 <sup>th</sup> March 2018	2.50	FPPM/165003/PVK/15	
4.	COD (Final) effective from 29 <sup>th</sup> March 2018	06 November 2020	131.50	Letter MSV- AV/NH53/SHP/2020/611 dated 06 November 2020 issued by the Independent Engineer on Final COD. Letter enclosed as Annexure -I	

## 4.2 Balance/Descoping of works

## 4.2.1 Balance works in progress

Following were the balance works in the project .

Table 4-3: List of Balance works

Sno.	Description	From	То	Side	Length (m)	Remarks
	Service Road	119+270	119+800	LHS	530	Embankment completed
		119+800	120+800	LHS	1000	BC completed
		120+800	121+560	LHS	760	Balance
		119+740	121+000	RHS	1260.00	LA issue

## 4.2.2 Descoping work

As stated, above, Authority has recommended a proposal for descoping of balance works, the details of which are as under;

Table 4-4: Details of De-Scoped works

Sno.	Description	From	То	Side	Length (m)	Remarks
1	Service Road	77+930	78+000	RHS	70.00	
2	-do-	86+680	86+947	LHS	267.00	
3	-do-	86+680	86+947	BHS	534.00	
4	-do-	87+965	88+040	LHS	75.00	
5	-do-	88+040	88+300	LHS	260.00	
6	-do-	116+450	116+600	LHS	150.00	
7	-do-	116+750	117+02	LHS	270.00	
8	-do-	121+540	121+620	RHS	80.00	
9	-do-	95+657	96+367	RHS	710.0	Sachin SR ROB
10.	Admin building at Bhatid	ı (89+450) T	oll Plaza.			
11	Medical aid post					
12	Traffic aid post					
13	Loading unloading shade					
14	Rest areas					
15	Sachin ROB at Service ro	ad				

# 4.3 Work programme For Major Maintenance works

SPV is requested to prepare and share a detailed work programme for major maintenance works.

# 4.4 Land acquisition

Land acquisition will not be required as descoping is approved by the Authority.

## 4.5 Variations

The following variations in Scope of works have been reported/intimated by the concessionaire.

Table 4-5: Variation Approved in principle against COSs but approval awaited

S.No.	Description	COS Amount	Remarks
		(₹ Crore)	
Α.	Works for which COS were issued	0.70	
1	Construction of VUP at (Khushalpura Village) Ch.40.020	0.76	
2	Electronic Toll Collection (ETC) lane at Toll	1.89	
	Plazas		
3	VUPs (5 Nos.) at Design Km 18.638 and	2.38	
4	Km 193.35	44.02	
4	Minor Bridges (13 Nos.): Km 0+135, 3+118, 11.01 5+450,9+139, 10+283,	11.02	Mank somenlated
	10+862, 11+616, 15+901, 64+823,		Work completed
	70+856, 74+562, 96+779 & 101+987		
5	Box Culvert (13 Nos.)	7.07	_
6	Pipe Culverts (85 Nos.)	5.91	
7	ROB at Km 3+886 & Km 40+957	40.38	
8	Construction of Toilet Blocks	0.36	
9	Construction of additional Toilet Blocks	0.36	
	Sub Total (A)=	70.13	
В	Proposals submitted against COS		
1	Flyover at Ch. 120.300 (one way)	40.59	NHAI has removed the
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		work of flyover under
			COS from SPV.
			Authority is floating
			new tender for this
2	Martin Day of Coath Day in a face of different	6.02	work.
2	Metal Beam Crash Barriers for additional	6.82	Work completed
	Length of 29.336 Km as per Instructions from Safety Consultant		
3	Realignment of Service Road (LHS) passing	1.1	1
3	through the Graveyard at Palsana	1.1	
	(Additional Quantity for Boulders &		
	deletion of concrete drain) at Km 83+000		
	to Km 83+300 (+ ve COS)		
4	Earthwork quantities & RE wall in	21.57	
	Approaches of VUPs & Service Roads		
	located at Km. 74+891 and at Km. 75+650		
5	RCC Retaining Wall and Concrete lining	1.46	
	from Km 75+ 100 to Km 75+660 at existing		
	stream/canal running along the Bypass		
6	Alignment proposed for COS	4.46	
6	Construction of PUPs at Km 1+500 & Km 3+465	1.46	
7	Construction of Service Road Minor Bridge	2.12	Not started.
,	at Km 92	2.12	ivot starteu.
8	Construction of Minor Bridge on Service	4.21	Work completed.
-	road at Km 1+439 (LHS), Km 15.901 (BHS)		
	and Km 18.350		

S.No.	Description	COS Amount (₹ Crore)	Remarks
9	Additional Quantities executed for Main Carriageway from Km. 61+800 to Km 63+100.	9.65	
10	Road Boundary Stone	0.17	Not started.
11	Construction of Highway Nest Near Toll Plaza	0.24	Work Completed.
	Sub Total (B)=	89.39	
С	Negative COS		
1	Reduction in volume of work due to inclusion of new Essar bypass at the tail end of project	-0.9186	
2	Modified TCS for Service Road in Hazira Area (Km 111+000 to Km 125+000)	-0.697	
	Sub Total (C)=	-1.62	
	Total =(A+B-C)	157.91	

Note:- IE has recommended a proposal for descoping of work which have not been executed either due to default of concessionaire although land was made available or due to non-availability of hindrance free land with financial implications of ₹ 23.11 Crore and ₹ 7.57 Crore respectively. The Concessionaire had objected that there was no any fault of theirs in completing the balance works. The balance works could not be executed due to non-availability of land which was the responsibility of NHAI/IE. Final COD wef 29 March 2018 has already been issued by the IE.

# **Chapter 5: Toll Fee Collection**

## 5.1 Toll Plaza and Toll Fee Collection System

#### 5.1.1 Toll Plaza

Project has two toll plazas located at Km 28.500 (Mandal) and at Km 89.450 (Bhatia) respectively. The toll plazas are having 14 & 12 lane/booth facilities, and these are adequate to handle the present traffic load on the project road.

## 5.1.2 New Fee Collection System /FASTags

FASTag is an electronic toll collection system on toll roads. Based on radio frequency identification (RFID) technology, FASTag is affixed on the windscreen of vehicles. These FASTags are prepaid and rechargeable for toll collection. FASTags do not have any expiry date, hence, these can be used as long as not tampered with and remains readable at the toll plazas.

Through Gazette Notification, GSR 690 E, dated 06.11.2020, the Ministry of Road Transport & Highways has mandated FASTag for all vehicles on toll roads. The instruction was circulated by NHAI through letter no. NHAI/100%FASTag/2020 dated 4<sup>th</sup> December 202 to all the Concessionaires. The Ministry has also directed that user fee will be collected only through FASTag with effect from 01<sup>st</sup> January 2021. To discourage vehicles without valid FASTags, the user fee were made doubled.

Since 01<sup>st</sup> March 2021, this system is 100% functional at both toll plazas of this project, but still 4 to 5% vehicle are passing without FASTags after paying penalty.

## 5.1.3 Toll Fee Collection System

Toll fee collection system is semi-automatic with a provision to go manual in case of system failure. Manual ticketing, when resorted to, is later updated on the system. In addition to the Semi-automatic toll collection system, a CCTV based automatic monitoring system too has been installed.

All toll collection booths are connected to a central server which records vehicle data like class, exempted/non-exempted, toll to be charged and overall toll collection booth wise/shift wise and the toll collected in a calendar day/calendar month. The system supports facility to create archives and is capable of generating traffic reports as mandated in CA.

# 5.2 Toll Management and Cash Handling

At toll plazas adequate supervisory, collection and security staffs haves been deployed for smooth functioning. Cash handling process including depositing in bank, is being done by handling agency. Company is taking proper care in handling of cash at both toll plazas. They are making cash transfer from toll plaza to bank safely. The personnel deployed at site are mentioned in the table below.

Following are the summary of staff deployed at site

			Manpowe	er Deployed (	Nos.)	
Sno.	Description	Common		Mandal TP		Total
Α.	Maintenance	6				6
1	SPV/ Operation Head	1				1
2	MIS	1				1
3	Sr. Manager F&A	1				1
4	Executive F&A	1				1
5	Manager HR/Admin	1				1
6	Officer Admin	1				1
7	Executive Procurement	1				1
8	HSE Engineer	1				1
	Total (A.) =	14				14
B.	Manpower at Toll Plazas					
1	Plaza Manager		1	1		2
2	DPM / APM		1	1		2
3	Sr. PC / PC		4	4		8
4	Validators		4	4		8
5	Sr. TC		3	3		6
6	Lane Attendant		12	11		23
7	Toll Operator		44	44		88
8	POS		1	1		2
9	Plaza Admin		1	1		2
10	Store		1	-		1
11	Banking Admin		1	1		2
	Total (B.)=	_	73	71	_	144
C.	IT/ITS					
1	Manager Technical Toll System		1	-		1
	Dy Manager/ Asst. Manager Technical Toll		<u>-</u>			<del>_</del>
2	System			1		1
3	Engineer IT (Surat Office Common)	1				1
	Sr. Executive/ Executive/ Jr. Executive Toll					
4	System		3	4		7
5	Electrician / Technician		6	5		11
	Total (C.)=	1	10	10	-	21
D.	Toll Operations Audits					-
1	Asst Manager / Sr. Executive Toll Audit	1				1
2	Sr. Executive/ Executive Toll Audit		1	1		2
	Total (D.)=	1	1	1	-	3
E.	Corridor/ Route Patrol					
1	Manager Route				1	1
2	Sr. Supervisor/ Supervisor				1	1
3	CRO / Control Room				4	4
4	RPO				12	12
5	ARPO				11	11
	Total (E.)=	-	-	-	29	29
	G. Total (A+B+C+D+E)=	16	85	82	29	211

Organization chart and manpower details of SPV are at Appendix-D.

## 5.3 Traffic Details

Monthly report of total traffic count and Tollable traffic count for the quarter Jan to Mar 22 passing through both the Toll Plazas are given in the Table 5-1 below;

Summary of the traffic passing through the toll plaza during the quarter ending Jan to Mar 22 and traffic growth in respect to quarter ending Jan to Mar 21 is given in Table 5-1.

Table 5-1: Comparison of Average Daily Tollable Traffic at Bhatia and Mandal toll plazas in between quarter ending Jan to March 2022 & quarter ending Jan to March 21.

Comparison of Traffic at Bhatia and Mandal toll plaza between quarter Jan to Mar22 & Jan to Mar 21									
Average Tollable Vehicles Per Day	Class 1	Class 2	Class 3	Class 4	Class 5	Total			
Mandal Toll Plaza (Km 28+500)									
Jan22	5083	339	1330	3394	3	10,149			
Feb 22	6038	358	1420	3702	3	11,521			
Mar 22	5560	357	1468	3492	2	10,879			
Total Average (Jan -Mar22)	5,560	351	1,406	3,529	3	10,850			
Total Average (Jan-Mar21)	5320	451	1607	3698	2	11,078			
Annual change over Quarter to quarter	240	-100	-201	-169	1	-228			
Difference in%	4.52%	-22.10%	-12.51%	-4.56%	33.33%	-2.06%			
	E	hatia Toll	Plaza (89+450 k	m)					
Jan22	7,305	555	622	2,941	7	11,430			
Feb 22	8,152	568	665	3,094	7	12,486			
Mar 22	7,760	539	660	2,922	7	11,888			
Total Average (Jan -Mar22)	7,739	554	649	2,986	7	11,935			
Total Average (Jan-Mar21)	8166	496	541	2954	6	12,163			
Annual change over Quarter to quarter	-427	58	108	32	1	-228			
Difference in%	-5.23%	11.69%	19.96%	1.07%	16.67%	-1.88%			
		Average fo	r both toll plaza	as					
Jan22	6,194	447	976	3,168	5	10,790			
Feb 22	7,095	463	1,043	3,398	5	12,004			
Mar 22	6,660	448	1,064	3,207	5	11,384			
Total Average (Jan -Mar22)	6,650	453	1,028	3,258	5	11,392			
Total Average (Jan-Mar21)	6,743	474	1,074	3,326	4	11,621			
Annual change over Quarter to quarter	-93	-21	-47	-69	1	-228			
Difference in%	-1.38%	-4.40%	-4.33%	-2.06%	20.83%	-1.96%			

At Mandal Toll plaza (28+500 Km) positive variation was observed in class 1 (Car) and Class 5 by 4.52% and 33.33%. While negative variation was observed in , class 2 (Truck), class 3 (truck-bus) and class 4 (HCV) by - 22.10%, -12.51% and 4.56%.

At Bhatia toll plaza (Km 89+450) there is positive variation observed in class 2 (Truck), class 3 (truck-bus), class 4 (HCV) and Class-5 by 11.69%, 19.96%, 1.07% and 16.67% respectively and negative variation in class 1 (Car) by -5.23%.

## 5.3.1 Suspension and resuming of Toll Collection

In view of COVID-19 pandemic, the Concessionaire received instructions on 25<sup>th</sup> March 2020 from PD-NHAI for suspension of complete toll operation with immediate effect until 20 April 2020. Toll Operations were suspended from 12:00 Noon, 25<sup>th</sup> March 2020. However, emergency services i.e. ambulance/patrol vehicles etc. were operational.

NHAI on 17<sup>th</sup> April 2020 has issued a letter for resumption of toll collection with effect from 20<sup>th</sup> April 2020

# 5.4 Toll Collection

Details of toll collected during Jan-Mar 22 as compared to Jan-Mar21 is shown in the Table 5-2 below;

Table 5-2: Comparison of toll collection Jan-Mar 22 as compared to Jan-Mar 21

		Toll Collection in (₹)								Difference	
SI. No.	Vehicle Type		Quarter Ja	an-Mar 22			Quarter J	an-Mar21		In Amount	In %
	. 712-2	Jan-2222	Feb-2222	Mar-2222	Total	Jan-21	Feb-21	Mar-21	Total	(₹)	111 76
A. Mandal Toll Plaza (km 28+500)											
1	Car/Jee p/Van	13,459,445	14,588,055	14,213,535	42,261,035	13,038,765	12,814,360	13,594,950	39,448,075	2,812,960	7%
2	LCV	2,034,550	1,922,855	2,069,305	6,026,710	2,521,550	2,173,445	2,210,185	6,905,180	-878,470	- 13%
3	Bus/Tru ck	16,407,960	15,755,115	17,930,605	50,093,680	19,374,300	17,100,225	16,635,375	53,109,900	-3,016,220	-6%
4	Multi Axle	71,682,810	70,174,660	73,300,940	215,158,410	75,384,980	69,825,770	73,125,880	218,336,630	-3,178,220	-1%
5	Over Sized	93,670	67,430	44,345	205,445	48,400	59,375	69,075	176,850	28,595	16%
6	ETS	0	0	0	0				0	0	
	Others	-1,416,385	-1,361,425	-1,223,315	-4,001,125	79,725	-1,743,610	-3,065,375	-4,729,260	728,135	
	Total (A)	102,262,050	101,146,690	106,335,415	309,744,155	110,447,720	100,229,565	102,570,090	313,247,375	-3,503,220	-1%
					B.Bhatia Toll	Plaza (km 89+45	0)				
1	Car/Jee p/Van	15,361,655	15,985,305	16,172,525	47,519,485	14,421,365	14,203,660	13,975,840	42,600,865	4,918,620	12%
2	LCV	2,535,550	2,356,900	2,414,640	7,307,090	2,204,955	2,008,530	2,085,235	6,298,720	1,008,370	16%
3	Bus/Tru ck	5,909,085	5,752,020	6,263,915	17,925,020	5,126,655	4,704,650	5,050,600	14,881,905	3,043,115	20%
4	Multi Axle	45,852,390	42,816,410	44,703,890	133,372,690	42,916,125	41,354,240	44,191,740	128,462,105	4,910,585	4%

	Vehicle Type		Difference								
SI. No.			Quarter Ja	an-Mar 22			In Amount	In %			
140.		Jan-2222	Feb-2222	Mar-2222	Total	Jan-21	Feb-21	Mar-21	Total	(₹)	111 /0
5	Over Sized	132,290	133,335	143,800	409,425	129,690	177,970	77,895	385,555	23,870	6%
6	ETS	0	0	0					0	0	
	Others	-1,198,660	-1,120,260	-1,122,616	-3,441,536	-8,450	-1,221,984	-1,921,755	-3,152,189	-289,347	
	Total (B)	68,592,310 65,923,71		68,576,154	203,092,174	64,790,340	61,227,066	63,459,555	189,476,961	13,615,213	7%
	Total (A+B)	170,854,360	167,070,400	174,911,569	512,836,329	175,238,060	161,456,631	166,029,645	502,724,336	10,111,993	2%

Table 5-3: Comparison of toll collection in quarter Oct-Dec 2021 & quarter Jan-Mar22

S. No.			Difference									
	Vehicle Type		Quarter C	ct-Dec 21			Quarter (	la Amazunt	In			
		Oct-21	Nov-21	Dec-21	Total	Jan-2222	Feb-2222	Mar-2222	Total	In Amount	percent age(%)	
Mandal Toll Plaza (km 28+500)												
1	Car/Jeep/Van	11,330,090	14,686,120	13,038,230	39,054,440	13,459,445	14,588,055	14,213,535	42,261,035	3,206,595	8%	
2	LCV	1,692,735	1,620,160	1,922,290	5,235,185	2,034,550	1,922,855	2,069,305	6,026,710	791,525	13%	
3	Bus/Truck	15,963,600	14,482,085	15,849,585	46,295,270	16,407,960	15,755,115	17,930,605	50,093,680	3,798,410	8%	
4	Multi Axle	64,686,820	55,691,920	65,287,990	185,666,730	71,682,810	70,174,660	73,300,940	215,158,410	29,491,680	14%	
5	Over Sized	57,015	48,870	71,045	176,930	93,670	67,430	44,345	205,445	28,515	14%	
6	ETS Transaction	0	0	0	0	0	0	0	0	0		
	Others	-1,541,733	-1,810,795	-1,454,425	-4,806,953	-1,416,385	-1,361,425	-1,223,315	-4,001,125	805,828		
	Total (A).	92,188,527	84,718,360	94,714,715	271,621,602	102,262,050	101,146,690	106,335,415	309,744,155	38,122,553	12%	

			Difference									
S. No.	Vehicle Type		Quarter C	ct-Dec 21			Quarter (	la Amazanat	In			
110.		Oct-21	Nov-21	Dec-21 Total		Jan-2222	Feb-2222	Mar-2222	Total	In Amount	percent age(%)	
Bhatia Toll Plaza (km 89+450)												
1	Car/Jeep/Van	15,953,240	18,046,685	17,887,790	51,887,715	15,361,655	15,985,305	16,172,525	47,519,485	-4,368,230	-9%	
2	LCV	2,779,750	2,030,160	2,526,730	7,336,640	2,535,550	2,356,900	2,414,640	7,307,090	-29,550	0%	
3	Bus/Truck	5,975,155	4,997,590	6,072,215	17,044,960	5,909,085	5,752,020	6,263,915	17,925,020	880,060	5%	
4	Multi Axle	45,316,960	39,672,750	45,352,520	130,342,230	45,852,390	42,816,410	44,703,890	133,372,690	3,030,460	2%	
5	Over Sized	104,545	84,840	170,300	359,685	132,290	133,335	143,800	409,425	49,740	12%	
6	ETS Transaction	0	0	0	0	0	0	0	0	0		
	Others	-1,304,545	-1,564,600	-1,304,290	-4,173,435	-1,198,660	-1,120,260	-1,122,616	-3,441,536	731,899	-21%	
	Total (B). (₹)	68,825,105	63,267,425	70,705,265	202,797,795	68,592,310	65,923,710	68,576,154	203,092,174	294,379	0%	
	Total (A+B) (₹)	161,013,632	147,985,785	165,419,980	474,419,397	170,854,360	167,070,400	174,911,569	512,836,329	38,416,932	7%	

There is an increase of 2% in toll collection during quarter Jan-Mar22 with respect to same quarter Jan-Mar21 last year.

## 5.4.1 Toll Collection - Comparison with Financial Model

For the quarter Jan-Mar 22 toll collection is ₹51.28 crore against projected amount of ₹55.80 Crore, resulting into a slippage of ₹4.52 Crore (8.09%).

A graphical representation of quarterly toll collection and percentage changes are given below.

Graphs between Projected toll collection (Cumulative), Actual toll collection (cumulative) & % increase / decrease with respect to previous quarter are also drawn.

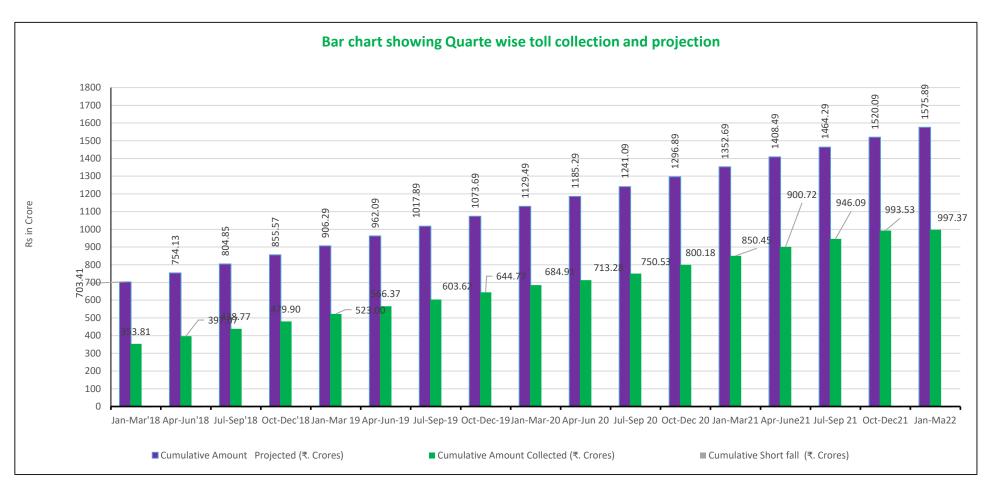


Table 5-4: Details of quarterly Toll collection, Projected toll and shortfalls upto quarter ending March22.

	Jan-Mar'18	Apr-Jun'18	Jul-Sep'18	Oct-Dec'18	Jan-Mar 19	Apr-Jun-19	Jul-Sep-19	Oct-Dec-19	Jan-Mar-20	Apr-Jun 20	Jul-Sep 20	Oct-Dec 20	Jan-Mar21	Apr-June21	Jul-Sep 21	Oct-Dec21	Jan-Ma22
Cumulative Amount Projected (₹. Crores)	703.41	754.13	804.85	855.57	906.29	962.09	1017.89	1073.69	1129.49	1185.29	1241.09	1296.89	1352.69	1408.49	1464.29	1520.09	1575.89
Quarterly Projected Amount (₹ Crores)	101.63	50.72	50.72	50.72	50.72	55.80	55.80	55.80	55.80	55.80	55.80	55.80	55.80	55.80	55.80	55.80	55.80
Cumulative Amount Collected (₹. Crores)	353.81	397.07	438.77	479.90	523.00	566.37	603.62	644.77	684.91	713.28	750.53	800.18	850.45	900.72	946.09	993.53	997.37
Quarterly Amount Collected (₹. Crores)	42.80	43.26	41.70	41.13	43.10	43.37	37.25	41.15	40.14	28.37	37.25	49.65	50.27	50.27	45.37	47.44	51.28
Cumulative Short fall (₹. Crores)	-349.60	-357.06	-366.08	-375.67	-383.29	-395.72	-414.27	-428.92	-444.58	-472.01	-490.56	-496.71	-502.24	-507.77	-518.20	-526.56	-578.52

# 5.5 Toll Leakage

Project has three major leakage points, two for Bhatia Toll Plaza and one for Mandal toll plaza. There is no change in the status since last quarter.

#### Leakage at Bhatia toll Plaza:

At Ichchapur (Km 116) ROB cum Flyover was constructed. As per provisions of CA and Railway norms, level crossings to be closed after construction of ROB. District Administration and PD, NHAI have consented jointly for closure of level crossing but till date this level crossing is still functioning for reasons beyond the control of SPV and as a result a lot of traffic escapes/takes this alternate route.

**Detour from Sachin to Navsari (at Km 96+240)**: Earlier this road was meant for local light vehicles and not for heavy vehicles. This road was subsequently developed/upgraded by State Government. Now, traffic from Hazira using this detour as escape route to evade Toll fee at Bhatia Toll Plaza.

#### Leakage at Mandal Toll Plaza:

**Detour at Songadh (Km 18+638):** Earlier Songadh-Ukai Road was meant for movement of light vehicles. It was widened by State Government. Now, traffic from Maharashtra travels through the Project stretch till Songhad flyover and thereafter uses this detour thereby evading payment of Toll fee at Mandal Plaza.

#### Action Taken to Plug these leakages: -

**Detour at Icchapore(at Km 116):** Issue has been discussed in presence of the representatives of HAIA (Hazira Area Industrial Association) during a meeting held under chairmanship of Hon'ble Minister of State, MORT&H in December 2016. HAIA has requested authority to provide Ramps at North bound traffic moving towards Surat city. NHAI has been asked by the Minister to study the feasibility of providing Ramps at Icchapore flyover cum ROB. Concessionaire communicated to Authority that provision of Ramp would result into leakage of majority of traffic volume causing negative impact on Toll revenue. This provision will necessitate additional tollbooths/plazas under COS. IE, PD-NHAI & RO, Gandhinagar had recommended the Concessionaire's proposal for issuance of in-principle approval by the competent authority at NHAI HQ. The proposal is under process at NHAI HQ.

**Detour at Sachin – Navsari road (at Km 96+240):** A notification has been issued by the Commissioner of Police, Surat to ban heavy vehicles from 7:00 Hrs. to 13:00 Hrs and 17:00 Hrs to 23:00 Hrs. as it passes through the villages. The Villagers too had requested for the same action.

**Detour at Songadh (Km 18+638):** A notification has been issued by DM, Tapi to ban movement of heavy traffic from Songhad to Ukai as the road is under widening and strengthening.

# 5.6 Traffic Operation and Safety

Review of concessionaire's reports reveals that traffic operation is smooth during this quarter and Incidents/accidents are not attributable to deficient project facility. In case of accidents, help has been reaching to the accident spot in a reasonable time. Accidents/black spots analysis and actions thereon initiated to enhance road safety and minimizing accidents are covered under Chapter 7 of this report.

# Chapter 6: Toll Plaza Installation and Functions

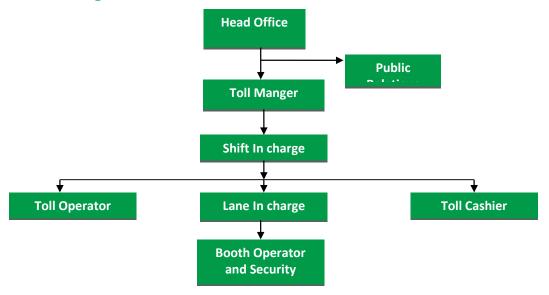
# 6.1 Integrated Modern Toll Collection System

- The integrated modern toll collection system (IMTCS) as per the CA has been installed with the following provisions /facilities;
- Automatic vehicle counter-cum-classifier (AVCC)
- Automatic BOOM barrier
- Electronic toll collection (ETC) systems
- Contactless smart card systems
- Ticket printer
- User fare display unit
- Close circuit television system (CCTV)
- Lane controller
- Traffic light system
- Intercom system
- Overhead lane signs
- Integrated toll management software
- Point of sale (POS) system
- The provisions as above have been provided and are functioning satisfactorily.

### 6.1.1 Toll Operation Overview

- There are 2 toll plazas at Km 28.500 and at Km 89.450 of 12 & 14 lanes respectively on the project road
- Three shifts timings are at 8-16, 16-24 and 00-8
- Recess time 11.30-12.00, 7.00 7.30 and 03.00-3.30
- Bleed off Every shift Three times
- Float Amount- INR 5,000.00
- Cash deposit to bank by concessionaire with own security system
- The peak hours at this toll is from 07.00 pm − 10.00 pm and 03.00 pm − 07.00 pm. The traffic is mixed type.

# 6.2 Organization Structure

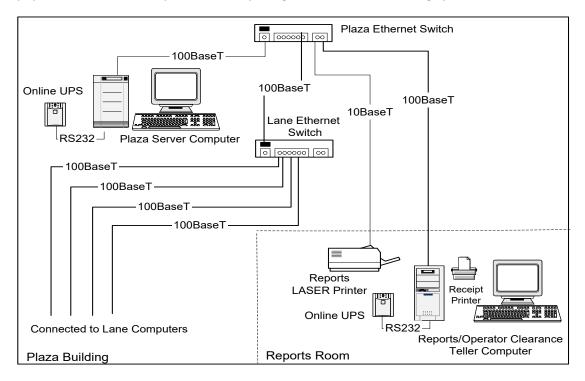


#### 6.2.1 Head Office

- This is the senior management/other staff engagement for toll operation.
- This level collects and compiles all necessary data from different plazas like traffic, revenue, sales, maintenance etc. on a periodic basis

## 6.2.2 Toll Operation System

The toll system of M/s International Road Dynamics South Asia Private Limited being used for Toll
Operations is a scalable toll collection, reporting and auditing system configured from a simple cash
payment toll collection system to a fully integrated advanced auditing system



• The Toll system provides two different methods of toll collection at plaza:

- Manual Toll Collection: Payment of toll by cash, requiring stopping, making cash payment to a toll attendant and cash exchange (if any)
- Electronic Toll Collection System: Electronic payment using a contactless card for pre-payment which allows payment without having to pay cash
- The Toll system installed at plazas performs the following operations:
  - Toll Collection
  - Receive transactions in real time over the network from operator in the lanes and store them in local database in real time
  - Receive events in real time over the network from operator and store them in local database in real time

### 6.2.3 Reporting

- Reports can be easily generated by the administrative or supervisory personnel on the plaza computer.
   The reports can be sent to any Windows compatible printer, but a laser printer is recommended.
   Reports would normally be generated using the teller computer.
- The reports are divided in to three different categories: financial, statistical and configuration.
- Financial reports
  - o Revenue report
- Statistical reports
  - Activity report
  - o Traffic count report
  - Transaction detail report
- Configuration reports
  - Toll user report
  - Payment method report
  - o Fair type report
  - Shifts report
  - Profiles report
  - Computer report
  - Lane hardware report
  - Main user report
  - Main shift report
  - Main payment method report
  - o Main operator class report
  - Main system class report
  - Main fair type report
  - Main destination reports

#### 6.2.4 Teller Description

• The teller computer system for this installation performs the following operations:

- Reporting functions identical to those available on the plaza computer
- Smart card sales
- Operator clearance
- Toll lane operator functions
- Record cash float amount if required
- Record operator declared cash collection
- Shift in charge functions
- Record mid-shift cash collection
- Record end of shift cash

## 6.3 Observations on Toll Plaza

No damages were observed at toll plaza location including concrete pavement and its ancillary structures of tolling systems during the last visit. It was observed that all operations/functions were working smoothly.

# 6.4 Plaza-Wise Details of Toll Collection

Toll Plaza-wise toll Collections details as obtained from the Concessionaire are given in Table 6-1

Table 6-1: Plaza-wise Toll Collections details

	Type of Vehicles	Toll Amount Collect	ed					Remarks
S. No.	venicles	Cumulative up to	Curi	rent Quarter (Jan-Ma	r 22)	Total for Quarter	Cumulative up to	
s,		December 2021	Jan 22	Feb 22	Mar 22	Jan-Mar 22	Mar 22	
				Mandal Toll Plaza (	28+590			
1	Car/Jeep/Van	670,457,420	13,459,445	14,588,055	14,213,535	42,261,035	712,718,455	
2	LCV	158,676,380	2,034,550	1,922,855	2,069,305	6,026,710	164,703,090	
3	Truck/Bus	998,000,590	16,407,960	15,755,115	17,930,605	50,093,680	1,048,094,270	
4	MAV	4,415,524,495	71,682,810	70,174,660	73,300,940	215,158,410	4,630,682,905	
5	OSV	1,932,010	93,670	67,430	44,345	205,445	2,137,455	
	ETS	242,427,005				0	242,427,005	
	Others	-20,033,447	-1,416,385	-1,361,425	-1,223,315	-4,001,125	-24,034,572	
	Total	6,466,984,453	102,262,050	101,146,690	106,335,415	309,744,155	6,776,728,608	
				Bhatia Toll Plaza @	89+860			
1	Car/Jeep/Van	661,874,975	15,361,655	15,985,305	16,172,525	47,519,485	709,394,460	
2	LCV	158,237,710	2,535,550	2,356,900	2,414,640	7,307,090	165,544,800	
3	Truck/Bus	289,846,085	5,909,085	5,752,020	6,263,915	17,925,020	307,771,105	
4	MAV	2,125,528,400	45,852,390	42,816,410	44,703,890	133,372,690	2,258,901,090	
5	OSV	5,439,535	132,290	133,335	143,800	409,425	5,848,960	
	ETS	195,247,975				0	195,247,975	
	Others	-14,605,134	-1,198,660	-1,120,260	-1,122,616	-3,441,536	-18,046,670	
	Total	3,421,569,547	68,592,310	65,923,710	68,576,154	203,092,174	3,624,661,721	
	Grand Total	9,888,554,000	170,854,360	167,070,400	174,911,569	512,836,329	10,401,390,329	

# Chapter 7: Performance of O&M Activities (Maintenance and Others)

### 7.1 Maintenance

#### 7.1.1 Maintenance Manual

Concessionaire has prepared O&M manual and is carrying out O&M activities mandated therein. As per information collected from SPV and IE, it is observed that concessionaire is carrying out O&M activities on regular basis.

## 7.1.2 Maintenance Equipment/arrangements

The SPV has appointed sub-contractors for maintenance works of the entire project highway. Equipment presently deployed by subcontractors/SPV appears adequate to carry out the routine and preventive maintenance activities. For certain maintenance aspect, SPV has hired agencies with appropriate/adequate mechanical resources. SPV has deployed sub-contractors having adequate resources/teams to undertake routine maintenance tasks.

## 7.1.3 Annual Maintenance Programme (2021-22)

Concessionaire has submitted a comprehensive Maintenance Programme for the financial year 2021-22 to IE. Programme is enclosed as annexure-II.

Maintenance programme has been prepared on micro-level in accordance with the Concession Agreement schedule-K. In this maintenance programme, possible measures as included in the CA and as per industry practice have been covered to minimize the damages to the project road to the extent possible.

Routine Maintenance of Road includes following activities:

Maintenance of Pavement

Maintenance of Turfed Areas and Landscaping

Maintenance of Drainage System

General Cleaning including CD Structures

Inspection procedure

Routine inspection and maintenance of Roads, Flyover, ROBs, Major and Minor bridges, VUP and PUPS

All the Project Facilities to be inspected as per a predetermined frequency to assess the performance. The inspections helps in planning the periodic maintenance requirements of the Project Highway. Degree of inspection are categorized as Visual inspection, close inspection, thorough inspections. These inspections are carried out according to Inspection frequency table of maintenance manual.

Operation and maintenance programme: As per maintenance programme, SPV has proposed surface cleaning once in a month, roughness test twice in a year, cleaning vegetations for ROB/Flyovers/Underpasses once in a year and cleaning of vegetations for Major bridges, Minor bridges, box culverts, pipe culverts, and slope protection twice in a year (before and after monsoon period), drain cleaning of drains twice in a year and other activities as and when required. The programme is in line with the requirements mentioned in the CA.

#### 7.1.4 Periodic Maintenance and Tests during O&M period

Project road was opened to traffic in August 2015. The last BI/Roughness test was carried out in Oct 21 and found that immediate repair and maintenance is required to be carried out. The copy of BI test is enclosed as annexure-III of this report..

# 7.2 Status of Critical Maintenance works for keeping Highway in traffic worthy condition

BI test was conducted in October 2021, on the basis of BI test it was observed that some areas are in immediate need of rectification to keep the highway in traffic worthy conditions. Subsequently, on the basis of BI test, observation of IE and visual inspection of SPV team/ Concessionaire decided to make rectification through milling out damaged surfaces, doing overlay with BC, sealing cracks by slurry seal, road marking, kerb painting and rehabilitation of some structures for which an estimated for Rs 39.72 Crore was made. Following are the details of quantities carried out during the quarter Jan to Mar 22.

Sno.	Description of Items	Unit	Quantity Executed during Quarter Jan-Mar 2022	Remarks
1.	Milling	Sqm.	730,858.00	
2.	Tack coat	Sqm.	731,671.00	
3.	Over lay with Bituminous Concrete (BC).	Sqm.	21,817.00	
4.	Maintenance of crack surface with Slurry seal	Sqm.	244,397.00	
5.	Road Marking	Sqm.	53,018.000	
6.	Kerb Painting	Sqm.	110,277.00	
7.	Repair of Earthen Shoulders with approved material	Cum	3,200.00	
8.	Rectification of Earthen Shoulder, with milling material	Sqm.	49,990.00	

Other than above repair and rehabilitation of structures, repair and maintenance (for refunctioning) of VMS, traffic control etc were also done during the quarter. Now all VMS are functional at site.

#### 7.2.1 Routine Maintenance

During this quarter, the SPV has carried out maintenance activities such as;

- a) Median plant trimming and cleaning
- b) ROW cleaning
- c) Kerb casting and painting.
- d) Metal beam crash barrier fixing and cleaning.
- e) Fixing of signboards
- f) Pedestrian guard rail fixing/repairing
- g) Fixing and painting of missing/damaged kilometer stones.
- h) Shoulder repairing
- i) Solar blinker fixing/repairing
- j) Road studs fixing

- k) Pothole repairs/ patch work at damaged portion
- I) Repair of Drain slabs
- m) ROW Cleaning
- n) Blinker Rectification
- o) Cleaning of Expansion Joint
- p) Cleaning of Road (MCW & SR) & ROW
- q) Trimming & Watering of median plantation
- r) Cleaning of drains and repair of protection works
- s) Repair and rain cuts and protection of side slopes
- t) Repair and replacement of signboards and safety provisions

# 7.3 Maintenance Budget

Budget provision is guided by the provision made for same in the base case business plan.

## 7.3.1 Budget allocation and expenditures

The variation in base case business plan as per the information available is mentioned in the Table below;

SI. No.	Year	Budgeted in Restructuring 3 Financial Model (2016)	Budgeted in Resolution Plan Financial Model (2018)	Actual	Remarks
			(In ₹, Crore.)		
1.	2017-18	5.71	4.99	4.99	
2.	2018-19	73.67	5.21	9.77	
3.	2019-20	76.05	5.43	8.11	
4.	2020-21	6.29	46.28	18.95	
5	2021-22	6.48	46.54	53.44	
Tota	al =	168.20	108.45	95.26	

# 7.4 Annuity Payment as O&M Support

As per the Concession Agreement clause 25.1.1, Authority agreed to provide cash support of ₹. 556.00 Crore.

As per Clause 25.1.1 of the CA, "the Grant shall be disbursed to the Concessionaire by way of Equity Support in accordance with the provisions of Clause 25.2, and the balance remaining, if any, shall be disbursed as O&M Support in accordance with the provisions of Clause 25.3 of CA. Accordingly, during construction phase, Rs 301.82 Crore was released by the Authority against equity support and Rs 231.93 Crore against O&M support from 01st to 16th Installments.

Table 7-1: Status of O&M support Annuity.

Sno.	O&M Support Annuity No.	Date of Release	NHAI, PIU Surat Letter No.	Amount Released after deduction (Cr.)
1	Annuity-1	2-Jan-16	NHAI/PIU-Surat(Exp'way)/41-IE/2016/40	13.16
2	Annuity-2	10-Mar-16	NHAI/PIU-Surat(Exp'way)/41-IE/2016/1075	13.05
3	Annuity-3	1-Jun-16	NHAI/P/U-Surat(fxp'way)/41-1E/2016/2280	13.2
4	Annuity-4	9-Sep-16	NHAI/PIU-Surat(Exp'way)/41-IE/2016/4414	13.2
5	Annuity-5	16-Dec-16	NHAI/PIU-Surat(Exp'way)/41-IE/2016/6228	13.2
6	Annuity-6	6-Mar-17	N HAI/PIU-Surat(Exp'way)/41-IE/2017 /1038	14.5
7	Annuity-7	5-May-17	N HAI/PIU-Surat(Exp'way)/41-IE/2017 /2226	14.5
8	Annuity-8	27-Jul-17	N HAI/PIU-Surat(Exp'way)/41-1 E/2017 /41- O&M/4181	14.67
9	Annuity-9	26-Sep-17	NHAI/PIU-Surat( Exp'way)/41-Grant/2017 /4943	14.8
10	Annuity-10	22-Jan-18	NHAI/PIU-Surat(Exp'way)/41-Grant/2018/358	14.78
11	Annuity-11	19-May-18	N HAI/P IU-Su rat( Exp' way)/41-Grant/2018/2582	15.09
12	Annuity-12	29-Sep-18	N HAI/P IU-S u rat( Exp'way)/ 41-Grant/2018/5264	15.09
13	Annuity-13	24-Dec-18	NHAI/PIU-Surat(Exp'way)/41-Grant/2018/6949	15.09
14	Annuity-14	1-Apr-19	N HAI/P IU-Surat( Exp' way )/41-Grant/2019 /1876	15.09
15	Annuity-15	10-Jun-19	N HAI/P IU-Surat( Exp' way)/ 41-Grant/2019 /3600	15.09
16	Annuity-16	05-0ct-2019	NH AI/P IU-S u rat( Exp'way)/ 41-Grant/2019 /6154	15.09
			Total=	229.6

On 14<sup>th</sup> October 2020 SPV had requested to NHAI/IE to release 17<sup>th</sup> O&M support Annuity of ₹. 15.09 Crores and retained amount ₹. 9.55 Crores which is pending since November 2019. Accordingly, IE has also recommended to NHAI for releasing 17<sup>th</sup> Annuity of ₹. 24.64 Crores including ₹. 9.55 Crores of retained amount by NHAI from 1<sup>st</sup> to 10<sup>th</sup> Annuity vide IE letter no. MSV-AV/NH53/SHP/0202/591 dated 15 Oct 2020.

# 7.5 Traffic and Safety

As per Schedule-L of the Concession Agreement during the operation period for safe operation of traffic, the Concessionaire shall develop, implement and administer a surveillance and safety programme for users, including correction in safety violations and deficiencies and all other actions necessary to provide a safe environment.

As per our interactions with the Concessionaire, it was understood that the traffic flow is fairly smooth and safety provisions installed on the project road is generally adequate. Timely inspection and rectifications of defects are being carried out to maintain the road in traffic worthy condition.

The following major activities are being carried out for the smooth flow of traffic:

- Inspection and repair/rectification of Potholes
- Median plantation trimming

- Daily, monthly and quarterly inspection of Road signage, sign boards and other road appurtenances and their repairs / rectifications.
- Inspection and repair/replacement of streetlights
- Cleaning of muddy Road signage in rainy season
- Road marking and kerb painting
- Maintenance of toll plaza and toll equipment
- Highway cleaning
- Replacement of damaged/worn out delineators/road studs
- All necessary equipment/facilities (highway patrol Vehicles, cranes, ambulance, first aid facilities, firefighting installation etc) required for the safety are available at the toll plaza in operational condition.
- Incident/relevant register/information are being maintained properly.
- It was observed at night that High masts, traffic lights, traffic blinkers etc were functional.

The concessionaire is also organizing time to time safety awareness programme at site

## 7.5.1 Black spot

SPV intimated that the identified black spots on the project highway have suitably been addressed to avoid recurrence of accidents. Fixing of rumble strip at 3 locations have improved the situation.

Recently, Authority has proposed 4 new VUPs at critical junctions to reduce the accidents further on the project highway. The volume of cross-traffic at these junctions are high and causing accidents. The Authority has finally decided to get these underpasses constructed through separate agencies and not by SPV.

# 7.6 Complaints

Following are the summary of complaints raised by the highway users during the last quarter;

Table 7-2: Summary of complaints during January-March 22

Month	Exemption & Toll Fees			Others	Total
Summary					
Jan-22	3	1	2	0	6
Feb-22	1	0	1	1	3
Mar-22	1	1	0	0	2
Bhatia Toll Plaza					
Jan-22	1	0	0	0	1
Feb-22	0	0	1	1	2
Mar-22	1	0	0	0	1
Mandal Toll Plaza					
Jan-22	2	1	2	0	5
Feb-22	1	0	0	0	1
Mar-22	0	1	0	0	1

## 7.7 Accidents/Incident

During the quarter January – March 2022, 106 nos. of accident occurred on the project highway which is very high nos. Out of 106 accidents, 4 (3.77%) were fatal, 15 (14.15%) were grievous injury, 27 (25.47%) were minor injuries and 60 (56.60%) were of non-injuries.

At critical junctions, rumble strips were provided to reduce the speed of vehicles

For such locations, black spot analysis is recommended and SPV is advised to identify and put in place the mitigation measures.

Most of the accidents have been reported to be due to driver's negligence or indulgence such as over speeding, etc. No accident has been reported due to overloading.

Recently, Authority has proposed 4 VUPs to minimize the number of accident at junctions having high volume at-grade cross-traffic.

Month-wise details of the accidents have been tabulated at *Table 7-4*, *Table 7-5*, and graphically represented accordingly at Figure 7-1, Figure 7-2 and Figure 7-3

Table 7-3: Causes of accidents

Month			Causes of ac	cidents		Total		
	Drunken Driving							
Jan-22	1	2	1	5	1	10		
Feb-22	2	6		7	1	16		
Mar-22	7 6							
Total	3	15	1	18	2	39		

Figure 7-1: Cause of Road Accidents

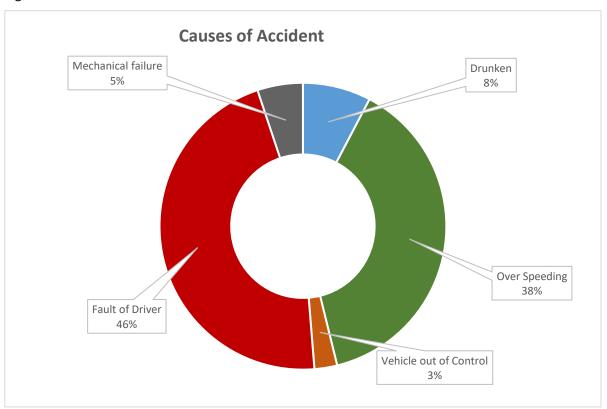


Table 7-4: Classification of accidents

Month	Classification	Total			
	Fatalities	Grievous injuries	Minor injured	Non-Injury	
Jan-22	2	3	7	10	22
Feb-22	2	8	16	18	44
Mar-22	0 4 4 32		32	40	
Total	4	106			

Figure 7-2: Classification of accidents

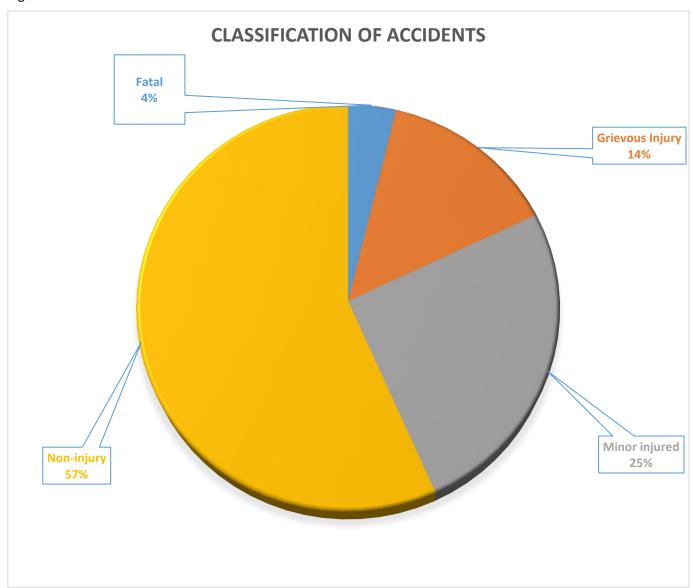
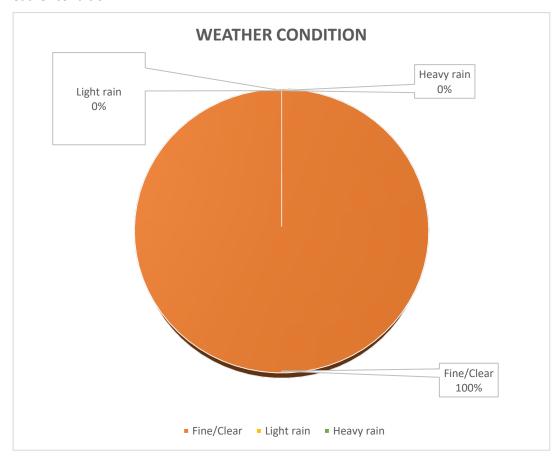


Table 7-5: Weather condition

Month	W	Weather Condition				
	Fine/Clear	Light rain	Heavy rain			
Jan-22	10			10		
Feb-22	16			16		
Mar-22	13			13		
Total	39	0	0	39		

Figure 7-3: Weather condition



# **Chapter 8: Miscellaneous**

# 8.1 Roadside Furniture

Road furniture are being maintained on regular basis for facility of highway users.

## 8.1.1 Horticulture and Landscaping

Trimming and replacement of dried plants are being carried out on regular intervals.

# 8.2 Status of Project Completion

## 8.2.1 Project Completion Certificate

Concessionaire has approached IE to issue COD. NHAI is likely to decide on this shortly. Following are the status of PCODs.

Sn o	PCOD/COD	Date of Grant	Length (Km)	IE Letter Reference	Remarks
1.	PCOD-I	19 August 2015	117.400	5406/NHAI/6003	
2.	PCOD-II	05 October 2016	11.60	FPI/165003/PVK/05A	
3.	PCOD-III	29 <sup>th</sup> March 2018	2.50	FPPM/165003/PVK/15	
4.	COD (Final) effective from 29 <sup>th</sup> March 2018	06 November 2020	131.50	Letter MSV- AV/NH53/SHP/2020/611 dated 06 November 2020 issued by the Independent Engineer on Final COD. Letter enclosed as Annexure -I	

# 8.2.2 Approvals/Toll collection

Action for commencing toll collection was taken by the concessionaire and toll collection has started w.e.f 20 August 2015.

## 8.3 O&M Contractor

Concessionaire appointed M/s H V Constructions as O&M Contractor and is carrying out Routine Maintenance of the project.

## 8.3.1 Approval and Permits

# 8.4 Force Majeure Events

No force measure have been reported during this quarter.

Appendix-A Details of Rourtine Maintenance.

# Four Laning of Gujarat/ Maharashtra Border–Surat–Hazira Port Section of NH-6 (Approx. Length 132.913 km)

Summary of routine maintenance during quarter Jan to Mar 22

		Summary of routine maintenance during of					
SI-No-	Object	Item	Unit	Jan-22	Feb-22	Mar-22	Total
		Watering Median	Km	87.250	89.000	89.000	265.25
		De Littering	Km	0.000	0.000	0.000	0.000
		Trimming	Km	89.152	80.970	88.999	259.12
		Weeding/ Hoeing/ Pit Repaire	Km	0.000	0.000	0.000	0.000
1	Median	Grass Cutting	Km	89.333	80.803	89.000	259.14
		Pesticides/ Manuring	Km	0.000	0.000	0.000	0.000
		New Median/Avenue Plantation Ring*	Nos	0.000	0.000	0.000	0.00
		Avenue Plantation Trimming	Km	0.000	0.000	0.000	0.000
		Avenue Plantation watering	Km	0.000	0.000	0.000	0.00
		Median Drain Cleaning	KM	0.000	0.000	7.920	7.920
2	MCW Cleaning	Road Sweeping/ Cleaning (LHS & RHS combined)	Km	131.500	124.700	131.500	387.70
2	IVICVV Cleaning	Unwanted vegetation , shoulder side cleaning	KM	121.250	129.713	131.500	382.463
3	SR Cleaning	Road Sweeping/ Cleaning (LHS & RHS combined)	Km	72.263	64.347	72.792	209.40
4	Kerb	Kerb casting	RMt-	0.000	1,162.000	19.000	1,181.000
<u>"</u>	VCI D	Kerb Painting	Sqm	36803.000	89327.402	24966.704	151,097.11
	W Beam Crash	Fixing	RMt-	0.000	92.000	44.000	136.000
5		Repairing	RMt-	0.000	0.000	0.000	0.00
	Barrier	Cleaning(Sticker)	Nos	0.000	0.000	0.000	0.000
		Repairing (Covers)	Nos	0.000	0.000	69.000	69.00
6	Drain	Repairing (Raft/Toe wall/Wall)	RMt	0.000	0.000	0.000	0.000
		Cleaning *	Km	0.000	0.000	6.250	6.25
		Pothole/Patch work by WMM/ Paver block	Sqm-	0.000	0.000	0.000	0.000
		Pothole/Patch work by GSB	Sqm-	0.000	0.000	0.000	0.00
_	Pot Hole/Patch	Pothole/Patch work by Cold Mix	Sqm-	0.000	0.000	0.000	0.000
7	work ( Repair)	Pothole /Patch work by Hot Mix	Sqm-	0.000	0.000	0.000	0.00
		Overlaying with BC	Cum	5,521.178	12,916.542	3,549.039	21,986.760
		Overlay at MCW/SR/Diversion by MSS/DBM	Cum	0.000	0.000	0.000	0.00
		Crack Filling, Slurry Seal	Sqm	45,044.420	138,511.280	5,829.200	189,384.900
		Prime Coat	Sqm-	0.000	0.000	0.000	0.00
		Tack Coat	Sqm-	184,039.283	430,551.390	118,301.316	732,891.989
8	Milling work		Sqm-	252735.873	409372.890	95278.626	757,387.39
٥	Avenue Plantation		KM	0.000	0.000	0.000	0.000
9	watering	Popairing	No	0.000	0.000	0.000	0.00
		Repairing	No-	0.000	0.000	0.000	0.00
10	Sign Boards	Fixing	No-	0.000	56.000	70.000	126.000
		Cleaning	No-	0.000	0.000	0.000	0.00
		Pole painting	No-	0.000	0.000	0.000	0.000
11	CD Cleaning	Minor Bridge * Culverts *	KM KM	0.000	0.000	0.000	0.00
12	Duttin-	Curverts					0.00
12	Rutting	Classina	Cum	0.000	0.000	0.000	
12	Concrete Crash	Cleaning	RMt-	0.000	0.000	0.000	0.00
13	Barriers	Repairing	Cum	0 000	0 000	0.000	0.000
		Painting	RMt-	0.000	0.000	0.000	0.00
14	Pedestrian	Painting	RMT	0.000	834.000	0.000	834.000
14	Guard Rail	Repairing	RMt-	0.000	0.000	0.000	0.00
	Juai u Nali	Fixing	RMt-	0.000	834.000	975.000	1,809.000

SI-No	Object	ltem	Unit	Jan-22	Feb-22	Mar-22	Total
15	Km stone/HM Stone/Fixing & Painting		No-	0.000	0.000	3.000	3.00
16	Km stone/HM Stone cleaning		Km	0.000	0.000	0.000	0.000
17	De Watering		Km Hrs-	0.000	0.000 0.000	0.000 0.000	0.00 0.000
		Spot Reconditioning/ Earth work in Rain Cut		0.000	0.000	0.000	
		Embankment Slope cleaning	Km	0.000	0.000	0.000	0.00
		Mud/ Earth Cleaning	Km	0.000	0.000	0.000	0.00
		Shoulder Repairing	Cum	6,655.000	3,645.533	1,098.318	11,398.851
		Shoulder Repairing	Sqm	0.000	29155.000	19829.500	48,984.50
		Excavation	RMt-	0.000	0.000	0.000	0.000
		Cleaning o Toll Plaza	Nos-	2.000	2.000	2.000	6.00
		Expansion Joint Repairing	Nos-	0.000	16.000	22.000	38.000
		Weep Hole cleaning/drainage spout /Bell mouth cleaning/ Removal of Debris	Km	119.455	0.000	34.675	154.13
		Debris cleaning	Km	32.470	36.910	14.000	83.380
		Flyover viaduct (Structures) & ROW cleaning	Km	44.300	52.897	105.000	202.20
		PCC	Cum	0.000	0.000	0.000	0.000
		RCC	Cum	0.000	0.000	0.000	0.00
18	Miscellaneous	Brick work	Cum	0.000	0.000	0.000	0.00
1-0	iviiseenaneous	Plaster	Sqm-	0.000	0.000	0.000	0.000
		Foundation Dismantle	Sqm-	0.000	0.000	0.000	0.00
		Painting on Structure	Sqm-	0.000	0.000	0.000	0.000
		Safety Items (lush Light, Radium plate, Dual lashar light, Solar , Spring Post fixing, Speed	Nos	0.000	0.000	0.000	
		Limit, Safety Cone)		2 222	0.000	2 222	0.00
		Solar Blinker Fixing	Nos	0.000	0.000	2.000	2.000
		Road Studs Fixing(cat's eye)	Nos-	0.000	0.000	3341.000	3,341.00
		Bus & Truck lay bye cleaning	Nos	13.000	10.000	4.000	27.000
		Delineator cleaning	Nos	0.000	0.000	0.000	0.00
		RCC Railing	Rm	0.000	0.000	0.000	0.000
		Solar Light cleaning	KM	0.000	0.000	0.000	0.00
		Junction Cleaning	Nos	5.000	4.000	4.000	13.000
		Stone Pitching	KM	0.000	0.000	0.000	0.00
		RE wall vegetation cleaning	KM	119.455	0.000	34.675	154.130
		Expansion Joint Cleaning	Km	131.450	0.000	131.500	262.95
		Road Marking Paint	Sqm	1,679.805	13,269.275	45,285.400	60,234.480
	Structure	Scafolding (Sqm)	Sqm	840.280	1919.720	402.200	3,162.20
19	(Icchapore Fly	Grinding/Surface preparation(Sqm)	Sqm	630.280	2,129.720	402.200	3,162.200
	over)	Primer (Sqm)	Sqm	630.280	2129.720	402.200	3,162.20
	o a ci j	C-Fiber (Sqm)	Sqm	420.280	2,339.720	402.200	3,162.200
		Scaffolding	Cum	0.000	1558.050	0.000	1,558.05
		Surface Preparation	Sqm	0.000	57.650	2.400	60.050
		Rust Removal	Sqm	0.000	51.700	0.000	51.70
		Anti-Corrosive Coating	Sqm	0.000	51.700	0.000	51.700
		Drilling holes 16mm Dia, 120mm Deep Hole	No	0.000	432.000	0.000	432.00
	Repair of Major	Drilling holes 30mm Dia, 200mm Deep Hole	No	0.000	58.000	0.000	58.000
20	Bridge at Taraj &	Epoxy Injection Grouting	No	0.000	1059.000	0.000	1,059.00
	Sachin	Reinforcement (HYSD)	Kg	0.000	1,723.830	0.000	1,723.830
		Epoxy Bond Coat	Sqm	0.000	66.880	12.120	79.00
		Centring & Shuttering	Sqm	0.000	61.460	9.720	71.180
		Microconcrete Reprofiling	Sqm	0.000	60.380	8.100	68.48
		Applying Thixotropic Epoxy Mortar	Sqm	0.000	5.700	2.790	8.490
		Protective Coating	Sqm	0.000	151.200	77.450	228.65
	l	procedure coating	Jyiii	0.000	131.200	,,,,	220.03

Appendix-B Details of Patch works and overlaying after milling.

Appendix-C Project Photograph.

# Four/Six Laning of Surat Hazira Section of NH-6 (Now Nh-53) in the state of Gujrat (Approx. Length 132 Km) Project Photograph's Jan to March 22





BC work after milling were completed also the road marking





Structures rehabilitation work completed





BC work after milling were completed also the road marking



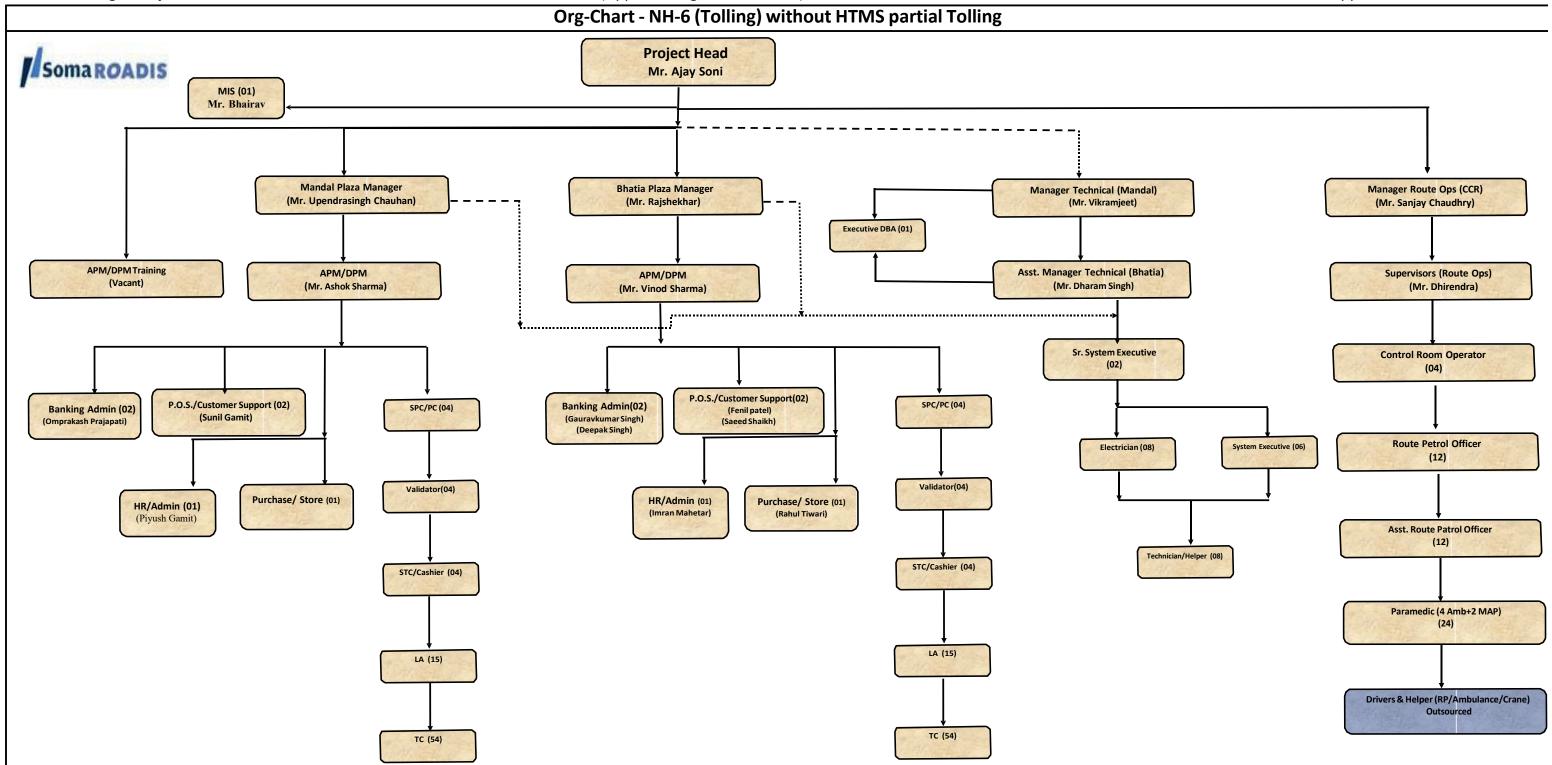


VMS functional at Site.

Camera for traffic control system is installed

Appendix-D Details of Manpower deployed at site for O&M.

WANPOWER NR-00					
Particulars	Common	Bhatia TP	Mandal TP	Corridor	Total
Maintenance	6				6
SPV/ Operation Head	1				1
MIS	1				1
Sr. Manager F&A	1				1
Executive F&A	1				1
Manager HR/Admin	1				1
Officer Admin	1				1
Executive Procurement	1				1
HSE Engineer	1				1
Total >>	14				14
Plaza Manager		1	1		2
DPM / APM		1	1		2
Sr. PC / PC		4	4		8
Validators		4	4		8
Sr. TC		3	3		6
Lane Attendant		12	11		23
Toll Operator		44	44		88
POS		1	1		2
Plaza Admin		1	1		2
Store		1	-		1
Banking Admin		1	1		2
Total >>	-	73	71	-	144
IT/ITS					
Manager Technical Toll System		1	-		1
Dy Manager/ Asst. Manager Technical Toll System			1		1
Engineer IT (Surat Office Common)	1				1
Sr. Executive/ Executive/ Jr. Executive Toll System		3	4		7
Electrician / Technician		6	5		11
Total >>	1	11	10	-	21
Toll Operatios Audits					-
Asst Manager / Sr. Executive Toll Audit	1				1
Sr. Executive/ Executive Toll Audit		1	1		2
Total >>	1	1	1	-	3
Corridor/ Route Patrol					
Manager Route				1	1
Sr. Supervisor/ Supervisor				1	1
CRO / Control Room				4	4
RPO				12	12
ARPO				11	11
Total >>	-	-	-	29	29
G. Total >>>	16	85	82	29	211



Annexure-I PCOD Letter.



# MSV INTERNATIONAL INC.

In Association with

# AVANZA ENGINEERING PVT. LTD.

MSV International, Inc.

H.No. A3-212, Raj Abhishek City, Homes, Near Sachin Flyover, Sachin Surat, Gujarat-394230 Email: msv.surat@gmail.com

Date: 06.11.2020

tional Inc.

In Appropriation with Avanza

eering Pvt. Ltd.

CIN: F04214

IE Services during O&M of 4 laning of Gujarat/Maharashtra Border - Surat-Hazira Port Section of NH53 in State of Gujarat on BOT basis Project under NHDP Phase III

Ref. No-MSV-AV/NH53/SHP/ /2020/ 611

To, Mr. Ajay Soni (DGM), Surat Hazira NH-6 Tollway Pvt. Ltd. C-201 to C-204 and 206 to 208, 2nd floor, Agam Shopping World Vesu, Surat, Gujarat-395007

Sub.: Four laning Gujarat/ Maharashtra Border – Surat – Hazira Port Section of NH-53 (old NH-06) in the State of Gujarat on BOT basis Project under NHDP Phase III. Reg. Issuance of Completion Certificate.

Ref.: (i) RO letter no. NHAI/12016/5/2014-RO-GNR/Tech/ Surat-Hazira / Vol.-52/D-1585, dated: 09.10.2020

(ii) IE letter no. MSV-AV/NH53/SHP/2020/383, dated: 25.05.2020

(iii) IE letter no. MSV-AV/NH53/SHP/2020/171, dated: 13.01.2020

(iv) Concessionaire letter no. SH-PO/NH-6/2019-20/15919, dated: 20.12.2019

Dear Sir,

As per Concession Agreement of clause 14.2 the Completion Certificate in the form set forth in schedule J, is to be issued by IE.

Concessionaire vide letter no. SH-PO/NH-6/2019-20/15919, dated: 20.12.2019 has requested to issue project completion certificate under clause 14.4.2.

IE vide letter no. MSV-AV/NH53/SHP/2020/171, dated: 13.01.2020 and further IE letter no. MSV-AV /NH53/SHP/2020/383, dated: 25.05.2020 has submitted the comments and recommendation under clause 14.4.2 To PD for issuing completion certificate in accordance of NHA1 circular no.75902 dated: 21.12.2015.

In pursuant to NHAI circular no.75902 dated 21.12.2015, Regional Officer NHAI Gandhinagar, vide letter no. NHAI/12016/5/2014-RO-GNR/Tech/ Surat-Hazira / Vol.-52/D-1585, dated: 09.10.2020, concurred to issue Project Completion Certificate (CC) by IE.

Therefore under CA clause 14.2 IE is pleased to issue the Project Completion Certificate of Project Four laning from Km. 103.100 to Km.29.100 of the Gujarat/ Maharashtra Border-Surat-Hazira Port Section in the State of Gujarat (103.100 to Km.29.100) of National Highway No. NH-6 ("The Project Highway") (New Chainage 0+000 to 131.500 of NH-53) on design, build, finance, operate & transfer (DBFOT) basis Project under NHDP Phase III with effective dated from 29.03.2018.

(Pushkar Malik)
Independent Engineer
For MSV International Inc.
In Association with Avanza
Engineering Pvt. Ltd.

**Encl. Completion Certificate** 

CC: 1. R.O. and CGM(T) NHAI Gandhinagar

2. Project Director, NHAI, PIU, Surat with a copy of Completion Certificate for Information Please.



# MSV INTERNATIONAL INC.

In Association with

# AVANZA ENGINEERING PVT. LTD.

MSV International, Inc.

H.No. A3-212, Raj Abhishek City, Homes, Near Sachin Flyover, Sachin Surat, Gujarat-394230 Email: msv.surat@gmail.com

CIN: F04214

IE Services during O&M of 4 laning of Gujarat/Maharashtra Border -Surat-Hazira Port Section of NH53 in State of Gujarat on BOT basis Project under NHDP Phase III

#### COMPLETION CERTIFICATE

- 1. I, Pushkar Malik, acting as Independent Engineer, under and in accordance with the Concession Agreement dated 09.05.2009, for Four laning from Km. 103.100 to Km.29.100 of the Gujarat/Maharashtra Border- Surat- Hazira Port Section in the State of Gujarat of National Highway No. 53 (Old NH-6) on design, build, finance, operate & transfer (DBFOT) basis through SOMA ISOLUX SURAT HAZIRA TOLLWAY PRIVATE LIMITED, hereby certify that the Tests specified in Article14 and Schedule 1 of the Agreement have been successfully undertaken to determine compliance of the Project Highway with the provisions of the Agreement, and I am satisfied that the Project Highway can be safety and reliable placed in commercial service of the user thereof.
- It is certified that, in terms of the aforesaid Agreement, all works forming part of (Four Laning) have been completed, and the Project Highway is hereby declared fit for entry into commercial operation on this the Date 29 March 2018.

Teamleader go NH-53

Signed, sealed and delivered For and behalf of

(Pushkar Malik)
(Independent Engineer)
MSV International Inc.
In Association with AVANZA
Engineering Pvt. Ltd.

Annual Maintenance programe 2019-20.



SURAT HAZIRA NH-6 TOLLWAY PRIVATE LIMITED

(Formerly known as Soma Isolux Surat Hazira Tollway Private Limited)

Ref: SH-PO/NH-6/2029-21/16381

30th September, 2020

To Team Leader, M/s. MSV International Inc. in association with Avanza Engineering Pvt. Ltd., A-3/212, Raj Abhishek City Home, Palsana Sachin Road, Surat - 394 210.

#### Kind Attn. Sh. Jagdish Singh

Sub: Four laning of Gujarat/ Maharashtra Border - Surat - Hazira Port Section of NH-6 (Approx. length 131.500Km) in the State of Gujarat under NHDP Phase III through Public - Private/ Public Sector Partnership (PPP) on Design, Build, Finance, Operate and Transfer ("DBFOT") basis: Submission of Maintenance Programme for the Financial Year 2020-21. - Reg.

Ref: IE letter No. MSV-AV/NH53/SHP/ O&M/2020/533

Dated: 08/09/2020.

Dear Sir,

This is in reference to above captioned subject and letters of IE, we are herewith submitting the Maintenance Programme for the Financial Year 2020-21.

This submission is for your information and needful.

Yours faithfully.

For Surat-Hazira NH-6 Tollway Pvt Ltd.

Deputy General Manager

Encl: As above.

#### Copy to

Sh. Sudhir A. Singh, GM (T) & Project Director, NHAI – PIU, Surat, for information please.

Gos p.m

Encl: As above.

Received Received

FOR NHAI PIU-Surat(Expressway

**REGD. OFFICE** 

5th Floor, Block-2 Vatika Business Park, Sohna Road, Sector - 49, Gurgaon - 122002, Harvana - India Phone: 0124-4510800 Fax: 0124-4510810

Email: info@roadis.co.in Website: www.roadis.com CIN No.: U45206HR2009PTC039059 **PROJECT OFFICE** 

Agam Shopping World, C-201 to 204 & 206 to 208, 2nd Floor, Opp. Nandini Apt., Near Agarwal Vidya Vihar, Vesu, Surat, Gujarat - 395007 Tel. 0261-2971435



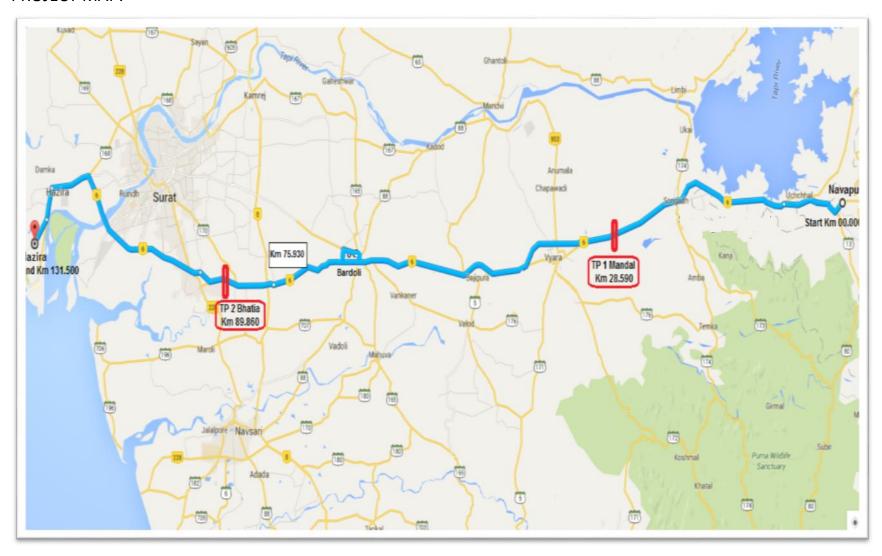
# MAINTENANCE PROGRAMME 2020 – 2021

Client: National Highways Authority of India

Concessionaire: Surat Hazira NH 6 Tollway Pvt Ltd

Independent Consultant: MSV International Inc. in association with Avanza Engineering Pvt. Ltd.

## PROJECT MAP:





## **TABLE OF CONTENTS**

#### **PROJECT KEY PLAN**

#### 1.0 EXECUTIVE SUMMARY

- 1.1 Background and Scope of the Project.
- 1.2 Toll Collections.

#### 2.0 OPERATION AND MAINTENANCE PROGRAMME

#### 3.0 Inspection Procedures

- 3.1 Degree of Inspection
- 3.2 Objective and Frequency of Inspection

#### 4.0 Project Preview

#### 5.0 STAFF MOBILIZATION BY INDEPENDENT CONSULTANT

#### 6.0 STAFF MOBILIZATION BY CONCESSIONAIRE.

#### 7.0 HIGHWAY SAFETY MEASURES.

- 7.1 Emergency Service Locations along the Project Highway
- 7.2 Brief description of Highway Safety Measures
- 8.0 Operation & Maintenance Programme for Routine Maintenance work for the Year 2020-2021.



#### 1.0 Executive Summary

### 1.1 Background and Scope of the Project:

The NHAI has assigned the Concession Agreement for Four Laning of Gujarat/Maharashtra Border – Surat – Hazira Port Section of NH-6 (Approx. Previously Length 132.913 Kms. & Presently 131.500 Kms.) in the State of Gujarat under NHDP Phase III through Public-Private/ Public Sector Partnership (PPP) on Design, Build, Finance, Operate and Transfer ("DBFOT") basis to Surat Hazira NH-6 Tollway Private Ltd. ("The Concessionaire"). The Concession Agreement was signed on 18th May 2009.

The main objective of the project includes developing the Two Lane Carriageway to Four Lane Dual Carriageway configuration including strengthening of existing Two Lane Gujarat/ Maharashtra Border – Surat – Hazira Port Section of NH-6 (Approx. Previously Length 132.913 Kms. & Presently 131.500 Kms.) from Km. 0+000 (Maharashtra/ Gujarat Border Existing Km. 103+000) to Km. 131+500 near Hazira.

#### **Toll Plazas:**

• Location at Km. 28+500

Influence Length - 69 Kms. **{**52.47+ 5.3 (Bajipura) + 11.23 (Vyara)**}** 

• Location at Km. 89+850

Influence Length - 62.5 Kms. {61.34+ 1.16 Sachin Flyover cum ROB)}

#### Structures:

Major Bridge : 6 Nos.
Flyovers : 9 Nos.
Railway Over Bridge : 6 Nos.
Minor Bridges : 32 Nos.
VUPs : 22 Nos.
PUPs : 11 Nos.
Culverts : 259 Nos.

#### **Bypasses:**

Vyara Bypass : 11.23 Kms.
Bajipura Bypass : 5.3 Kms.
Bardoli Bypass (Km. 69+111 – Km. 74+094) : 4.983 Kms.
Ena Bypass (Km. 76+276 – Km. 77+770) : 1.494 Kms.
Realignment (Km. 61+940 – Km. 62+980) : 1.04 Kms.

1.2. Toll collections: Toll is collected by the M/s. Surat Hazira NH-6 Tollway Pvt. Ltd.



#### 2.0 Operation and Maintenance Program

#### Requirement and Scope of Operation & Maintenance:

- I. Road Maintenance: This includes Routine Maintenance, Periodic Maintenance, Preventive Maintenance and Special Repairs.
- **II. Traffic Maintenance:** This includes Incident Management, Hazard Response, Road Patrols and Surveillance.
- III. Safety Management: This includes Accident Prevention, After Care, User Behavior, Education, Enforcement, Data Collection and Analysis.
- IV. Facility Management: This includes Periodic Inspection, Routine Maintenance, Rehabilitation etc.
- V. Road Asset Management: This includes Management of Access, Encroachment and Ribbon Development.
- VI. Other Maintenance Activities: This includes maintenance of Traffic Signs, Highway Lighting System, Highway Landscape, Highway Traffic Management System, User Fee Collection at Plaza and other Road Furniture.

#### Maintenance Program:

The Maintenance Methodology and Maintenance Program will guide the O&M Team to undertake the Routine & Periodic maintenance works of the Project Facilities. This program is the basic indicator of the intended works by the O&M Team over an accounting Year 2020-21.

The maintenance of road consists of routine and periodic maintenance.

#### **Routine Maintenance:**

Routine Maintenance of Road includes following activities:

- Maintenance of Pavement
- Maintenance of Turfed Areas and Landscaping
- Maintenance of Drainage System
- General Cleaning including CD Structures

#### 3.0 Inspection Procedures

All the Project Facilities are inspected as per a predetermined frequency to assess their performance. The inspections will help in planning out the periodic maintenance requirements of the Project Highway.

#### 3.1 Degree of Inspection

#### a) Visual Inspection:

Visual Inspections are broad general inspections carried out quickly and frequently by Highway/ Bridge Maintenance Engineers having knowledge of Road & Structures. The purpose of this visual inspection is to report the obstacles to traffic and fairly obvious deficiencies, which could lead to accidents or maintenance problems. Such inspections should be frequent. The visual inspection may be carried out by visual assessment with careful observation of the specific object/ item of the Project Highway for identification and for quantification of the deficiencies or damages of the Project Highway.

The Highway Patrol Team moving on the total Project Highway will be constantly doing visual inspection of any visible defects like Potholes, Subsidence etc. and will be reported to concerned party.

#### b) Close Inspection

The close inspection may be visual and/ or supplemented by standard instrumental aids for assessment of defects/ deficiencies of Project Highway with careful observation of specific element(s). The close inspection may be daily/ periodic but it is more intensive and would require detailed examination of elements of the Project Highway. It should cover all the aspects of the specific element of Project Highway against a checklist. The close inspections are to be carried out quite frequently depending upon the nature of structure of Project Highway. This inspection is to be carried out by the Highway/ Bridge Engineer having good knowledge of road structures with theoretical background to analyze the nature and extent of defects/ deficiencies, suggest suitable remedial measures to rectify/ remedy them and quantify repair work.

#### c) Thorough Inspection

A thorough inspection is comprehensive and detailed for assessment of defects/ deficiencies of the Project Highway by visual inspection or with aid of standard equipment and non-destructive testing where necessary. Such an inspection is to be carried out on the basis of comprehensive checklist of items related to the materials, condition and situation of the structure etc. The checklist is to be prepared meticulously well in advance of inspection. The thorough inspection should be undertaken during the most critical weather condition, which is generally rainy season in India. During rainy season the Road/ Bridge structures are under severe condition, thereby the damage and deficiencies of the Project Highway are more pronounced. The inspection carried out during the said period offer the most critical evaluation of the performance of the structure.

The thorough inspections are all the more important for Bridges, Culverts and Drainage structures as well as Road Pavements during adverse weather condition of Monsoon Period.

Besides being a qualified Highway/ Bridge Engineer; the Inspection Engineer must be familiar with design and construction features of the Highway/ Bridges to be inspected so that the condition can be properly and accurately assessed for a meaningful report and quantification of repair works.

#### d) Frequency of Inspections

The inspection frequency of various items of Project Highway has been indicated in the Table – 1 hereunder. The frequency of inspection can be suitably revised in consultation with the Independent Engineer if the emergencies so warrant. Besides planning the preventive and routine maintenance, the system shall also carry out inspection before and after monsoon.

#### 3.2 Objective and Frequency of Inspection

(The objective and minimum frequency of inspections under normal circumstances shall be as under. If some exigencies arise, the interval of inspection may be reduced).

#### Inspection Frequency (Table - 1)

mapecular requeries (rubic – r)											
SI. No.	Nature of Defect/ Deficiency	Inspection Frequency									
		Daily	Weekly	Fort- nightly	Monthly	Half Yearly					
ROADS											
(a) Hard/ Earth Shoulders, Side Slopes, Drains and Culverts											
(i)	Slope of Camber/ Cross Fall		✓								
(ii)	Edge Drop at Shoulders			✓							
(iii)	Side (Embankment) Slopes			✓							
(iv)	Rain Cuts/ Gullies in Slope				<b>✓</b>						
(v)	Damage to or Silting of Culverts and Side Drains during and immediately preceding the Rainy Season			<b>√</b>							
(vi)	Desilting of Drains in Urban/ Semi- urban Areas		✓								
(b) Carriageway and Paved Shoulders											
(i)	Breach or Blockade	<b>✓</b>									
(ii)	Roughness Value exceeding 2,500 mm in a stretch of 1 Km (as measured by a standardised Roughometer/ Bump Integrator)					✓					
(iii)	Pot Holes		✓								

(iv)	Cracking of Road Surface		✓					
(v)	Rutting of Bitumen Surface / Carriageway Surface.			✓				
(vi)	Bleeding/ Skidding of Bitumen Surface		✓					
(vii)	Ravelling/ Stripping of Bitumen		✓					
(viii)	Damage to Pavement Edges		✓					
(ix)	Removal of Debris	✓						
(c) Road Side Furniture including Road Signs and Pavement Marking								
(i)	Damage to shape or position; poor visibility or loss of Retro Reflectivity		✓					
(d) Street Lighting and Telecom (ATMS)								
(i)	Any major failure of the system	✓						
(ii)	Faults and minor failures	✓						
(e) Trees and Plantation								
(i)	Obstruction in a minimum head-room of 5mtr. above Carriageway or obstruction in visibility of Road Signs	<b>√</b>						
(ii)	Deterioration in health of Trees and Bushes	✓						
(iii)	Replacement of Trees and Bushes				✓			
(iv)	Removal of Vegetation affecting Sight Line and Road Structures	✓						
(f) Toll Plaza[s]								
(i)	Failure of Toll Collection Equipment or Lighting	✓						
(ii)	Damage to Toll Plaza	✓						
(g) Other Project Facilities and Approach Roads								
(i)	Damage or Deterioration in Approach Roads, [Pedestrian Facilities, Truck Lay bays, Bus Bays, Bus Shelters, Cattle Crossings, Traffic Aid Posts, Medical Aid Posts and other works]	<b>√</b>						
DKID	71-47							

(a) S	uperstructure of Bridges					
(i)	Cracks		✓			
(ii)	Spalling/ Scaling		✓			
(b) F	oundations of Bridges			<u>.</u>		
(i)	Scouring and/ or Cavitation		✓			
(c) Pi	ers, Abutments, Return Walls and Wing	Walls of E	Bridges			
(i)	Cracks and Damages including Settlement and Tilting		<b>✓</b>			
(d) B	earings (Metallic) of Bridges					
(i)	Deformation		✓			
(e) Jo	pints in Bridges			,	1	
(i)	Loosening and Malfunctioning of Joints		✓			
(f) O	ther items relating to bridges		1	1	l	
(i)	Deforming of Pads in Elastomeric Bearings		<b>✓</b>			
(ii)	Gathering of Dirt in Bearings and Joints or Clogging of Spouts, Weep Holes and Vent Holes		<b>√</b>			
(iii)	Damage or Deterioration in Parapets and Handrails		<b>✓</b>			
(iv)	Rain Cuts or Erosion of Banks of the Side Slopes of Approaches			✓		
(v)	Damage to Wearing Coat			<b>✓</b>		
(vi)	Damage or Deterioration in Approach Slabs, Pitching, Apron, Toes, Floor or Guide Bunds	✓				
(vii)	Growth of Vegetation affecting the Structure or obstructing the Waterway		<b>✓</b>			
(g) A	rrangements and Procedures for carryin	g out safe	ty related m	neasures:	l	
A	s and when required as per the finalized me	ethodology	for any spec	cific activity/	rectificatio	n work.

#### 4.0 Project Preview

Employer : National Highways Authority of India (NHAI).

Concessionaire : M/s Surat Hazira NH 6 Tollway Pvt. Ltd.

Independent Consultant : M/S. MSV International Inc. in association

with Avanza Engineering Pvt. Ltd.



Appointed Date : 30.03.2010
Scheduled Completion Date: 24<sup>th</sup> September 2012
PCOD I Date : 19<sup>th</sup> August 2015
PCOD II Date : 05<sup>th</sup> October 2016 PCOD III Date 29th March 2018

19 years including construction Concession period :

#### 5.0 Staff Mobilization by Independent Consultant

Technical Staff of O&M Consultant

SI. No.	Name of the Employee	Designation
1	Mr. Jagdish Singh	Team Leader
2	Mr. Sitaram Sharma	Road Safety Expert
3	Mr. Sanjay Mathur	Highway Maintenance Engg.
4	Mr. Ramchandra Agarwal	Financial Expert
5	Mr. Ramakant Chomal	Horticulture Expert
6	Mr. Prem Prakash Sharma	Quantity Surveyor
7	Mr. Rishab Jain	CAD Expert
8	Mr. Nikhilesh Saini	Asst. Highway Maintenance Engg.
9	Mr. Abhisekh Singh	Office Manager
10	Mr. Raghuvir Singh	Computer Operator
11	Mr. Arjun Singh Rawat	Technical Supervisor
12	Mr. Kamlesh Patel	Office Boy

#### 6.0 Staff Mobilization by the Concessionaire

SI. No.	Name of the Employee	Designation
1	Mr. Ajay Soni	Dy. General Manager
2	Mr. Adesh Saxena	Sr. Quantity Surveyor
3	Mr. Deepak Kumar Raut	Sr. Executive to Dy. GM
4	Mr. Pintu Ramprasad Gupta	Sr. Executive - MIS
5	Mr. Aditya Lothe	Manager Contracts
6	Mr. Manoj Patidar	Asst. Manager Structure
7	Mr. Burhan Mahdi	Asst. Manager Highway
8	Mr. Ankit Goel	Sr. Manager - Finance &
9	Mr. Vikramjeet Singh	Manager – Toll System
10	Mr. Tribhuwan Chandra	Manager HR/Admin
11	Mr. Sunil Kumar Srivastava	Officer - Admin
12	Mr. Dibyalok Bisoi	Asst. Manager - Procurement
13	Mr. Bhairav Bharatbhai Modi	MIS Executive
14	Mr. Amarjeet Singh Kushwaha	Sr. Executive - Toll Audit
15	Mr. Pramod Bante	Engineer HSE
16	Mr. Rakesh Hirabhai Mistry	Engineer-IT
17	Mr. Devendra Sidhapara	Exe. Accounts/ Fin.
18	Mr. Sandip Hiralal Sharma	Sr. Executive – Toll Audit

#### 7.0 **Highway Safety Measures**



# 7.1 Emergency Service Locations Along the Project Highway Major Hospital

SI. No.	Hospitals	Contact Number
1	New Aadarsh Hospital	
	Plot no 53, Ichhapore Ind co-op. soc, Ichchapore,	(0261) 2840651
	Hazira road, Surat, Gujarat 394510	
2	Samarpan Multispecialty Hospital	
	Center Point Building, Surat Navsari Road, Gujrat	(0261) 2391663
	Housing Board, Surat, Gujarat 394230	
3	Om Shivam Multi Specialty Hospital	
	SAI Park & Complex, Near Sachin Post Office,	(0261) 2390290
	Station Road, Sachin, Surat – 394230	
4	Satyagrah Hospital Bardoli	
	Station Rd, Talavadi, Bardoli, Gujarat 394601	(02622) 220260
5	Sarvajanik Hospital	
	Palsana	(0261) 2400058
6	Shree Sardar Smarak Hospital – Bardoli	
	Sardar Baug, Station Road, Bardoli,	(0262) 2220089
	Gujarat – 394601	
7	Sanjeevani Multi Specialty Hospital	
	2 <sup>nd</sup> Floor, Western Business Park, Opposite, S D	(0261) 2215777
	Jain School, Vesu, Surat – 395007	
8	METAS: ADVENTIST MISSION HOSPITAL PO	
	BOX-24, ATHWA LINES, RING-ROAD, Surat,	(0261) 2667591/95
	Gujarat – 395001	
9	Referral Hospital & CHC	
	Valod	(02625) 220049
10	General Hospital	
	Vyara	(02626) 220053
11	Rhythm Multispeciality Hospital	(00000) 00000
	RM Thariwal Township, Dhulia Road, Kanpura,	(02626) 222833
10	Vyara, Gujarat 394650	
12	Janak Smarak Hospital	(00000) 000404
	Vyara	(02626) 220181
10	Poterral Hagnital ® CUC	
13	Referral Hospital & CHC	(02624) 222060
	Songadh	(02624) 222060
14	Dhiraj Hospital	
14	Songadh	(02624) 221536
	Congacin	()



15	Referral Hospital & CHC	
	Uchhal	(02628) 231201

#### **Police Stations**

SI. No.	Police Stations	Contact Number (Code)
1	Hazira Police Station	(0261) 2912711
2	Icchapore police stations	(0261) 2860197
3	Dummas Police Station	(0261) 2251010
4	Khatodra Police station	(0261) 2633800
5	Umra Police station	(0261) 2669428
6	Pandesara Police station	(0261) 2890200
7	Sachin GIDC Police station	(0261) 2399200
8	Sachin Police Station	(0261) 2392258, (0261) 2395734
9	Palsana Police station	(02622) 264227
10	Bardoli Police station	(02622) 220168
11	Valod Police station	(02625) 220048
12	Vyara Police station	(02625) 220033
13	Kakrapar Police station	(02626) 234222
14	Songadh Police Station	(02624) 222033
15	Ucchal Police station	(02628) 231112

#### **Fire Stations**

SI. No.	Fire Stations	Contact Number
1	WIRELESS CONTROL ROOM – Surat	(0261) 2414139 - 95/ 96. +91 97243 46022
2	HEAD QUARTER – Surat	(0261) 2400172 O-EXT- 229, R-EXT- 226
3	GHANCHI SHERI – Surat	(0261) 2400173
4	Fire - Bardoli	(02622) 220101
5	Fire – Vyara	(02626) 220101
6	Fire - Songadh	(02624) 233249

#### 7.2 Brief Description of Highway Safety Measures

#### 1. Metal Beam Crash Barrier

The Metal Beam Crash Barrier has been provided in the locations where the height of Embankment is more than 3mtr. in the Project Highway along the Shoulders. In the Median Opening locations where the Median width taper from 4.5mtr. to 1.5mtr., W-Beam has been installed on both sides of the Crash Barrier in the Central Median and it has been installed on only one side in the Shoulder portion.

#### 2. Sign Boards

Various types of Sign Boards such as Mandatory/ Regularity, Warning/ Cautionary and Information/ Destination Boards have been erected in Single Post, Double Post and Cantilever and Gantry types. Hazard Markers have been provided at all Traffic Islands in Median Openings, Truck lay Bays, Minor Bridges and Box Culverts. Route Markers are erected at all Junctions to guide the Road Users to know the direction of all NH roads.

#### 3. Pedestrian Guard Rails

These are provided at all Bus Bay locations & Service Roads to safe guard and organize the Pedestrian movement.

#### 4. Traffic Blinker Signal (LED)

Traffic Blinker Signals are provided at Median Openings having considerable Traffic and Pedestrian movement. This signal warns the Road User about the Median Opening so that they will be alert while crossing that location.

#### 5. Delineators

These are provided at all Horizontal Curves of radius up to 1000mtrs. The spacing of the Delineators varies with the radius of the Circular Curve. These are all used to guide the Road Users to indicate the edge of the roadway. These are provided at all the Horizontal Curves, Pedestrian Crossings and approaching side of all Intersections. White color Studs are provided along edges of all lanes on the approaching side of all cross road to indicate the extent of the Carriageway during night time. Red color studs have been provided at Pedestrian crossing locations giving warning about Median Openings, Bus Stops and Truck Lay bays.

#### 6. Highway Lighting

High Mast lighting is provided at all Major Junctions. Solar Lighting



arrangement are made at all interactions.

#### 7. Highway Traffic Management System

CCTV's have been erected at various locations in the Project Highway to identify the Incident/ Accident occurred if any so that the information can be communicated to the emergency response team. The ECB's have been provided throughout the Project Highway at an interval of 2 Kms. along the Highway for both directions of travel. The ATCC are located two locations to account to count and classify the vehicles.

#### 8. Speed Breakers

Speed Breakers have been provided to regulate the speed of vehicle before entering to the Main Carriageway from all cross roads and in front of Toll Plaza in order to prevent the accidents.

#### 9. Pavement Marking

Pavement marking has been done on the entire Main Carriageway and Service Road. Different type of Pavement markings has been provided at the Intersections, Median Openings, Pedestrian Crossings, Bus Stops, Truck Lay Bays and Merging & Diverging locations.

# 8.0 Operation & Maintenance Programme for Routine Maintenance work for the year 2020-2021:

Routine	e Maintenance					Мо	nth Wise	Progra	am				
Item	Description	Apr	Apr May Jun July Aug Sept Oct Nov Dec Jan Feb Mar								Remarks		
	Stretches: Km. 0+000 to Km. 131+500												
1. Road	1. Road Works												
1	Cleaning vegetation, Rubbish and Debris on Road												
1.1	Surface					Mini	mum on	ce a mo	onth				
1.2	Earth Work in restoring rain cuts and eroded portion of embankment slopes		As and when required										
1.4	Repair of flexible pavement												
1.4.1	Pot Hole filling					As a	and whe	n requii	red				
1.4.2	Crack Sealing					As a	and whe	n requii	red				
1.4.3	Treatment of Raveling					As a	and whe	n requii	red				
1.4.4	Treatment of Hungry Areas					As a	and whe	n requii	red				
1.4.5	Repair of damaged Edge		As and when required										
1.4.6	Surface Roughness Test												
1.4.7	Shoulder Maintenance	As and when required											
2. Bridg	e and Culvert Works												

Routine		Month Wise Program												
Item	Description	Apr May Jun July Aug Sept Oct Nov Dec Jan Feb Mar									Mar	Remarks		
2.1	Clearing Silt Vegetation, Rubbish and Debris from the Bridge and Deck Drainage System	Apr	ividy	Juli	July	Aug	зері	- Juli	INOV	Dec	Jail	reb	ividi	
а	ROB's/ Flyovers/ VUP/ PUPs													
b	Major/ Minor bridges													
С	Box Culverts													
d	Pipe Culverts													
2.2	Earthwork in restoring Rain- cuts & eroded portion of Embankment Slopes					As a	and whei	n requir	ed					
2.3	Slope Protection and Bed Protection													
3	Repair of Railing/ Parapet/ Crasl	n barrie	rs											
3.1	Replacement					As a	and wher	n requir	ed					
4	Painting Works													
4.1	RCC Crash Barrier													
4.2	Traffic Sign Boards/ Pole													
4.3	Painting of Gantry Post/ Name Board Post													
5	Repair of Footpath Slabs and Ke	rbs												
5.1	Concrete Works					As a	and wher	n requir	ed					
5.2	Replacement of Covers					As a	and wher	n requir	ed					
5.3	Replacement of Kerbs		As and when required											
6	Bearing													
6.1	Cleaning of Bearings					As a	and wher	n requir	ed					
6.2	Replacement of damaged Bearings					As a	and whei	n requir	ed					
6.3	Repair of Wearing Course					As a	and wher	n requir	ed					
7	Repair of Concrete works in Sup	erstruct	ure, Fοι	ındatio	n, Retair	ning Wa	ll, Wing	Wall, H	ead Wa	ll etc.				
7.1	Repairs of Cracks					As a	and wher	n requir	ed					
7.2	Repairs of Honeycomb, Spalling and Soft or Spongy Concrete Surface					As a	and whei	n requir	ed					
7.3	Repair of corroded reinforcement					As a	and whei	n requir	ed					
8. Drain	nage and Protection Works													
8.1	Lined, Unlined Drains & Median	Drains												
8.1.1	Cleaning/ Reshape/ Deepening of Unlined Drains													
8.1.2	Cleaning of Lined & Median Drains													
8.1.3	Repair of Lined & Median Drains					As a	and whei	n requir	ed					
8.2	Catchpit													
8.2.1	Clearing & Cleaning of Rain Harvesting Pit	As and when required												
8.3	Chute drain													
8.3.1	Cleaning & clearing of Drain													
8.3.2	Repair of Chute Drain, Stone Bedding or Cut-off Wall					As a	and whei	n requir	ed					
8.3.3	Replacement of eroded soil at		As and when required											

Routine	Maintenance	Month Wise Program											
Item	Description	Apr	Apr May Jun July Aug Sept Oct Nov Dec Jan Feb Mar									Remarks	
	out fall												
8.4	Stone Pitching including replacing missing stones and replacing eroded soil below the same					As a	and whe	n requir	ed				
9	Cleaning												
9.1	МВСВ			ļ	As and w	hen req	uired exc	cept in I	monsoo	n perio	d		
9.2	Sign Boards			,	As and w	hen req	uired exc	cept in I	monsoo	n perio	d		
9.3	Bus Stops			,	As and w	hen req	uired exc	cept in I	monsoo	n perio	d		
9.4	KM/ Hectometer Stones, Delineators			,	As and w	hen req	uired exc	cept in I	monsoo	n perio	d		
9.5	Major Junctions			,	As and w	hen req	uired exc	cept in I	monsoo	n perio	d		
9.6	Expansion Joint			ļ	As and w	hen req	uired exc	cept in I	monsoo	n perio	d		
10. Mis	cellaneous Works												
10.1	Traffic Signs					As	and whe	n requir	ed				
10.2	Road Markings		As and when required except in monsoon period										
10.3	Road Studs		As and when required except in monsoon period										
10.4	Metal Beam Crash Barrier					As	and whe	n requir	ed				
10.5	Delineators/ Guard Posts					As	and whe	n requir	ed				
10.6	Pedestrian Guard Rail					As	and whe	n requir	ed				
10.7	Maintenance of Toll Plaza					Asa	and whe	n requir	ed				
10.8	Maintenance of Avenue Plantation & Median Plants					Will be	maintai	ned reg	ularly				
10.9	Watering for Avenue Plantation & Median Plants					Will b	e done o	n daily	basis				
10.10	Replantation of Median & ROW Plants in place of the Dead Plants					Asa	and whe	n requir	ed				
10.11	Maintenance of Bus Bays		Will be maintained regularly										
10.12	Maintenance of Truck Lay Bays		Will be maintained regularly										
10.13	Highway Lighting Maintenance		Will be maintained regularly										
10.14	Encroachment		As and when required										
10.15	Incident Management & Safety					Will be	e maintai	ned reg	ularly				

Annexure-III Descoping Letter.



### MSV INTERNATIONAL INC.

In Association with

### AVANZA ENGINEERING PVT. LTD.

MSV International, Inc.

ILNo. A3-212, Raj Abhishek CIPY, Homes, Near Sachin Hyover, Sachin Surat, Gujarat-394230

Email: msv.surat@gmail.com CIN: F04214

II. Services during O&M of 4 laning of Guiarat/Maharashtra Border -Surat-Hazira Port Section of Albert Physics Squarat on BOT basis Project under NHDP Phase III

No.: MSV-AV/NH53/SHP//2020/290

To,
The Project Director
PIU-Surat (Expressway)
National Highway Authority of India,
301-304, VIP Street
Opp. Roongta Arcade
VIP Road, Vesu,
Surat-395007



Date-27-02-2020

Sub: Four laning of Gujarat/Maharashtra Border Surat – Hazira Port Section of NH-53 (old NH-6) in the

State of Gujarat on BOT basis Project under NHDP Phase III.(Operation & Maintenance period).

S.H.: Regarding De-scoping estimate of balance work.

Ref.: (i) Your office letter no. NHAI/PIU-Surat (Expressway) 41-IE/2019/5342 Dated: 28.08.2019.

(ii) RO, NHAI, Gandhinagar office email dated 27.08.2019 enclosing copy of NHAI, HQ, New Delhi office letter no. 139943 dated 26.08.2019.

(iii) IE Letter No. FPI/SH/NH-6/NHAI/2885 Dated 30.04.2019.

Dear Sir,

With reference to above captioned subject and NHAI letter cited at Sl. No. (i) Where IE was asked to review design quantities and GFC drawings for the works proposed for de-scoping.

In this context, IE has reviewed all the works subjected for de-scoping based on the available details/drawings.

This is to inform that proposal submitted by The then IE vide letter no. 2885 dated 30.04.2019 is also reviewed and found in order therefore can be consider further for de-scoped works Estimate. The proposed amount shall be as under:

(i) Cost of item where land was made available – 23.11 Cr.

(ii) Cost of item where land was hindered – 7.57 Cr.

Thanking you

Team Leader

MSV International Inc.

In Association with AVANZA Engineering Pvt, Ltd.

Encl. As available Drawing and Estimate

Copy to: Sh. Ajay Kumar Soni (DGM), Surat - Hazira NII-53 Toll Pvt. Ltd. for information

### भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय) परियोजना कार्यान्वयन इकाई — सुरत (एक्सप्रेसवे)

३०१ — ३०४, वीआईपी हाई स्ट्रीट, रुंगटा आर्केंड के सामने, वीआईपी रोड, वेसु, सुरत — ३९५००७

#### NATIONAL HIGHWAYS AUTHORITY OF INDIA

(Ministry of Road Transport & Highways)

Project Implementation Unit-Surat (Expressway) 301-304, VIP High Street, Opp. Roongta Arcade, VIP Roed, Vesu, Surat-395007.

301–304, VIP High Street, Opp. Roongta Arcade, VIP Road, Vesu, Surat-395007. दुरुगर/Phone :(0261) 2218168/69 • क्रिस/E-mail: plusurat@nhai.org • plusurat1@gmail.com

Date: 28:08:2019

To,

BHARATMALA

ROAD TO PROSPERITY

Team Leader,

M/s. Frischman Prabhu

206, Block A-2, Raj Abhishek City Homes, Nr. Sachin Octroi Naka, Sachin Palsana Road.,

NHAI/PIU-Surat (Expressway)/41-IE/2019/

Surat - 394 210.

Sub: Four laning of Gujarat/Maharashtra Border - Surat - Hazira Port Section of NH-6

(approx. length 131.500km) in the State of Gujarat under NHDP Phase III.

S.H.: De-scoping of balance work and completion of project regarding.

Ref.: (i)Your office letter no. 2885 dated 30.04.2019.

(ii)RO, NHAI, Gandhinagar office email dated 27.08.2019 enclosing copy of NHAI, HQ,

New Delhi office letter no. 139943 dated 26.08.2019.

Sir,

Please refer your office letter no. 2885 dated 30.04.2019 on the subject mentioned above recommending therewith "A proposal for de-scoping of works which have not been executed either due to defaults of Concessionaire although land was made available or due to non-availability of hindrance free land, with financial implication of Rs. 23.11 Cr. & Rs. 7.57 Cr. respectively.

2.As recommended by you, Competent Authority has accorded approval to de-scope the above balance work to facilitate closure of project after recovery of the 120% of value of those items which have not been executed due to defaults of Concessionaire & 80% of value of those items where work have not been started by the Concessionaire due to non-availability of hindrance free land. These de-scoped items can be executed through open tender when land is made available.

3.In this context, you are requested to ensure the following:

(i) CoS amount (1.2 COS + 0.8 COS) may be got verified from GFC drawings.

(ii)NHAI money is to be recovered, if necessary, from Escrow account.

(iii)Based on design quantities & GFC drawings, you shall submit the tender documents to this office for approval within 45 days.

(iv) The availability of land be ensured by November, 2019.

4. Competent Authority has also directed to expedite the CoS proposal as discussed in EC in its meeting held on 13.03.2019 which was conveyed vide HQ letter no. 132494 dated 25.03.2019".

In view of the above, it is requested to do the needful & submit the compliance of the para-3 for taking further necessary action.

Thanking you,

THE STOLLWAY THE STOLLWAY THE STOLL TO PER S

Yours Singerely,

[Shashi Brishan]
GM (T) & Project Director,
NHAI, PIU-Surat (Expressway)

Cont...2...

#### Copy to:

- (1) Shri A.K. Swami, Manager (T), PIU-Surat (Expressway), NHAI for information and suitable necessary action.
- (2) Shri Ajay Kumar Soni, DGM, Ws. Surat Hazira NH-6 Tollway Pvt. Ltd, Surat for information and suitable necessary action.



### भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(गड़क परिवरन और राजधार्य मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport and Highways) जी-5 एवं ६, सेक्टर-10, द्वारका, नई दिल्ली-110075 G-5 & 6, Sector-10, Dwarka, New Delhi-110075 दूरभाष / Phone : 91 11-25074100/25074200 फैक्स / Fax : 91-11-25093507 / 25093544

NHAI/BOT/DBF@/II/11012/58/19/2006 139943

26.08.2019

To.

CGM (Tech) Cum Regional Officer Regional Office, Gandhingar National Highways Authority of India 235 - 239, 2<sup>nd</sup> Floor, Supermall - 01, Above -HDFC Finance, Infocity, Gandhinagar - 382 007, GUJARAT

Sub: Four laning of Gujarat/Maharashtra Border Surat Hazira Port Section of NH-6 (Approx Length 132.913 km) in the State of Gujarat under NHDP Phase III through PPP on BOT (Toll) basis - De-scoping of balance work and completion of project -Reg.

Ref: Your office letter no. D-4155 dated 10.05.2019

Sir.

Reference is made to letter cited above recommending thereby a proposal for de-scoping of works which have not been executed either due to defaults of Concessionaire although land was made available or due to non-availability of hindrance free land, with financial implication of Rs.23.11 Cr. and Rs.7.57 Cr. respectively.

- 2. As recommended by you, Competent Authority has accorded approval to de-scope the above balance work to facilitate closure of project after recovery of the 120% of value of those items which have not been executed due to defaults of Concessionaire and 80% of value of those items where work have not been started by the Concessionaire due to non-availability of hindrance free land. These de-scoped items can be executed through open tender when land is made available.
- In this context, you are requested to ensure the followings:
  - (i) COS amount (1.2 COS + 0.8 COS) may be got verified from GFC drawings,
  - (iii) MHAI money is to be recovered, if necessary, from Escrow account.
  - (iii) Based on design quantities and GFC drawings, RO shall submit the tender documents to HQ for approval within 45 days.
  - (iv) RO shall ensure availability of land by November, 2019.
- 4. Competent Authority has also directed to expedite the COS proposal as discussed in EC in its meeting held on 13.03.2019 which was conveyed vide HQ letter no. 132494 dated 25.03.2019. \*\*

It is requested to take necessary action please.

Yours faithfully.

(\$ \$ Jha)

General Manager (T)-Gujarat

Copy for information and necessary action to:

PD PIU Surat

#### PIU Surat

From:

**RO** Gujarat

Sent:

27 August 2019 03:43 PM

To:

PIU Surat; piusurat1@gmail.com

Subject:

Four laning of Gujarat/Maharashtra Border - Surat-Hazira Port section of NH-6 in

the State of Gujarat under NHDP Phase-III through PPP on BOT (Toll) basis - De-

scoping of balance work and competion of project - reg.

**Attachments:** 

139943.pdf

Sir,

Please find attached herewith NHAI HQ letter no.139943, dated 26.08.2019 regarding above cited subject.

You are requested to submit the compliance as per para-3 of the said letter.

Thanking You,

DGM(T)-AK

#### NATIONAL HIGHWAYS AUTHORITY OF INDIA

Regional office (Gujarat)

235-239, 2nd Floor, Supermall-01

Above-HDFC Finance, Infocity,

Gandhinagar-382007 (Gujarat)

Ph.: 079-40306838/40306839

Email:rogujarat@nhai.org

http://www.nhai.gov.in/

www.morth.nic.in

From: Verma Monia, Personal Assistant, Admin

Sent: Monday, August 26, 2019 7:38 PM

To: RO Gujarat

Cc: PIU Surat; Sinha Awadhesh, Manager(Tech.); Jha Sheo Shankar, GM(T)

Subject: Four laning of Gujarat/Maharashtra Border - Surat-Hazira Port section of NH-6 in the State of Gujarat under

NHDP Phase-III through PPP on BOT (Toll) basis - De-scoping of balance work and competion of project - reg.

Sir,

Please find attached herewith a copy of NHAI HQ letter no. 139943 dated 26.08.2019 regarding above cited subject.

It is requested to take necessary action please.

Monia Khanduja

PA

To

Sh. A.K. Sinha

Manager (Tech) Guj.



#### भारपाच राष्ट्राय राजभाग आव्यप्रश्च (सड़क परिवहन और राजमार्ग मंत्रालय)

परियोजना कार्यान्वयन इकाई - सुरत (एक्सप्रेसवे)

#### २०१ – २०४, वीआईपी हाई स्ट्रीट, एंगटा आर्केड के सामने, वीआईपी रोड, वेसु, सुरत – २९५००७ NATIONAL HIGHWAYS AUTHORITY OF INDIA

(Ministry of Road Transport & Highways)

Project Implementation Unit-Surat (Expressway) 301–304, VIP High Street, Opp. Roongta Arcade, VIP Road, Vesu, Surat-395007. কুলাৰ/Phone:(0261) 2218168/69



Date: 04.05, 2019

NHAI/PIU-Surat(Expressway)/41- 501-/2019/41-TE 2586

To,
Shri Ashutosh Gautam
Chief General Manager (Tech)
RO-Gandhinagar
National Highways Authority of India
235-239, 2<sup>nd</sup> Floor, Supermall-01,
Above HDFC Finance, Infocity,

Gandhinagar - 382007 (Gujarat).

Sub.: Four laning of Gujarat/Maharashtra Border - Surat - Hazira Port Section of NH-6 (approx. length 131,500km) in the State of Gujarat under NHDP Phase III.

.H.: De-scoping of balance work and completion of project regarding

Ref.: (i) This office letter no.2440 dated 27.04.2019

(ii) This office letter no.1987 dated 05.04.2019 (iii) IE's letter no. 2885 dated 30.04.2019

Sir.

Please refer to the various discussions as also discussion held during the Video Conference under the Chairmanship of Chairman, NHAI on 15.04.2019, wherein the issue regarding long pending project was discussed & with respect to Surat-Hazira project, it was decided that the work still not completed shall be de-scoped from the scope of the Concessionaire & the project be closed accordingly. Further, the balance work shall be tendered on priority upon availability of encumbrance free land.

2.In this regard, as per earlier discussion on similar line, PIU vide letter no. 1987 dated 05.04.2019 (copy enclosed F/1) has taken up the matter with IE to examine the balance work suitably in accordance with the Concession Agreement duly considering the descoping / delinking to complete the oroject. Further, vide this office letter no 2440 dated 27.04.2019 (copy enclosed F/2), this .:ce has also asked IE to explore suitable cost implication in the case of work, wherein the land has been provided as also the work, wherein the land is yet to be provided by the Authority.

3.Now, IE vide letter no. 2885 dated 30.04.2019 (copy enclosed F/3) has examined the issue & submitted their comment which is re-produced as under:-

"With reference to above cited subject and authority's letter cited at Sr. no. (iii) vide which, IE has been requested to review the Various Important Issues to be resolved duly considering the status of balance works.

In our letter cited at Sr. no. (ii), all the issues of balance works are brought out. Some of the works are balance due to non-availability of land and remaining are due to the Concessionaire delay although lands are available.

#### The details of balance works under scope of the Concessionaire is as below:-

IE had recommended EOT for the period of 12 months up to 31st October 2018 vide its letter no. 1328 dated 07.10.2017 without any penalties to the Concessionaire & without an extension of

Contd...2/-

the concession period subjected to condition that GAD approval for Sachin ROB service road shall be available by 31<sup>st</sup> October 2017.

Details of Balance Work along with Time Assessment for EOT vide IE letter 1328 dtd.07.10.2017 and current status as on 30.04.2019.

Sl. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval/a vailability of land	Status
1	Construction of 2 lane ROB on Service Road on opposite side of 2 lane ROB constructed by SUDA at Km 95+925	365 Days from the date of GAD approval	22.04.2018	Not Started
2	Toll Plaza Admin Building at Km.89+850 & Km 28+500	240 Days from the date of availability of hindrance free land.	Bhatia 04.10.2018	Not Started
3	Completion of Service Road from Km. 119+300 to Km. 121+500 including shifting of Suwali Canal	120 Days from the date of approval of Revised Estimate of Suwali Canal.	24.11.2017	Work to be Started from 30.64.2019
4	SR - Km. 116+400 to Km. 116+980 (LHS)	41 Days from the date of availability of hindrance free land.	Land not available	Not Started
5	SR - Km. 119+740 to Km. 121+000 (RHS)	60 Days from the date of availability of hindrance free land.	Land required due to constructio n of reliance bridge	Work to be Started from 30.04.2019 Authority will provide hindrance free land at earliest.

Details of balance work with Time Assessment during PCC-II and current status as on 30.04.2019.

Sl. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval	Status
1	Toll Plaza Admin Building at Km 28+500.	240 Days from the date of availability of hindrance free land.	19.04.2016	Likely to be completed by May 2019

Details of balance work with Time Assessment during PCC-II vide Authority letters and

SI. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date approval	of	Status
1	SR - Km. 91+800 to Km. 92+150 (BHS).	40 Days from the date of availability of hindrance free land.		not	Not Started
2	SR - Km. 96+950 to Km. 97+920 (BHS).	90 Days from the date of availability of hindrance free land.			Not Started

Contd...3/-

h-

SI. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval	Status
1	Way side amenities		Land not available	Not Started

#### Review of present status of works:

#### (1) Sachin ROB:

The IE found that, for Sachin ROB, GAD approval was accorded on 22.04.2018 by the Western Railway and Authority vide their letter no. 2056 dated 23.04.2018 conveyed to Concessionaire for taking up the work. The time of 365 days was proposed for construction of two-lane ROB on service road on opposite side of two lane ROB constructed by SUDA at Km. 95+925 from the date of GAD approval in EOT proposal vide letter No. 1328 dated 07.10.2017. Thus, the scheduled completion date of ROB is 22.04.2019 but the construction work of ROB, Sachin has not yet started.

The Concessionaire has submitted in reply to the letters of authority that the compensation for survey no. 199/A is still pending & land is still to be transferred in the name of NHAI vide its letter no. 15368 dated 13.03.2019. The Concessionaire has also appraised to authority vide its letter no. 15283 dated 18.01.2019 regarding the existing electrical line in the stretch from Km. 96+100 to km. 96+450 (RHS) which needs to be shifted for commencement of the work. IE opines that pursuant to clause 11.2 of CA, the shifting of utility will be under taken by the Concessionaire by assistance of the authority. Therefore, it was to be taken into account by the Concessionaire at the appropriate time.

The delay in commencement of work of ROB as on date is 373 days and the Concessionaire has not started this work. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

#### (2) Bhatia Toll Plaza:

After review of the available records, IE found that the Concessionaire was requested by the authority vide its letter no. 5374 dated 04.10.2018 to take the possession of survey no. 95 village Bhatia since the payment received by Dr. Pravinchandra Thakorlal Nayak & others were acknowledged and confirmed by the CALA, Surat vide letter no. LAQ/1/NH-6/4-Six/COMP/J-No.787/18 dated 29.02.2018. It was also requested by the authority to start the building work at Bhatia Toll plaza by the same letter.

The IE has recommended EOT for 240 days for construction of Toll Plaza admin building at Km. 89+850 from the date of availability of hindrance free land. It means schedule time period for the completion of Toll Plaza admin building will be 240 days from 04.10.2018 i.e. up to 2<sup>nd</sup> June 2019. The Concessionaire vide its letter no. 15366 dated 13.03.2019 communicated to IE that some mango trees were still standing in the same survey no. & are required to be removed after payment of the compensation for mango trees to the land lord by the authority. IE has also communicated to authority regarding the submission of Concessionaire vide its letter no. 2788 dated 26.03.2019 for providing the encumbrance free land to the Concessionaire for the construction of the admin building, Bhatia Toll Plaza. IE opines that land is available at the aforesaid site for construction of administrative building without felling the trees. However, the Concessionaire has not yet commenced the work of admin building at Bhatia Toll Plaza.

The delay in commencement of work as on date is about 208 days and the Concessionaire has not started this work. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

h

Contd...4/-

#### (3) Suwali Canal:

After review of the available records, !E found that the revised estimate for shifting of Suwali minor Canal as submitted by the KRBC vide its letter no. KRBC/PB-4/NHAI/Suwali Minor/Shifting of Suwali minor canal/relocation/809 dated 24.03.2017 to the authority and after approval for above said revised estimate for the shifting of Suwali canal by the competent authority, Project Director, Surat-PIU. Conveyed to Executive Engineer, KRBC Division, Surat regarding the approval of the same copied to Concessionaire for information & necessary action vide its letter no. 5733 dated 24.11.2017.

The IE has recommended 120 days from the date of approval of revised estimate of Suwali Canal for completion of service road from Km. 119+300 to Km. 121+500 including shifting of Suwali Canal. Therefore, Concessionaire had to finish the completion of service road including shifting of Suwali Minor Canal within 120 days from the date of approval of revised estimate of Suwali Canal i.e. 24.11.2017. Hence, the completion date of service road will be 24<sup>th</sup> March 2018. Thus, it reveals that the service road after shifting of Suwali Canal has been substantially delayed by the Concessionaire due to non-shifting of Suwali canal under Clause 11.2 of CA.

The work of shifting of canal is substantially completed now and remaining work should be completed by the Concessionaire. However, the work of service road which is substantially balance is to be started from 30.04.2019 as discussed in the meeting. The hindered land in RHS will be provided by the authority at earliest.

#### (4) Mandal Toll Plaza:

The IE found that the Concessionaire has agreed to complete the construction of administrative building at Ch. 28+500 (Mandal Toll Plaza) according to work program submitted during issuance of provisional completion certificate-II as per letter no. FPI/SHINH-6/NHAI/480 dated 07.10.2016. As per submitted work program by the Concessionaire the completion date of toll plaza was 21.08.2017.

The incumbrance free land for Mandal Toll plaza was made available to Concessionaire on 19.04.2016 and it was duly requested by authority to take up the work of Toll building and complete the same at the earliest vide authority's letter no. 1781 dated 23.04.2016. According to the present status of work, the Mandal Toll Plaza is expected to be completed by end of May' 2019.

#### (5) Service Road:

Apart from the items recommended under EOT proposal the service roads at Ch. 91+800 to Ch. 92+150 (BHS) & service road from Ch. 96+950 to Ch. 97+920 (BHS) (against saving of service roads) were notified by the authority vide its letter 710 Dated 05.11.2018.

The Concessionaire was expected to complete the work within the proposed time of 40 & 90 days for the service road at Ch. 91+800 to 92+150 (BHS) and service road from Ch. 96+950 to Ch. 97+920 (BHS) respectively. The work is yet to be started by the Concessionaire.

The No. of days delayed in completion of SR at Ch. 96+950 to Ch. 97+920 (BHS) is 176 days and the Concessionaire has not started this work. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

ifn

Contd...5/-

#### (6) Construction of Rest area (Way side amenities):

IE found that pursuant to Schedule C and Clause 4.13 of Schedule D in accordance with the drawing cited on page no. 82 of Schedule D, Rest area has to be developed on the project section.

The Concessionaire has agreed to construct a rest area while issuing PCC-I. (Annexure-C, Page-1 of 1, Sr. no.-40), PCC-II (Annexure-C, Page-Nill, Sr. no.-17) & PCC-III (Annexure-B, Page-Nill, Sr. no.-1, project facilities) after getting encumbrance free land.

However, the required land for construction of rest area is not made available to the Concessionaire so far. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

From the above, it can be seen that, the items of works for which incumbrance free land were made available to Concessionaire by the Authority but could not be completed by the Concessionaire within the time estimated by IE and agreed by the Concessionaire. Therefore, the Concessionaire is liable for damages as per the provision of clause 12.4.2 of Concession Agreement.

Further, as stated above it is recommended to descope the works which are not yet completed. But the provisions of Clause 16.6 of Concession Agreement will not be applicable for these works since these works are required to be descoped because the Concessionaire has failed to complete the same.

In the light of authority's letter no. 2440 dated 27.04.019 as received on 29.04.2019 in this office, the request of the authority to explore the recovery of cost at the rate of 120% at the estimated cost wherever land was made available and Concessionaire did not take up the wok is not in the line of CA. However, the Concessionaire is liable for the damages as per the provision of the Clause 12.4.2 of CA regarding the non-completion of the work wherever land was made available.

NHAI recovers 80% of the cost for negative COS for the reason of attributable to the authority in the line of provision of clause 16.6 of the CA.

In the opinion of IE, the authority may recover 100% of cost for the items not executed by the Concessionaire wherever land was made available and the damages as per the clause 12.4.2 of CA separately. The authority may also recover the additional cost for design, supervision and other such charges during the time of construction for the items for which land was made available but concessionaire failed to construct.

However, for the works which could not be completed due to Authority's default i.e. non-availability of land, the provisions of Clause 16.6 of Concession Agreement shall apply.

The Detailed Cost Estimate and Abstract sheet as Annexure, for the items of works which are not completed by the Concessionaire although the lands were made available and items of works which are not completed due to land hindrances/non availability of land is submitted herewith for your needful action, please.

1

11611

Sr. no.	Description	Amount
1	Cost of items where land was made available	Rs.231108189.476
2	Cost of items where land was hindered	Rs.75708231.657

In the acceptance of the descoping, the completion of the project may be accorded accordingly."

4.In this regard, various Change of Scope (COS) involving the positive & negative Change of Scope (COS) was earlier forwarded to CGM(T) / RO vide this office letter dated 06.10.2018 on detailed below:-

+ve

SI. No.	Description of Work	Estimated Cost in Cr.	Status of work
1	Realignment of Service Road (LHS) Through Muslim Graveyard at Km. 83+000	1.10	Work completed. (Cos Order to be issued)
2	RE Wall Backfilling quantities & RE Wall Area in approaches of VUP's	21.57	Work completed. (Cos Order to be issued)
3	RCC Retaining Wall & Concrete Lining from Km. 75+100 to Km. 75+600 at existing Stream/ Canal running along the existing road	1.46	Work completed. (Cos Order to be issued)
4	Construction of Minor Bridges on Service Road at Km. 1+439 LHS, Km. 15+901 BHS & Km. 18+396 BHS	4.21	Work completed. (Cos Order to be issued)
5	Additional quantities executed in MCW from Km. 61+800 to Km. 63+100 (Additional Earthwork & RR Masonry to retain the Embankment etc)	9.65	Work completed. (Cos Order to be issued)
6	Metal Beam Crash Barrier in additional length as per instructions of Safety Consultant.	6.82	Work completed. (Cos Order to be issued)
7	Opening of approaches of Flyover and ROB with PUP's at Km. 1 +500 & Km. 3+465	1.46	Work completed. (Cos Order to be issued)
	Total Amount (in Cr.)	46.27	

#### Details of -ve COS proposals

S.N	Brief Description of Work (COS)	Estimated Cost	COS Notice / Order issued	Status of Work
1	Negative Change of Scope on account of reduction in Scope of Work:  (a) On account of change in alignment in Hazira Area	(a)-Rs.69,75,273/-	In Principle approval accorded but notice not issued.	

h

S.N	Brief Description of Work (COS)	Estimated Cost	COS Notice / Order issued	Status of Work
	(b) Reduction in total project length due to inclusion of new Essar bypass at the tail end of project.			
	(c)Reduction in volume of work due to inclusion of new Essar Bypass at the tail end of project.	(c) -Rs. 91,86,180/- Total(a)+(b) +(c)= -Rs. 1,61,56,180/-		
2	Deletion for Entry/Exit Ramp 47 Nos.(for 2 side 94 Nos.)	-Rs 0.0/- (NtL recommended by IE)		Earlier an amount of Rs. 6.09 Cr was recommended by this office for consideration for in-principal approval for issuance of COS notice and independent approval for issuance of COS notice and independent approval for issuance of COS on account of Deletion of Entry (Exit ramp. IE vide letter dated 25.11.2016 and reconfirmed that there is no -ve COS on account of deletion of entry (exit ramp.
2	(D) Total amount Sr. no. 1 to 3	- Rs. 1,61,61,453/- (-Rs.1.62 Cr)		

5.In this regard, amount towards(-ve) COS amounting to Rs. -1.62 Cr as assessed by IE which is pending for approval from Competent Authority has been recovered while making the payment towards +ve COS in year 2016. Further, the consolidated COS has been deliberated in EC and NHAI, HQ vide letter 132494 dated 25.03.2019 has been forwarded certain observations with respect to justification of item as also prior approval before execution which is under examination.

6.The Concessionaire M/s. Surat Hazira Tollway Pvt Ltd was issued PCC-I on 19.08.2015 for 117.4 Km length, the PCC-II for a length of 10.6 Km was issued by IE on 05.10.2016 & PCC-III was issued on 29.03.2018 for balance 2.5 Km by IE vide letter dated 30.03.2018. The work of 131.5 Km (entire stretch) for main carriageway has already been completed & Concessionaire is collecting toll after issuance of PCC-III.

#### 11811

7. Concessionaire has also approached Arbitration Tribunal with the claim of Rs. 3557.44 Cr. towards various default with Authority which is under progress in the Arbitration Tribunal comprising of Dr. Justice Arijit Pasayat (Retd.), Shri U. K. Sinha & Shri Shashi Kant Sharma as the Hon'ble Arbitrator.

8.Accordingly, considering the default by the Concessionaire resulting in in-ordinate delay in execution of work for an amount of Rs. 23.11 Cr, cost of 100% as proposed by IE along with 20% extra for design, supervision etc is proposed for recovery. Further 80% towards the work wherein the land is not available is also recommended. It is also important to mention that certain work such as service road in Suwali Canal, Administration Building at Mandal are in progress & likely to be completed in all respect by June-2019.

In view of above, the proposal submitted by IE for de-scoping the work as mentioned above, is recommended for seeking approval from the Competent Authority in order to take further necessary action to close the project.

Thanking you,

Yours Sincerely,

[Shashi Bhushan] GM (T) & Project Director, NHAI, PIU-Surat (Expressway)

Encl: As above

Copy to: Shri A. K. Swami, Manager (T), PIU-Surat (Expressway), NHAI, Surat - for information and suitable necessary action

#### Formariz Prischiadara Probha (India) Princia

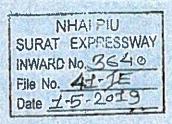
Project (Phon. Block-Av3# 212, Roy Authinor, they beams), there in a Sporter-Roberts N and

Letter No.: FPI/SH/NH-6/NHAI/ 2,885

Date: 30.04.2019.

To.

Mr. Shashi Bhushan
GM (T) & Project Director
PIU – Surat (Expressway)
National Highways Authority of India,
301-304, ViP Street,
Opp. Roongta Arcade
VIP Road, Vesu,
Surat-395007, Gujarat



132

A Company of the Company

Sub: Four/Six Laning of Gujarat/Maharashtra Border to Surat – Hazira Port Section of NH-6 (approx. length 131,500Km) in the State of Gujarat under NHDP Phase III.

S.H.: Various Important Issues to be resolved.

Ref. (i) NHAI letter No. NHAI/PIU-Surat(Expressway)/41-EOT/2019/2440 dated 27 04.2019 as received in this office dated 29.04.2019.

(ii) This office letter no. FPI/SH/NH-6/NHA1/2840 dated 10.04.2019

(iii) NHAI letter No. NHAI/PIU-Surat(Expressway)/41-IE/2019/1987 dated 05 04.2019.

(iv) NHAI letter No. NHAI/PIU-Surat(Expressway)/41-IE/2019/1170 dated 26 02 2019.

Dear Sir,

With reference to above cited subject and authority's letter cited at Sr. no. (iii) vide which, it has been requested to review the Various Important Issues to be resolved duly considering the status of balance works.

In our letter cited at Sr. no. (ii), all the issues of balance works are brought out. Some of the works are balance due to non-availability of land and remaining are due to the Concessionaire delay although lands are available.

#### The details of balance works under scope of the Concessionaire is as below:-

IE had recommended EOT for the period of 12 months up to 31<sup>st</sup> October 2013 vide its letter no. 1328 dated 07.10.2017 without any penalties to the Concessionaire & without an extension of the concession period subjected to condition that GAD approval for Sachin ROB service road shall be available by 31<sup>st</sup> October 2017.

Details of Balance Work along with Time Assessment for EOT vide IE letter 1328 dtd.07.10.2017 and current status as on 30.04.2019.





Contid | Page 2 of 6

SI. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval/a vallability of land	Status
1	Construction of 2 lane ROB on Service Road on opposite side of 2 lane ROB constructed by SUDA at Km 95+925	365 Days from the date of GAD approval	22.04.2018	Not Started
2	Toll Plaza Admin Building at Km.89+850 & Km 28+500	240 Days from the date of availability of hindrance free land.	Bhatia 04.10.2018	Not Started
3	Completion of Service Road from Km. 119+300 to Km. 121+500 including shifting of Suwali Canal	120 Days from the date of approval of Revised Estimate of Suwali Canal.	24.11.2017	Work to be Started from 30.04.2019
4	SR - Km. 116+400 to Km. 116+980 (LHS)	41 Days from the date of availability of hindrance free land.	Land not available	Not Started
5	SR - Km. 119+740 to Km. 121+000 (RHS)	60 Days from the date of availability of hindrance free land.	Land required due to constructio n of reliance bridge	Work to be Started from 30.04.2019 Authority will provide hindrance free land at earliest.

## <u>Details of balance work with Time Assessment during PCC-II and current status as on 30.04.2019.</u>

SI. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval	Status
1		240 Days from the date of availability of hindrance free land.	19 04.2016	Likely to be completed by May 2019

# Details of balance work with Time Assessment during PCC-II vide Authority letters and current status as on 30.04.2019.

SI.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval	Status	
	SR - Km. 91+800 to Km. 92+150 (BHS).	40 Days from the date of availability of hindrance free land.		Not Started	V

Jy\_\_\_

Contidy... Page 3 of 6

2 SR - Km. 96+950 to Km. 97÷920 (BHS).	90 Days from the date of availability of hindrance free land.	05.11.2018	Not Started
-------------------------------------------	---------------------------------------------------------------	------------	-------------

SI. No.	Description of work	Time assessed by IE in accordance to Clause 10.3.5	Date of approval	Status
1	Way side amenities		Land not available	Not Started

#### Review of present status of works:

#### (1) Sachin ROB:

The IE found that, for Sachin ROB, GAD approval was accorded on 22.04.2018 by the Western Railway and Authority vide their letter no. 2056 dated 23.04.2018 conveyed to Concessionaire for taking up the work. The time of 365 days was proposed for construction of two-lane ROB on service road on opposite side of two lane ROB constructed by SUDA at Km. 95+925 from the date of GAD approval in EOT proposal vide letter No. 1328 dated 07.10.2017. Thus, the scheduled completion date of ROB is 22.04.2019 but the construction work of ROB, Sachin has not yet started.

The Concession aire has submitted in reply to the letters of authority that the compensation for survey no. 199/A is still pending & land is still to be transferred in the name of NHAI vide its letter no. 15308 dated 13.03.2019. The Concessionaire has also appraised to authority vice its letter no. 15283 dated 18.01.2019 regarding the existing electrical line in the stretch from Km. 96+100 to km. 96+450 (RHS) which needs to be shifted for commencement of the work. IE opines that pursuant to clause 11.2 of CA, the shifting of utility will be under taken by the Concessionaire by assistance of the authority. Therefore, it was to be taken into account by the Concessionaire at the appropriate time.

The delay in commencement of work of ROB as on date is 373 days and the Concessionaire has not started this work. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith

#### (2) Bhatia Toll Plaza:

After review of the available records, IE found that the Concessionaire was requested by the authority vide its letter no. 5374 dated 04.10.2018 to take the possession of survey no. 95 village Bhatia since the payment received by Dr. Pravinchandra Thakorlal Nayak & others were acknowledged and confirmed by the CALA, Surat vide letter no. LAQ/1/NH-6/4-Six/COMP/J-No.787/18 dated 29.02.2018. It was also requested by the authority to start the building work at Bhatia Toil plaza by the same letter.

The IE has recommended EOT for 240 days for construction of Toll Plaza admin building at Km. 89+850 from the date of availability of hindrance free land. It means schedule time period for the completion of Toll Plaza admin building will be 240 days from 04.10.2018 i.e. up to 2<sup>nd</sup>. June 2019. The Concessionaire vide its letter no. 45366 dated 13.03.2019.

er\_

Confid / Page 4 of 6

communicated to IE that same mange trees were still standing in the same survey no & are required to be removed after payment of the compensation for mange trees to the land lone by the authority. IE has also communicated to authority regarding the submission of Concessionaire vide its letter no. 2788 dated 26.03.2019 for providing the incumbrance free land to the Concessionaire for the construction of the admin building, Bhatia Toll Plaza. IE opines that land is available at the aforesaid site for construction of administrative building without felling the trees. However, the Concessionaire has not yet commenced the work of admin building at Bhatia Toll Plaza.

The delay in commencement of work as on date is about 208 days and the Concessionaire has not started this work. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

#### (3) Suwali Canal:

After review of the available records, IE found that the revised estimate for shifting of Suwali minor Canal as submitted by the KRBC vide its letter no. KRBC/PB-4/NHAI/Suwali Minor/Shifting of Suwali minor canal/relocation/809 dated 24.03.2017 to the authority and after approval for above said revised estimate for the shifting of Suwali canal by the competent authority, Project Director, Surat-PIU. Conveyed to Executive Engineer, KRBC Division, Surat regarding the approval of the same copied to Concessionaire for information & necessary action vide its letter no. 5733 dated 24.11.2017.

The IE has recommended 120 days from the date of approval of revised estimate of Suwali Canal for completion of service road from Km. 119+300 to Km. 121+500 including shifting of Suwali Canal. Therefore, Concessionaire had to finish the completion of service road including shifting of Suwali Minor Canal within 120 days from the date of approval of revised estimate of Suwali Canal i.e. 24.11.2017. Hence, the completion date of service road will be 24th March 2018. Thus, it reveals that the service road after shifting of Suwali Canal has been substantially delayed by the Concessionaire due to non-shifting of Suwali canal under Clause 11.2 of CA.

The work of shifting of canal is substantially completed now and remaining work should be completed by the Concessionaire. However, the work of service road which is substantially balance is to be started from 30.04.2019 as discussed in the meeting. The hindered land in RHS will be provided by the authority at earliest.

#### (4) Mandal Toll Plaza:

The iE found that the Concessionaire has agreed to complete the construction of administrative building at Ch. 28+500 (Mandal Toll Plaza) according to work program submitted during issuance of provisional completion certificate-II as per letter no. FPI/SH/NH-6/NHAI/480 dated 07.10.2016. As per submitted work program by the Concessionaire the completion date of toll plaza was 21.08.2017.

The incumbrance free land for Mandal Toll plaza was made available to Concessionaire on 19.04.2016 and it was duly requested by authority to take up the work of Toll building and complete the same at the earliest vide authority's letter no. 1781 dated 23.04.2018.



Contidii. Page 5 of 6

According to the present status of work, the Mandal Toll Plaza is expected to be completed by end of May! 2019.

#### (5) Service Road:

3

Apart from the items recommended under EOT proposal the service roads at Ch. 91+800 to Ch. 92+150 (BHS) & service road from Ch. 96+950 to Ch. 97+920 (BHS) (against saving of service roads) were notified by the authority vide its letter 710 Dated 05.11.2018.

The Concessionaire was expected to complete the work within the proposed time of 40 & 90 days for the service road at Ch. 91+800 to 92+150 (BHS) and service road from Ch. 96+950 to Ch. 97+920 (BHS) respectively. The work is yet to be started by the Concessionaire.

The No. of days delayed in completion of SR at Ch. 96+950 to Ch. 97+920 (BHS) is 176 days and the Concessionaire has not started this work. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

#### (6) Construction of Rest area (Way side amenities):

IE found that pursuant to Schedule C and Clause 4.13 of Schedule D in accordance with the drawing cited on page no. 82 of Schedule D, Rest area has to be developed on the project section.

The Concessionaire has agreed to construct a rest area while issuing PCC-I. (Annexure-C. Page-1 of 1, Sr. no.-40), PCC-II (Annexure-C. Page-Nill, Sr. no.-17) & PCC-III (Annexure-B. Page-Nill, Sr. no.-1, project facilities) after getting encumbrance free land.

However, the required land for construction of rest area is not made available to the Concessionaire so far. Therefore, it is recommended to descope the same. The Cost estimates for this work based on SOR for 2015-2016 is submitted herewith.

From the above, it can be seen that, the items of works for which incumbrance free land were made available to Concessionaire by the Authority but could not be completed by the Concessionaire within the time estimated by IE and agreed by the Concessionaire Therefore, the Concessionaire is liable for damages as per the provision of clause 12.4.2 of Concession Agreement.

Further, as stated above it is recommended to descope the works which are not yet completed. But the provisions of Clause 16.6 of Concession Agreement will not be applicable for these works since these works are required to be descoped because the Concessionaire has failed to complete the same.

in the light of authority's letter no. 2440 dated 27.04.019 as received on 29.04.2019 in this office, the request of the authority to explore the recovery of cost at the rate of 120% at the estimated cost wherever land was made available and Concessionaire did not take up the was not in the line of CA. However, the Concessionaire is liable for the damages as per

Control / Page 6 of 5

the provision of the Clause 12.4.2 of CA regarding the non-completion of the work wherever land was made available.

NHAI recovers 80% of the cost for negative COS for the reason of attributable to the authority in the line of provision of clause 16.6 of the CA.

In the opinion of IE, the authority may recover 100% of cost for the items not executed by the Concessionaire wherever land was made available and the damages as per the clause 12.4.2 of CA separately. The authority may also recover the additional cost for design, supervision and other such charges during the time of construction for the items for which land was made available but concessionaire failed to construct.

However, for the works which could not be completed due to Authority's default i.e. non-availability of land, the provisions of Clause 16.6 of Concession Agreement shall apply.

The Detailed Cost Estimate and Abstract sheet as Annexure, for the items of works which are not completed by the Concessionaire although the lands were made available and items of works which are not completed due to land hindrances/non availability of land is submitted herewith for your needful action, please.

Sr. no.	Description	Amount
1	Cost of items where land was made available	Rs.231108189.476
2	Cost of items where land was hindered	Rs.75708231.657

In the acceptance of the descoping, the completion of the project may be accorded accordingly.

This is for your perusal and fur her suitable action please.

Thanks & Regards,

For FP Project Management

- ly -

Punil Kumar Pandey

Team Leader

Encl: As above.

Cc: Mr. Suraj Bhardwaj, Associate Vice President, Surat-Hazira NH-6 Tollway Pvt Ltd-for information & suitable necessary action.

The Director, F P Project Management, HO Mumbai.



Halcrow Consulting India Pvt. Ltd. B-1D, Sector-10 Noida - 201 301 Uttar Pradesh [INDIA] Tel: +91 120 4682 500 / 4098 900 Fax: +91 120 4682 534 www.ch2m.com