



SHREM FINANCIAL PRIVATE LIMITED

**Development of Patan–Tendukheda – Rehli Road Section
(SH-15) in the State of Madhya Pradesh on
BOT(Toll+Annuity) Basis.**

TECHNICAL DUE DILIGENCE REPORT



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SUBMITTED BY



RUKY PROJECTS PRIVATE LIMITED

Hyderabad – 500 072

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Development of Patan–Tendukheda – Rehli Road Section (SH-15) in the State of Madhya Pradesh on BOT(Toll+Annuity) Basis.

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CHAPTER 1. INTRODUCTION

1.1 General

DBL PATAN REHLI TOLLWAYS LIMITED (herein after referred to as the “Concessionaire”) had augmented the existing road “Patan-Tendukheda-Rahli” section of SH-15 in the State of Madhya Pradesh, in accordance with the provisions of the Concession Agreement (CA) executed with Madhya Pradesh Road Development Corporation Limited (herein after referred to as the “MPRDC”) on 1st September, 2015.

Project Road starts at Rehli–Gorjhamar-Patan Chowk from Km 31+000 and cross the junction at Km 113+400 of Rehli Gourjhamar road including bypass of Rehli which is about 4.400 Kms and terminates at Km 38+100 on Sagar – Rehli State Highway (SH-15A) in the state of Madhya Pradesh on Design, Build, Finance, Operate and Transfer (DBFOT) Toll + Annuity basis. Project Location map is given at **Figure 1.1.**

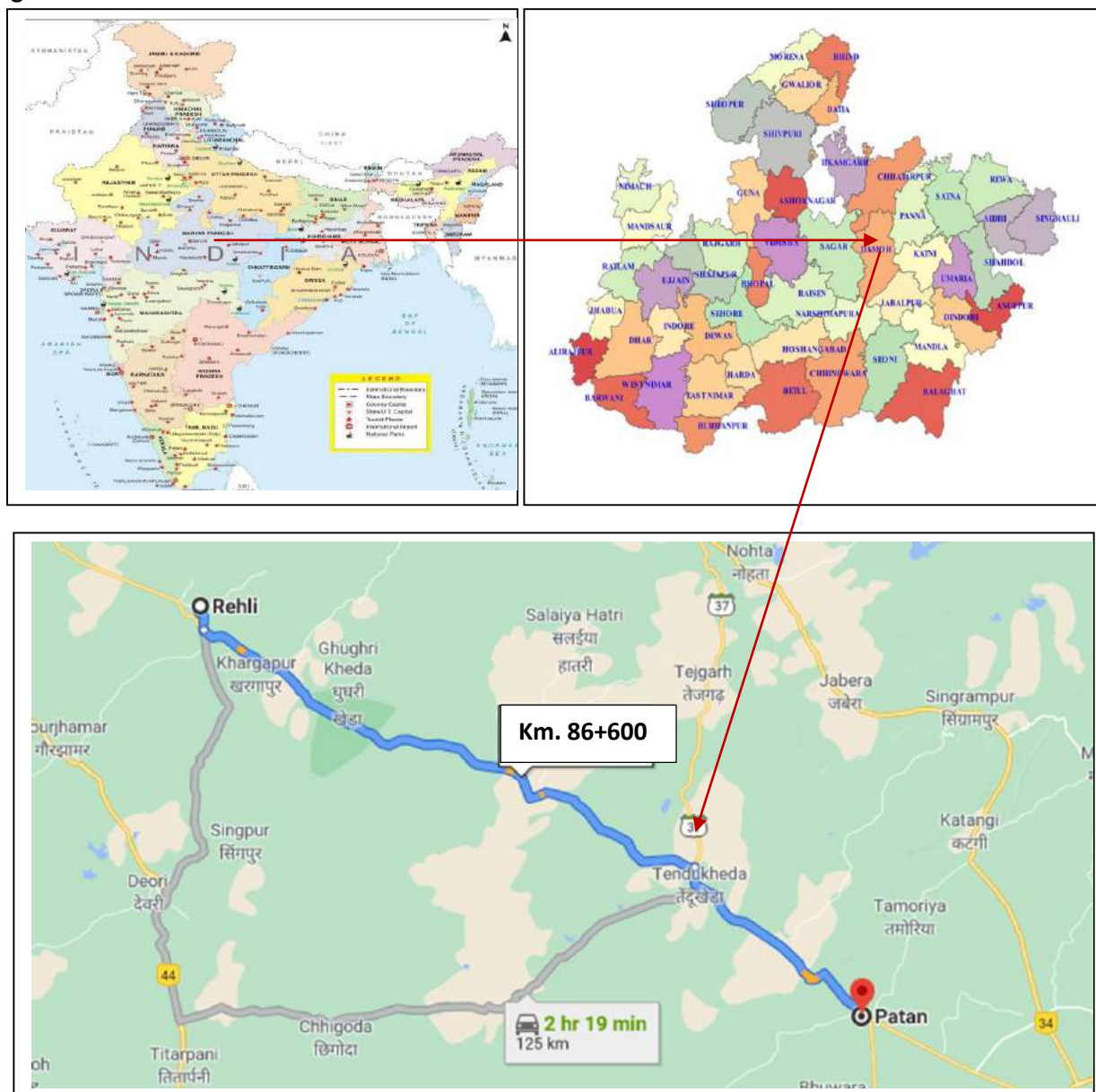


Figure 1.1: Project Location Map

SHREM ROADWAYS PRIVATE LIMITED (SRPL) acquired DBL PATAN REHLI TOLLWAYS LIMITED vide agreement dated 26.03.2018

SHREM FINANCIAL PRIVATE LIMITED (SFPL) appointed RUKY Projects Pvt. Ltd. as consultants for detailed Technical Due Diligence services of the above Road Project to know-how the present condition of Carriageway and Structures, probable costs of Operations and Maintenance during balance Concession period, additional road safety requirements if any and to review the traffic potential and to estimate the projected Toll Collection Etc.

1.2 The Project Data

The details of the Project are listed in the following table.

Table 1.1: The Project Data

S No.	Particulars	Details
1	Name of the project	Construction, operation and maintenance of Two Laning of Patan– Tendukheda – Rehli Road in the state of Madhya Pradesh on BOT (Toll-Annuity) basis on design, build, finance, operate and transfer (DBFOT) on Toll Plus Annuity Basis in the State of Madhya Pradesh.
2	Road Type	State Highway (SH-15)
3	Name of the Authority	Madhya Pradesh Road Development Corporation Limited
4	Name of the Concessionaire	DBL Patan-Rehli Tollways Limited
5	Name of the EPC Contractor	Dilip Buildcon Limited
6	Date of LOA	08.07.2015
7	Date of Agreement	01.09.2015
8	Design length as per Schedule B of CA	Approximately 87.6 Kms
9	Actual length constructed	86.6 Kms
10	Project lane configuration	2 Lane
11	EPC Cost	225.02 Cr
12	Nature of contract	BOT (Toll + Annuity)
13	Toll collected by	Concessionaire
14	Concession period	15 years from the appointed date
15	Appointed date	10.04.2016
16	Concession End Date	09.04.2031
17	Construction period	730 days from the appointed date.
18	Schedule completion date	09.04.2018
19	Date of issuance of provisional certificate (Commercial operation date)	31.03.2017
20	Date of issuance of completion certificate	12.02.2018
21	Annuity amount (every six months)	17.64 Cr
22	Total number of annuities payable	26 Nos

S No.	Particulars	Details
23	First annuity payment date	31.09.2017
24	Total number of annuity paid	07 Nos

1.3 Scope of consultancy services

The scope of work includes providing Due Diligence of the project road and providing estimate of the anticipated maintenance works. Scope of the work as defined in the consultancy work order is listed below:

- Review of various contractual documents
- Collection of historic/past toll revenue data
- Collection of historic/past classified Traffic data from toll plaza and to estimate the projected traffic to arrive at revenue projections.
- Carryout detailed assessment of pavement condition and propose maintenance plan along with BOQ.
- Review of latest BBD/BI test report
- Carrying out inventory & condition survey of all elements of road like embankment slope, plantation, road furniture, tolling system etc., of the project.
- Carrying out inventory & condition survey of all structures (Major Bridges, Minor Bridges, ROB, RE Wall, Flyovers, VUPs, PUPs, Culverts etc.), suggest any rehabilitation & maintenance requirements along with BOQ.
- Carryout review of tolling system to evaluate the efficiency and functionality of tolling system and to identify and give suggestions to improve if any setbacks in the system.
- Carryout road safety audit on Project highway and provide suggestions for improvement.
- Assess and Provide BOQ and cost estimate for routine & periodic maintenance including O&M.
- Review of punch list items, NCR's to identify any uncompleted works as on date of submission of report.
- Review of validity of insurance and statutory compliances related to Project.
- Review of correspondences exchanged between parties on contract related issues and claims etc.
- Submission of detailed report on technical due diligence of the project.

CHAPTER 2. PROJECT DESCRIPTION & TECHNICAL DETAILS

2.1 Salient Features of the Project

The salient features of the Project as per schedule B and Schedule C of the CA including Change of scope are listed in the following Table.

Table 2.1: Salient Features

S No.	Particulars	As per CA	As per COS	As per Site
1	Total project length	86.600 Kms	---	86.600 Kms
2	Four lane divided carriageway	2.200 Kms	---	2.200 Kms
3	Two lane with paved shoulder	4.300 Kms	---	4.300 Kms
4	Two lane with granular shoulder	54.300 Kms	---	54.300 Kms
5	Bypass	4.400 Kms	---	4.400 Kms
6	Single lane with granular shoulder	21.400 Kms	---	21.400 Kms
7	Flexible pavement	86.600 Kms	---	86.600 Kms
8	Toll plaza	2 Nos.	---	2 Nos.
9	Bus bays / Bus shelters	16 Nos.	---	16 Nos.
10	Truck lay bays	---	---	---
11	Major junction	06 Nos.	---	6 Nos.
12	Minor junction	14 Nos.	---	14 Nos.
13	ROB	---	---	---
14	Major Bridges	05 Nos.	---	05 Nos.
15	Minor Bridges	22 Nos.	-3 Nos.	19 Nos.
16	Box/Slab Culverts	19 Nos.	-1 Nos.	20 Nos*.
17	Pipe Culverts	85 Nos.	+13 Nos., -11 Nos.	78 Nos*.
18	CUP	Nil	+4 Nos.	4 Nos.

*2 additional Slab culverts were constructed as per site requirement and 9 Pipe culverts were not constructed as per site condition.

2.2 Typical Cross Section (TCS) Schedule

The Concessionaire has followed the Typical Cross Section schedule as shown below during the construction.

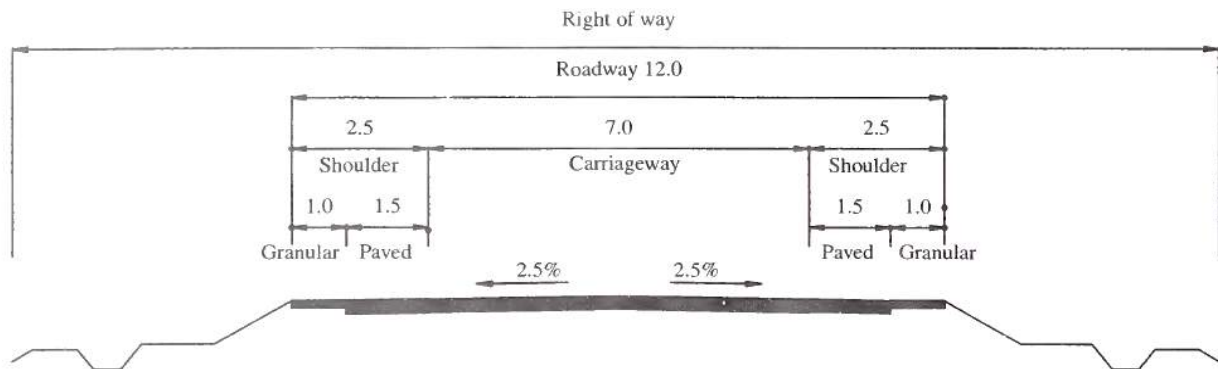


Figure 2.1: TCS. 2.1 of Schedule D of CA
Two lane carriageways with 1.5m paved shoulder and 1m granular shoulder shall be applicable in Built-up area in plain/rolling terrain.

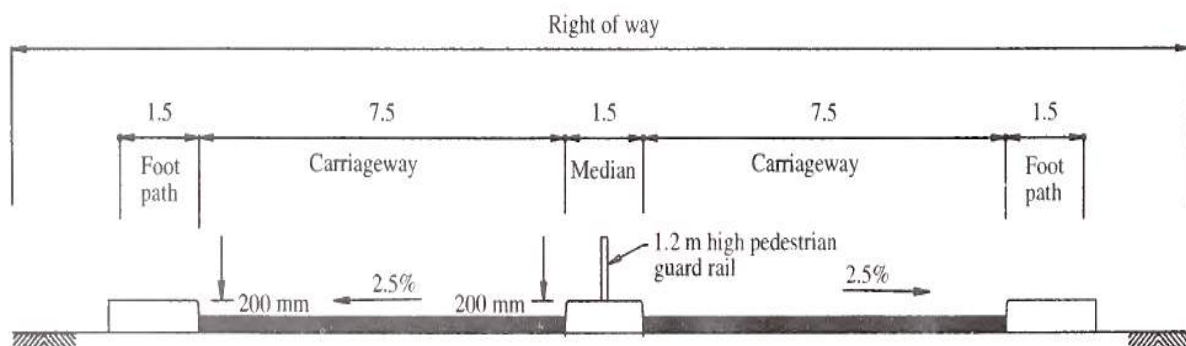


Figure 2.2: TCS. 2.2 of Schedule D of CA
Four lane divided carriageway with footpath in Built-up area within Municipal limit.

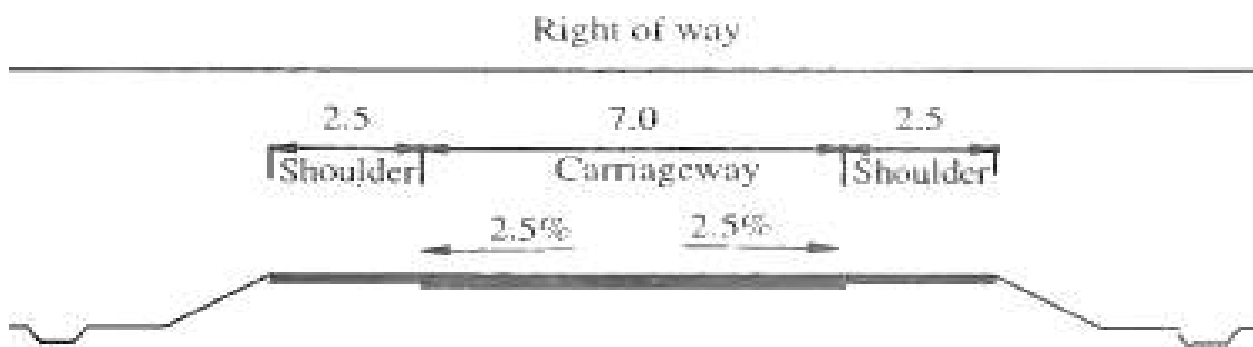


Figure 2.3: TCS. 2.3 Of Schedule D of CA
Two lane undivided highway with granular shoulder in Open Country

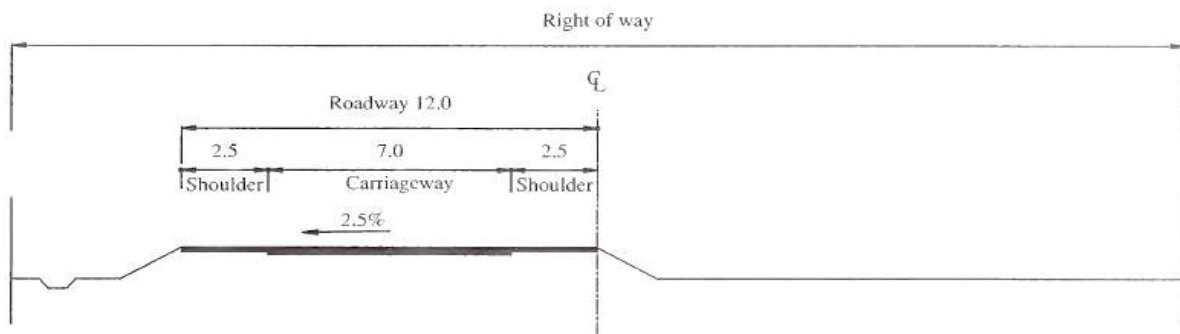


Figure 2.4: TCS. 2.4 of Schedule D of CA
Eccentrically placed shall be applicable for two lane new bypass in plain/rolling terrain

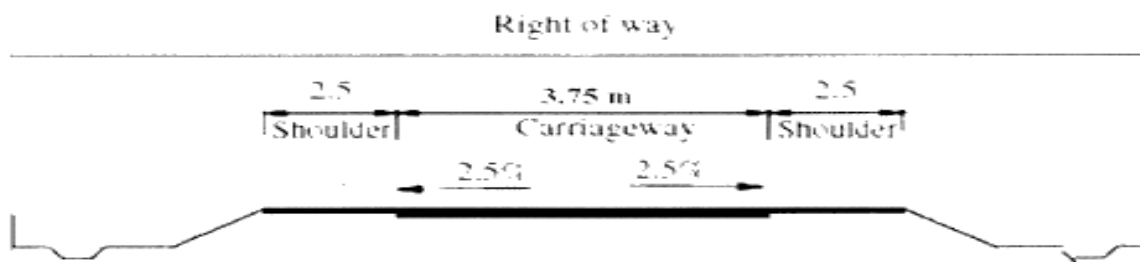


Figure 2.5: TCS. 2.6 of Schedule D of CA
Single lane with granular shoulder shall be applicable in sanctuary area in plain/rolling terrain

TCS schedule is provided below.

Table 2.2: TCS Schedule

S No.	From Chainage	To Chainage	length	Type of TCS
1	31+000	31+800	800	TCS.2.2 of Schedule D of CA
2	31+800	43+600	11800	TCS.2.3 of Schedule D of CA
3	43+600	43+800	200	TCS.2.1 of Schedule D of CA
4	43+800	50+700	6900	TCS.2.3 of Schedule D of CA
5	50+700	51+000	300	TCS.2.1 of Schedule D of CA
6	51+000	51+200	200	TCS.2.3 of Schedule D of CA
7	51+200	51+500	300	TCS.2.1 of Schedule D of CA
8	51+500	52+400	900	TCS.2.3 of Schedule D of CA
9	52+400	53+800	1400	TCS.2.2 of Schedule D of CA
10	53+800	57+500	3700	TCS.2.3 of Schedule D of CA
11	57+500	58+200	700	TCS.2.1 of Schedule D of CA
12	58+200	65+400	7200	TCS.2.3 of Schedule D of CA
13	65+400	65+700	300	TCS.2.1 of Schedule D of CA
14	65+700	75+000	9300	TCS.2.3 of Schedule D of CA
15	75+000	75+600	600	TCS.2.1 of Schedule D of CA

S No.	From Chainage	To Chainage	length	Type of TCS
16	75+600	76+700	1100	TCS.2.3 of Schedule D of CA
17	76+700	77+100	400	TCS.2.1 of Schedule D of CA
18	77+100	77+600	500	TCS.2.3 of Schedule D of CA
19	77+600	99+000	21400	TCS.2.6 of Schedule D of CA
20	99+000	100+600	1600	TCS.2.3 of Schedule D of CA
21	100+600	100+800	200	TCS.2.1 of Schedule D of CA
22	100+800	104+400	3600	TCS.2.3 of Schedule D of CA
23	104+400	105+300	900	TCS.2.1 of Schedule D of CA
24	105+300	109+500	4200	TCS.2.3 of Schedule D of CA
25	109+500	109+900	400	TCS.2.1 of Schedule D of CA
26	109+900	113+200	3300	TCS.2.3 of Schedule D of CA
27	0+000	4+400	4400	TCS.2.4 of Schedule D of CA for Bypass

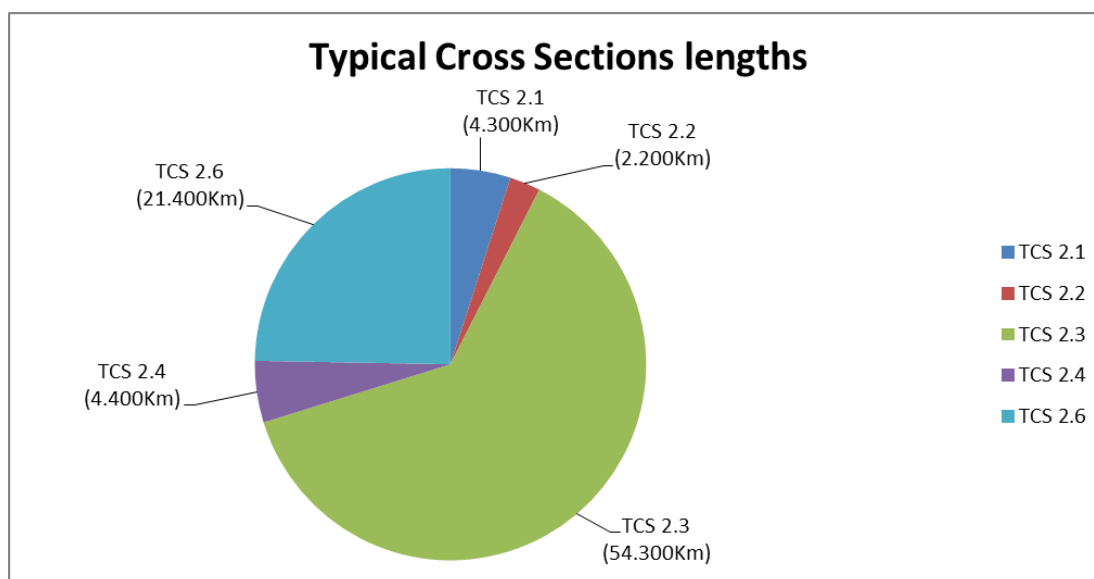


Figure 2.6: Pictorial Representation of TCS Lengths

2.3 Road Side Drainage

- To facilitate quick disposal of storm water from the Carriageway and to avoid accumulation of drainage RCC side drains are constructed along the main carriage way on both flanks as specified in Schedule B of CA in strict adherence to the Standard Specifications set forth in Schedule D of CA.
- The Concessionaire has provided RCC covered drains with footpath in built up areas while earthen drains in open and rural areas.

2.4 Service Roads

Service roads are not provided along the entire stretch of the project road as per provisions of Schedule B of the Concession Agreement.

2.5 Bypass/Realignment

Bypass starts from Km 113+000 of Patan – Tendukheda Rehli Road & Joint at Km 38+100 of Sagar Rehli Road of 4.4 Kms length as per Provisions of Schedule B of CA

2.6 Intersections

As per Schedule B of CA requires developing 06 Nos Major Junctions and 14 Nos. Minor Junctions. Details are given below.

Table 2.3: Summary of Junctions

S No..	Chainage (Km)	Type of junction	Lead to
Major Junctions			
1	31+000	Y	Malikhedi
2	37+800	X	LHS: Podikala RHS: Jain temple
3	56+800	Y	Damoh
4	113+000	T	Rehli
5	115+800	X	Pandalpur
6	118+400	T	Sagar
Minor Junctions			
1	44+200	X	LHS: Singramopur RHS: SchaJganj
2	51+800	T	Nargua
3	52+600	T	Jharoli
4	54+800	Y	Tendukhera
5	55+800	Y	Ghanghor
6	73+400	X	LHS: Gunchi RHS: Jhalon
7	75+400	T	Magdupura
8	76+200	T	Sehri
9	78+800	Y	Damoh
10	94+800	X	LHS: Hinotiya Khapa RHS: Mohli
11	99+600	X	LHS: School RHS: Chandpur
12	110+200	X	LHS: Baleh RHS: Chandpur
13	110+400	T	Tikitoriya
14	110+600	T	Balch

2.7 Grade Separated Structures and underpasses

The Concessionaire has provided four numbers of CUP's as per COS.

Table 2.4: List of Grade Separated Structures (CUP's)

S No.	Chainage (Km.)	Span (m)
1	80+114	1x10x4
2	81+265	2x10x4
3	86+050	1x10x4
4	96+107	1x8x4

2.8 Road Under Bridge

There are no Road Under Bridge in the Project, as per provisions of Schedule B of the Concession Agreement

2.9 Carriageway Details

The details of Carriageway are shown in the following table.

Table 2.5: Summary of Carriageway Details

S. No.	Description	Flexible	Rigid	TCS Type
1	Four lane divided carriageway	2.200 Kms	---	TCS.2.2 of Schedule D of CA
2	Two lane with paved shoulder	4.300 Kms	---	TCS.2.1 of Schedule D of CA
3	Two lane with granular shoulder including Bypass	54.300 Kms	---	TCS.2.3 of Schedule D of CA
	Bypass	4.400	---	TCS.2.4 of Schedule D of CA
4	Single lane with granular shoulder	21.400 Kms	---	TCS.2.6 of Schedule D of CA
	Total length of the project	86.600 Kms	---	
5	TYPE OF ALIGNMENT			
6	New alignment	---	---	---
7	Realignment	---	---	---
8	Strengthening	---	---	---
9	Reconstruction	86.600 Kms	---	---
10	Total length of the project	86.600 Kms	---	---

2.10 Summary of Structures

Summary of Structures as per provisions of schedule B of the CA is given below.

Table 2.6: Summary of Structures:

S. No.	Description	Major Bridges	Minor Bridges	Hume Pipe Culverts	Box/Slab Culverts
1	Retained-Repair & Strengthening	5	3	2	
2	Widening- Repair & Strengthening			13	

S. No.	Description	Major Bridges	Minor Bridges	Hume Pipe Culverts	Box/Slab Culverts
3	Reconstruction		17	42	19
4	New		2	28	
	Total	5	22	85	19

2.11 Toll Plazas

As per Schedule C of CA provisions, Two Toll Plazas have been constructed at Km34+100 & Km 110+400. Salient features of Toll Plazas are provided below.

Toll Plaza – Km 34+100

- Each side comprises of two normal lanes and one extra wide lane.
- The lane width in normal lanes is 3.20m; extra wide lane is 4.5m.
- Single canopy is provided to cover the toll lanes.
- Toll plaza has been constructed as per standards set forth in Schedule D of CA having facilities like lighting, water supply and firefighting Arrangements.
- CC Cameras are installed and monitored in administrative building.

Toll Plaza – Km 110+400

- Each side comprises of, one normal lane and one extra wide lane.
- The lane width in normal lanes is 3.20m, Extra wide lane is 4.5m.
- Single canopy is provided to cover the toll lanes.
- Toll plaza has been constructed as per standards set forth in Schedule D of CA having facilities like lighting, water supply and firefighting Arrangements.
- CCTV Cameras are installed and monitored in administrative building.

2.12 Bus shelters

As per the provisions of Schedule C of CA, 16 Nos. Bus Shelters are provided in the entire length of Project. Details as per Schedule C of CA and provided as per site condition are given below.

Table 2.7: Bus Shelters:

S. No.	Chainage (Km)	S. No.	Chainage (Km)
1	31+000	9	75+000
2	36+000	10	76+700
3	43+600	11	94+500
4	50+700	12	100+600
5	51+200	13	104+400
6	54+200	14	109+500
7	57+500	15	114+100
8	65+400	16	115+700

2.13 Other Project Facilities Provided as per Schedule C

- Roadside furniture: Sign boards, kilometer stones, road marking and object/hazard markers are provided in accordance with IRC-SP: 73-2007.
- Traffic safety devices: W beam crash barriers, parapet walls are provided as per the provisions of Schedule C of the CA
- Landscaping: provided at Toll plazas location and being maintained
- Tree plantation: Tree plantation is provided on both sides, for the full length of project corridor and being maintained.
- Medical Aid Post: Provided at toll plaza location and operational
- Highway Lighting: Highway lighting is provided at Toll Plazas locations and is functional.

CHAPTER 3. ROAD INVENTORY & PAVEMENT CONDITION

3.1 General

Road Inventory and pavement condition surveys were carried out by a team of Engineers and the features noted at site are presented below.

3.2 Road Inventory

Inventory of the project road was carried out physically and is summarized in Table 3.1 and few representative photographs are given below to have a clear picture of the Project.

Table 3.1: Road Inventory

S No.	Features	Remarks
1	Terrain	Plain, Rolling and Hilly Terrain
2	Land Use	Agriculture, Forest with Built up sections
3	Total Length	86.6Kms
4	Villages	13 Nos
5	Four lane divided carriageway	2.200 Kms
6	Two lane with paved shoulder	4.300 Kms
7	Two lane with granular shoulder	54.300 Kms
8	Bypass	4.400 Kms
9	Single lane with granular shoulder	21.400 Kms
10	Earthen shoulder	1.0 m to 2.5m width on either side
11	Junctions	20 Nos
12	Toll Plaza	1) Km34+100 2) Km 110+600
13	Sign boards	Sign boards are provided as per requirement
14	Road Markings	Lane Markings are provided as per requirement
15	Bus Bays /shelters	16 Nos.
16	Truck Lay bye	Nil
17	Street Lighting	Highway lighting provided as per requirement
18	Avenue plantation	Nil

3.3 Pavement Condition

Pavement condition survey was carried out on the project road based on observations supplemented by simple measurements. The criteria adopted for the classification of condition of the pavement is as per 4.2.1 of IRC 81-1997.

Table 3.2: Pavement Condition Classification

Classification	Pavement condition
Good	No cracking, rutting less than 10 mm
Fair	No cracking or cracking confined to single crack in the wheel track with rutting between 10 mm and 20 mm.
Poor	Extensive cracking and/or rutting greater than 20mm sections with cracking exceeding 20% shall be treated as failed.

Pavement surface condition assessment is a key component of infrastructure asset management. The information is used across a wide range of business processes which includes: Monitoring the performance of the road; Predicting future pavement conditions and assessing long term needs; Identifying rehabilitation and maintenance treatment options; investigate causes of pavement deterioration and evaluating specific treatment options; The purpose of the pavement condition survey is to provide a more accurate and detailed investigation of the pavement deterioration in order to assist in determining appropriate rehabilitation treatments.

3.4 Pavement Condition Survey

The survey on general Pavement Condition was primarily undertaken by means of slow drive- over survey, and supplemented with measurements where ever necessary. Pavement assessment was done with the help of simple instruments using measuring tape, Straight edge. It was carried out to quantify pavement deficiency on a representative basis. Aspects of pavement condition assessment include surface defects, rut depth, cracking, pot holes, patched areas, shoulder conditions etc. An overall assessment of performance serviceability of the road was also done to rate the existing pavement and shoulder condition qualitatively.

The Pavement Condition is measured under the following sub-heads:

- Shoulder- (Composition/Condition)
- Riding Quality (Good/Fair/Poor/Very Poor)
- Pavement Condition-
 - Cracking (% of surface area)
 - Ravelling (%of surface area)
 - Potholes (%of surface area)
 - Patching (%of surface area)
 - Rut depth
 - Pavement edge drop (mm)
- Road Side Drain (Non Existing/ Partially Functional/ Functional)

Upon verification of the Pavement Condition in the above said manner, it is observed that the Pavement condition of Project road is good. The field measurements of the Pavement Condition survey are tabulated in the standard proforma as per IRC: SP-19 and is given in **ANNEXURE 1**. The summary of Pavement Condition is given below.

Table 3.3: Pavement condition summary

From (Km)	To (Km)	Length (kms)	Condition
31+000	113+200	82.200	Good
0+000	4+400	4.400	Good



Km 39+600



Km 52+200



Km 54+610



Km 55+400

Figure 3.1 : Pavement Condition Photos

CHAPTER 4. INVENTORY AND REVIEW OF STRUCTURES

4.1 General Assessment and Details of the Existing structures

Inspection of existing structures on the project section was carried out, detailed inventory and condition is examined during the site visit as per the guide lines provided in IRC SP: 52-1999 & IRC SP: 35-1990.

4.2 Inventory of Structures

There are 05 Nos. of Major Bridge, 19 Nos. of Minor Bridges, 78 Nos. Of Pipe culverts, 20 Nos. of Slab/ Box culverts and 4 Nos. of Cattle Under Passes are there along this project road.

Table 4.1 List of Structures

S No.	Type of Structure	Numbers
1	Major bridges	05 Nos.
2	Minor Bridge	19 Nos.
3	Pipe culverts	78 Nos.
4	Slab/Box Culverts	20 Nos.
5	CUP	04 Nos.

The superstructure for major bridges is of RCC solid slab type with RCC wall type piers and abutments resting on open foundation. The superstructure for minor bridges is of RCC solid slab type with RCC/PCC wall type piers and abutments resting on open foundations. Detailed inventory and condition survey of bridges are given in **ANNEXURE 2**. The culverts observed along the project road are mainly of two types viz. pipe culverts and RCC slab/box culverts. Structural condition of most of the culverts is fair. Detailed inventory and condition survey of culverts are given in **ANNEXURE 3**.

4.3 Details of Major Bridges

The total length of the major bridge at Km 35+611 is 103.80m with 6 spans. The superstructure consists of RCC solid slab with RCC wall type piers and abutments resting on open foundations. Superstructure is seated on elastomeric bearings. Expansion joints are of Buried type. Steel railings has been provided on both sides of the deck.

The total length of the major bridge at Km 54+682 is 72.0m with 6 spans. The superstructure consists of RCC solid slab with RCC wall type piers and abutments resting on open foundations. Superstructure is seated on Tar paper bearings. Expansion joints are of Buried type. Steel railings has been provided on both sides of the deck.

The total length of the major bridge at Km 77+516 is 126.0m with 6 spans. The superstructure consists of Box girder with RCC wall type piers and abutments resting on open foundations. Superstructure is seated on elastomeric bearings. Expansion joints are of Strip seal type. Steel railings has been provided on both sides of the deck.

The total length of the major bridge at Km 113+554 is 62.50 m with 5 spans. The superstructure consists of RCC solid slab with RCC wall type piers and abutment resting on open foundations.

Superstructure is seated on Tar paper bearings. Expansion joints are of Buried type. Steel railings has been provided on both sides of the deck.

The total length of the major bridge at Km 114+323 is 102.40 m with 16 spans. The superstructure consists of RCC solid slab with circular type piers and regular RCC wall type abutment resting on open foundations. Superstructure is seated on Tar paper bearings. Expansion joints are of Buried type. Steel railings have been provided on both sides of the deck.

Table 4.2: List of Major Bridges

S No.	Chainage (Km.)	Span (m)	Total Length of Bridge (m)
1	35+611	6 x 17.3	103.800
2	54+682	6 x 12.0	72.000
3	77+516	6 x 21.0	126.000
4	113+554	5 x 12.5	62.500
5	114+323	16 x 6.40	102.400

The condition of the superstructure and substructure is good. Certain minor maintenance operations such as quadrant pitching, reflector plates, drainage spouts and strip seal expansion joints are to be carried out.



Km 54+682

Figure 4.1 Overall view of the Major Bridge at Km 54+682

4.4 Details of Minor Bridges

There are 19 minor bridges in the project stretch. The type of superstructure for minor bridges is RCC solid slab and the substructure is PCC conventional wall type supported on open foundations. Expansion joints are buried type and bearings are tar paper and elastomeric bearings. RCC crash barriers are provided on all structures.

Table 4.3 Inventory of Minor Bridges

S No.	Chainage Km	Span (m)	Total Length of Bridge (m)	Description
1	31+792	1 x 8.2	9.50	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
2	32+291	1 x 8.4	9.70	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
3	35+031	2 x 5.0	11.10	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
4	36+639	2 x 5.0	11.10	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
5	51+062	3 x 11.6	34.80	Minor bridge is of RCC solid slab superstructure with RCC wall type piers and abutments resting on open foundations. Other features are RCC crash barrier, bituminous wearing coat, and Tar paper Bearings and buried type expansion joints.
6	52+241	3 x 13.4	40.20	Minor bridge is of RCC solid slab superstructure with RCC wall type piers and abutments resting on open foundations. Other features are RCC crash barrier, bituminous wearing coat, and Tar paper Bearings and buried type expansion joints.
7	63+305	2 x 10.2	22.50	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
8	67+640	4 x 10.0	42.80	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
9	70+843	4 x 5.0	21.70	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
10	75+848	2 x 10.0	22.10	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
11	100+047	4 x 12.2	48.80	Minor bridge is of RCC solid slab superstructure with RCC wall type piers and abutments resting on open foundations. Other features are RCC crash barrier, bituminous wearing coat, and Tar paper Bearings and buried type expansion joints.
12	100+973	3 x 10.0	30.00	Minor bridge is of RCC solid slab superstructure with CRM wall type piers and abutments resting on open foundations. Other features are Steel railing, bituminous wearing coat, and Tar paper Bearings and buried type expansion joints.
13	101+344	2 x 6.8	13.60	Minor bridge is of RCC solid slab superstructure with PCC wall type piers and abutments resting on open foundations. Other features are Steel railing, bituminous wearing coat, and Tar paper Bearings and buried type expansion joints.
14	106+175	2 x 10.3	22.70	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
15	106+398	1 x 9.7	11.20	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.

S No.	Chainage Km	Span (m)	Total Length of Bridge (m)	Description
16	107+958	1 x 7.7	8.80	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
17	108+162	2 x 9.0	18.00	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
18	109+663	1 x 7.6	8.70	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
19	112+383	1 x 8.0	9.30	Minor bridge is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.



Km 52+241

Figure 4.2: Representative photo for Minor Bridges

4.5 Details of CUP's

There are 4 No's of CUP's in the project stretch. The type of structure is RCC Box type structure. RCC crash barriers are provided on both sides.

Table 4.4 Inventory of CUP's

S No.	Chainage Km	Span (m)	Total Length (m)	Description
1	80+114	1 x 10 x 4.0	10.0	CUP is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
2	81+265	2 x 10 x 4.0	20.0	CUP is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
3	86+050	1 x 10 x 4.0	10.0	CUP is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.
4	96+107	1 x 8 x 4.0	8.0	CUP is RCC Box structure. It has RCC crash barrier, bituminous wearing coat.

4.6 Details of Culverts

The culverts observed along the project road are mainly of two types' viz. RCC Slab/Box culverts and Pipe culverts. The condition of culverts is generally good. For some of the pipe culverts vegetation and vent cleaning is required. In general, the condition of all the structures is found satisfactory. The detailed condition of the same are given the following sections. Detailed inventory and condition survey of culverts are given in **ANNEXURE 3**.

Details of the Slab/ Box Culverts

There are 20 nos. of slab/Box culvert in the project stretch. The details of the culverts are as given below.

Table 4.5: List of Slab/Box Culverts

S No.	Chainage Km	Span (m)	Vent Size (m)
1	35+870	1 x 3.0	2.50
2	40+006	2 x 3.0	2.60
3	50+395	1 x 3.0	3.00
4	51+425	1 x 3.2	3.20
5	61+251	2 x 3.0	2.60
6	70+252	1 x 3.5	3.1
7	70+676	2 x 3.0	2.60
8	72+038	2 x 3.0	2.60
9	72+284	1 x 5	2.00
10	72+817	1 x 4.5	4.0
11	73+690	2 x 3	3.0
12	74+027	1 x 5.5	3.1
13	77+336	2 x 3	3.0
14	80+270	1 x 3.8	2.10
15	83+070	1 x 3.3	2.10
16	104+088	1 x 3.0	2.00
17	104+530	1 x 7.0	3.00
18	106+783	1 x 7.0	2.10
19	107+407	1 x 4.7	2.10
20	111+636	2 x 3.0	2.50

The general condition of above Box/slab culverts is good. Maintenance is to be carried out before monsoon for vent clearance, Protection works etc.

There are 78 Nos of pipe culverts in the project stretch. The details of the culverts are as given below.

Table 4.6: List of Pipe Culverts

S No.	Chainage Km	No. of Rows X Dia (m)	Sl. No.	Chainage Km	No. of Rows X Dia (m)
1	32+885	1 x 0.9	40	74+442	2 x 0.9
2	33+500	1 x 1.2	41	76+186	1 x 1.2
3	35+134	2 x 1.2	42	77+189	1 x 1.2
4	35+502	1 x 1.2	43	77+723	1 x 1.0
5	36+113	2 x 0.9	44	77+728	1 x 1.0
6	37+116	1 x 1.2	45	78+560	1 x 1.0
7	37+413	1 x 1.2	46	79+350	1 x 1.2
8	37+677	1 x 1.2	47	79+500	1 x 1.2
9	38+453	1 x 1.2	48	80+345	1 x 1.2
10	38+756	1 x 1.2	49	81+842	1 x 1.2
11	39+034	2 x 0.9	50	83+963	2 x 0.9
12	39+135	1 x 1.2	51	85+006	1 x 1.2
13	40+629	1 x 1.2	52	85+615	1 x 1.2

S No.	Chainage Km	No. of Rows X Dia (m)	Sl. No.	Chainage Km	No. of Rows X Dia (m)
14	40+809	1 x 1.2	53	86+085	1 x 1.0
15	40+941	2 x 0.9	54	88+300	1 x 1.0
16	41+232	2 x 1.2	55	88+380	1 x 1.0
17	41+682	1 x 1.2	56	88+600	1 x 1.2
18	42+820	3 x 1.2	57	90+030	1 x 1.2
19	44+655	2 x 1.2	58	91+396	1 x 1.2
20	47+872	1 x 1.2	59	92+035	1 x 1.2
21	49+485	2 x 0.9	60	92+215	1 x 1.0
22	52+603	1 x 1.2	61	92+702	1 x 1.0
23	53+004	1 x 1.2	62	92+892	1 x 1.2
24	53+561	1 x 1.2	63	93+900	1 x 1.2
25	54+358	1 x 1.2	64	94+445	1 x 1.2
26	54+814	1 x 1.2	65	95+142	1 x 1.2
27	55+175	1 x 1.2	66	95+326	1 x 1.2
28	56+050	1 x 1.2	67	96+750	1 x 1.2
29	59+639	1 x 1.2	68	98+265	1 x 1.2
30	60+140	1 x 1.2	69	99+002	1 x 1.2
31	61+686	1 x 1.2	70	99+431	1 x 1.2
32	63+450	1 x 1.2	71	102+265	1 x 1.2
33	63+995	1 x 1.2	72	103+285	1 x 1.2
34	64+490	1 x 1.2	73	104+300	1 x 1.2
35	64+686	1 x 1.2	74	109+316	1 x 1.2
36	65+381	1 x 1.2	75	110+475	1 x 1.2
37	66+765	1 x 1.2	76	110+966	1 x 1.0
38	68+172	1 x 1.2	77	111+359	1 x 1.0
39	32+885	1 x 1.2	78	112+902	1 x 1.0

The general condition of above pipe culverts is good. Maintenance is to be carried out before monsoon for vent clearance, Protection works etc.

The culverts are in fair condition and can be retained in the present condition with following repairs/rehabilitation measures.

- Chocked culverts must be cleared.
- Debris and garbage near outside the vents must be removed.

CHAPTER 5. PAVEMENT DESIGN VALIDATION AND OVERLAY SCHEDULES

5.1 General

Review of Pavement design report includes providing insights on design life of pavement, crust thickness, history of overlays on the existing pavement, pavement condition and CA provisions for the upcoming renewal cycles.

5.2 Pavement design validation

The flexible pavement has low flexural strength and hence layers reflect the deformation of the lower layers / sub-grade on to the surface layer after the withdrawal of wheel load. In order to control the deflections in the sub-grade so that no permanent deflections result, the pavement thickness is so designed that the stresses on the sub-grade soil are kept within its bearing capacity. Loading of bituminous pavement requires the stiffest layers to be placed at the surface with successive weaker layers down to sub-grade.

The project road is already operational and the standards applicable during the design development phase of the project road are taken into account for this review. Therefore, the design of pavement has been validated based on IRC: 37-2012 publication while the current publication is IRC: 37-2018.

Review of Pavement Design

As per the pavement design approved in the project, the following conclusions are given.

Table 5.1: Flexible Pavement Design summary

S No.	Description/ Pavement layer	Design Parameters	Adopted values
1	Sub Grade CBR (%)	9%	9%
2	Design Life (Years)	15 years	15 years
3	Design Traffic (MSA)	1.98 MSA for HS-1 Actual 0.26 MSA for HS-2 Actual	5 MSA for HS-1 & HS-2
4	Surface course (BC/SDBC)	25 mm (SDBC)	30 mm (BC)
5	Binder course (DBM)	50 mm	50 mm
6	Base course (WMM)	250 mm	250 mm
7	Sub Base course (GSB)	150 mm	200 mm

Pavement design (Crust thickness)

The new pavement shall be designed in accordance with the IRC:37. “Guidelines for the Design of Flexible Pavements”. Rigid pavement shall be designed in accordance with the method prescribed in IRC:58. “Guidelines for the Design of Plain Jointed Rigid Pavements for Highways”.

Pavement design validation is carried out as per actual traffic from COD. As per IRC 37, Distribution of commercial vehicles and growth rate values are 0.75 and 5% respectively. Vehicle Damage Factor (VDF) 0.7, 0.5, 2.5 and 4.11 for LCV, BUS, 2-AT and MAV respectively as per design report. Summary is given below.

Table 5.2: Flexible Pavement Design Traffic Validation (Patan)

FY Year	AADT in Vehicles					CVPD (Veh.)	MSA	CMSA	Year	Remarks
	Car	LCV	BUS	2-AT	MAV					
2018	637	271	35	32	71	409	0.16	0.16	2	Actual
2019	896	388	44	57	93	581	0.22	0.38	3	Actual
2020	1070	448	46	70	99	664	0.25	0.63	4	Actual
2021	1123	470	49	74	104	697	0.26	0.90	5	Projected
2022	1179	494	51	78	109	732	0.28	1.18	6	Projected
2023	1238	518	54	81	115	768	0.29	1.47	7	Projected
2024	1300	544	56	85	121	807	0.31	1.77	8	Projected
2025	1365	571	59	90	127	847	0.32	2.09	9	Projected
2026	1433	600	62	94	133	889	0.34	2.43	10	Projected
2027	1505	630	65	99	140	934	0.35	2.79	11	Projected
2028	1580	661	68	104	147	980	0.37	3.16	12	Projected
2029	1659	694	72	109	154	1029	0.39	3.55	13	Projected
2030	1742	729	75	115	162	1081	0.41	3.96	14	Projected
2031	1829	766	79	120	170	1135	0.43	4.39	15	Projected

Table 5.3: Flexible Pavement Design Traffic Validation (Rehli)

FY Year	AADT in Vehicles					CVPD (Veh.)	MSA	CMSA	Year	Remarks
	Car	LCV	BUS	2-AT	MAV					
2018	329	91	10	15	24	139	0.05	0.05	2	Actual
2019	519	156	15	29	38	238	0.09	0.14	3	Actual
2020	606	177	19	33	46	274	0.10	0.24	4	Actual
2021	636	186	19	34	48	288	0.11	0.35	5	Projected
2022	668	195	20	36	51	302	0.11	0.46	6	Projected
2023	702	205	21	38	53	317	0.12	0.57	7	Projected
2024	737	215	23	40	56	333	0.12	0.70	8	Projected
2025	774	226	24	42	59	350	0.13	0.83	9	Projected
2026	812	237	25	44	61	367	0.14	0.96	10	Projected
2027	853	249	26	46	65	385	0.14	1.11	11	Projected
2028	896	261	27	48	68	405	0.15	1.26	12	Projected
2029	940	274	29	50	71	425	0.16	1.41	13	Projected
2030	987	288	30	53	75	446	0.17	1.58	14	Projected
2031	1037	303	32	56	78	468	0.17	1.75	15	Projected

Based on the above projected traffic, estimated MSA at 8 years and 15 years are 1.77, 4.39 of TP1 respectively. Similarly estimated MSA at 8 years and 15 years of TP2 are 0.70, 1.75 respectively.

Traffic considered in pavement design is more than projected traffic based on actual traffic. Hence the pavement design adopted is found in order.

Rigid Pavement

Pavement crust thickness in the pavement design report for rigid pavement is as follows: -

Table 5.4: Rigid Pavement Design for Toll Plaza

Description	Design/Adopted Thickness
CBR of sub grade	9%
Design life in years	30
Pavement Quality Concrete (PQC) - mm	250
Dry Lean Concrete (DLC) - mm	150
Drainage Layer (GSB) - (mm)	150
Diameter of Dowel Bar (mm)	32
Length of Dowel Bar (mm)	450
Spacing of Dowel Bars (mm)	400
Diameter of Tie Bar (mm)	12 (Deformed)
Length of Tie Bar (mm)	640
Spacing of Tie Bars (mm)	710

The Pavement crust has been designed according to IRC specification and found in order, the adopted/constructed pavement layer thickness is adequately provided than actual/designed thickness.

5.3 Overlay during operation and maintenance

The pavement has been designed to cater traffic of 5 MSA for a design life of 15 years for Bituminous layers and Granular layer (up to 2031), whereas the actual traffic is 1.98 MSA and 0.26 MSA for HS-1 and HS-2 respectively for 15 years. This implies that pavement will be structurally adequate to cater the future traffic with periodic renewal carried out under the maintenance program.

However, it is recommended to carry out traffic survey, pavement condition and pavement strength evaluation before the end of Stage-I of design life (as per pavement design report) and prior to the end of concession period to evaluate the requirement of overlay.

5.4 Maintenance/ Overlay schedule

Periodic Maintenance includes Profile corrective course overlaid with the periodic renewal of the wearing course of SDBC. The detail maintenance schedule is summarized below.

Routine maintenance - Every year

Periodic Renewal for Flexible Pavement – Next periodic renewal proposed on or before 2024.

Periodic Maintenance for Rigid Pavement – Re-texturing shall be done at least once in 10 years from construction (as per IRC 58-2015).

CHAPTER 6. SAFETY AUDIT OF ROAD

6.1 General

Road Safety Audit (RSA) is defined as “the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users”.

Road Safety is a multi- sectorial and multi- dimensional issues. It incorporates the development and management of road infrastructure, provisions of safer vehicles, legislations and law enforcements, mobility planning, provisions of health and hospital services, child safety, urban land use planning.

A Key feature of a road safety audit is the use of a team of professionals with varied expertise. The team shall include highway safety engineers, highway design engineers, maintenance personal, and law enforcement. Additional specialties shall be added to the team as needed.

Central Road Research Institute (CRRI) has studied road safety elements extensively in the past and has come up with various manuals such as manual for safety in road design (1998), Road safety Audit Manual (2003) and Revised Road Safety Audit manual (2010). Indian Road Congress (IRC) has published Special provision SP-88, Manual on road Safety Audit. The methodology used for the design stage audit process is based on these manuals. Type Designs for Intersections on National Highways, 1992

Table 6.1: Referred IRC Publications

IRC : 35	Code of Practice for Road Markings
IRC : 38	Guidelines for Design of Horizontal curves for highways and Design tables
IRC : 67	Code of Practice for Road signs
IRC : 73	Geometric Design standards for rural highways (non-urban)
IRC:103	Guidelines for Pedestrian Facilities
IRC: SP-15	Ribbon Development along highways and its prevention
IRC: SP-23	Vertical curves for highways
IRC: SP-41	Guidelines on design of at-grade intersections in Rural and Urban areas
IRC: SP-55	Guidelines for safety in construction zones
IRC:SP- 88	Manual of Road Safety Audit

6.2 Road Safety Audit

During the site visit it is observed that all safety items are provided as shown in the following table

Table 6.2: Safety Items

S. No.	Item Description		Status	Condition
1	Sign Boards	Chevron signs Village sign Board Informatory Boards Object Hazard Markers at culverts	Available as per site requirement	Good
2	Road Marking	Studs & Lane Marking	Available as per site	Good

S. No.	Item Description		Status	Condition
			requirement	
3	Metal Beam Crash Barriers	At High Embankments	Available as per site requirement	Good

This Project Section is part an important corridor. It is the Concessionaire's duty and responsibility to provide a safety and thorough fare for the road users by assuring safe and hindrance free movement for both Traffic and Pedestrians along urban locations & habitations.

Few Observations on the road furniture in safety aspects for the project road are mentioned below:

- At few places, reflectors were missing on the signboards and few sign boards were also damaged.
- The object hazard markers are placed only on one side of Head walls/parapet walls of all structures, whereas it is to be installed on both sides at structures.



W Beam at approaches of MNB at Km 51+070



Railing at Builtup sections at Km 55+400



Speed Limit Board and Direction Chevron Boards



Safety before the Head wall of Box Culvert at 54+610

Figure 6.1: Representative photos during road safety audit

6.3 Conclusions

Safety arrangements are made for road users along the project road are found to be in conformity with Project Road requirements and good industry practice. However, a continuous monitoring on safety arrangements is required during the operation and maintenance period.

CHAPTER 7. TOLL PLAZA & HTMS

7.1 General

There are two toll Plazas at Km 34+100 and Km 110+400.

- Each side comprises of two normal lanes and one extra wide lane.
- The lane width in normal lanes is 3.20m; extra wide lane is 4.5m.
- Single canopy is provided to cover the toll lanes.

7.2 Tolling Equipment's and Control Room Equipment's

List of equipment provided at toll plaza and control room is given below.

Table 7.1: List of Tolling Equipment in toll plaza @34+100

S No.	Description	Nos.
Lane and Booth Equipment		
1	DG SET -701 (25KVA)	1
2	NVR	1
3	DVR	1
4	PTZ CAMERA (NEW)	1
5	PTZ CAMERA (OLD)	2
6	ALL BOOTH SYSTEM, TLC, LCD	2
7	6 KVA UPS	6
8	15 KVA UPS	1
9	STABILIZER- 6KVA	1
10	STABILIZER- 15KVA	1
11	UFD OLD	1
12	OFFICE CPU	6
13	OFFICE MONITOR	2
14	PRINTER NEW	3
15	PRINTER OLD	1
16	SCANNER	1
17	BOOTH CAMERA(NEW)	1
18	EMAGE CAMERA	4
19	VIDEO CAMERA (CP PLUS NEW)	6
20	INTERCOM	4
21	FASTAG	7
22	SMART CARD READER	4

Table 7.2: List of Tolling Equipment in toll plaza @110+400

S No.	Description	Nos.
Lane and Booth Equipment		
1	TLC (Toll lane Controller)	6
2	Monitor	6

S No.	Description	Nos.
3	Printer	6
4	Keyboard	6
5	CCTV Booth	6
6	Intercom-S	6
7	IC Camera	6
8	Barrier	6
9	UFD	6
10	Traffic Light	6
11	OHLS	6
12	AVC Laser	4
13	Axle Sensor	6
14	Wifi-Router Tenda	1
15	Data Server-Technovaa	1
16	NVR	1
17	Network Rack	1
18	POE Switch	1
19	RFID HHT	1
20	PTZ-LHS	1
21	PTZ-RHS	1
22	Firewall Router	1
23	Lane Camera	1

7.3 Vehicles

The list of vehicles which were observed at site for operation of highway and toll plazas are presented below.

Table 7.3: List of Vehicles

S No.	Vehicle Type	Make & Model	No of vehicles
1	Patrol vehicle	Tata	2
2	Ambulance	Maruti van	2



Toll Plaza at Patan



Toll Building at Raheli

Figure 7.1: Photographs of Toll Plaza

CHAPTER 8. TRAFFIC CENSUS AND TOLL REVENUE

8.1 Traffic Census

In accordance with clause 22.1, the Concessionaire shall install, maintain and operate electronic/computerized traffic counters at each of the Toll Plazas and collect data relating to the number and types of vehicles using the Project Highway. A weekly statement of such data shall be compiled and furnished forthwith by the Concessionaire to MPRDC substantially in the form specified in Schedule N of CA.

Accordingly, the Concessionaire provided toll plaza wise details. Based on the data made available the summarized annual classified Traffic census details for the past Two years are provided in Table 8.1 below. The Actual traffic data recorded below has been taken as a basis to calculate AACGR % (Average Annual Cumulative Growth Rate).

Table 8.1: Year wise Traffic (Vehicles) Details as per schedule N of CA

A) Patan Toll Plaza						
FY Year	Car	LCV	Bus	Truck	MAV	Total Traffic
Apr 2018-Mar 2019	327023	141460	16025	20702	33791	539001
Apr 2019-Mar 2020	391470	163839	16953	25728	36344	634334
AACGR* (%)						17.69%

B) Raheli Toll Plaza						
FY Year	Car	LCV	Bus	Truck	MAV	Total Traffic
Apr 2018-Mar 2019	189572	57093	5393	10594	13840	276492
Apr 2019-Mar 2020	221839	64757	6789	11908	16786	322079
AACGR* (%)						16.49%

*AACGR- Annual Average Compound Growth Rate

8.2 Actual Revenue Collection

In accordance with clause 19.5, "During the operation period, the Concessionaire shall furnish to MRPDC within 7 days of completion of each month, a statement of fee substantially in the form set forth in Schedule-M (Monthly fee statement)". As per provisions of CA the concessionaire submitted monthly fee statement and the summary of form submitted under Schedule M during the financial year 2019-20 is given under as Table 8-2.

Table 8.2: Summary of 2019-20 Tollable traffic and revenue collected at Toll Plaza

A) Patan Toll Plaza:

Description	Car	Car(pass)	LCV	Bus	Truck	MAV	Total
In Nos.	279437	1180	142142	16908	25445	36139	501251
Toll Revenue collection in Rs.	6985925	94368	7817810	1991405	3514380	10075995	30479883

B) Rahelli Toll Plaza:

Description	Car	Car(pass)	LCV	Bus	Truck	MAV	Total
In Nos.	170525	623	43683	6742	11789	16652	250014
Toll Revenue collection in Rs.	4263125	49850	2839395	895905	1923430	5406705	15378410

The figures shown in Table 8-1 are Real time traffic data on project road for the past two years and the growth rate is calculated to be 17.69%, 16.49% in TP-1 & TP-2 respectively. It is pertinent to note that the figures given in table 8-1 are inclusive of exempted /non tollable traffic.

The figures shown in Table 8-2 are actual tollable traffic based on which the toll revenue collected and is excluding of exempted/non tollable traffic. For the realistic estimate of the traffic growth and projected revenue calculation actual traffic based on which FY 2019-20 revenue collected (table 8-2) is considered as a base year traffic and the projected traffic growth rate is restricted to 5%.

Based on the base year traffic and growth rate as explained above traffic projections from year 2019-20 to till end of Concession period toll plaza wise are calculated and summarized below in Table 8.3.

Table 8.3: Projected traffic

A) Patan Toll Plaza:

FY Year	AADT in Vehicles					CVPD* (Veh.)	AADT in PCU					CVPD* (PCU)	Remarks
	Car	LCV	BUS	2-AT	MAV		Car	LCV	BUS	2-AT	MAV		
	PCU Factor						1	1.5	3	3	4.5		
2020	769	389	46	70	99	604	769	584	139	209	446	1378	Actual
2021	807	409	49	73	104	635	807	613	146	220	468	1447	Projected
2022	848	429	51	77	109	666	848	644	153	231	491	1519	Projected
2023	890	451	54	81	115	700	890	676	161	242	516	1595	Projected
2024	934	473	56	85	120	735	934	710	169	254	542	1675	Projected
2025	981	497	59	89	126	771	981	746	177	267	569	1758	Projected
2026	1030	522	62	93	133	810	1030	783	186	280	597	1846	Projected
2027	1082	548	65	98	139	851	1082	822	196	294	627	1939	Projected
2028	1136	575	68	103	146	893	1136	863	205	309	658	2036	Projected
2029	1193	604	72	108	154	938	1193	906	216	324	691	2137	Projected
2030	1252	634	75	114	161	985	1252	952	226	341	726	2244	Projected
2031	1315	666	79	119	169	1034	1315	999	238	358	762	2357	Projected

*CVPD: Commercial vehicle per day (LCV+BUS+2 AT+MAV)

C) Raheli Toll Plaza:

FY Year	AADT in Vehicles					CVPD* (Veh.)	AADT in PCU					CVPD* (PCU)	Remarks
	Car	LCV	BUS	2-AT	MAV		Car	LCV	BUS	2-AT	MAV		
	PCU Factor						1	1.5	3	3	4.5		
2020	469	120	18	32	46	216	469	180	55	97	205	537	Actual
2021	492	126	19	34	48	227	492	188	58	102	216	564	Projected
2022	517	132	20	36	50	238	517	198	61	107	226	592	Projected
2023	543	139	21	37	53	250	543	208	64	112	238	622	Projected
2024	570	145	22	39	55	263	570	218	67	118	250	653	Projected
2025	598	153	24	41	58	276	598	229	71	124	262	686	Projected
2026	628	160	25	43	61	290	628	241	74	130	275	720	Projected
2027	660	168	26	45	64	304	660	253	78	136	289	756	Projected
2028	693	177	27	48	67	319	693	265	82	143	303	794	Projected
2029	727	186	29	50	71	335	727	278	86	150	318	833	Projected
2030	764	195	30	53	74	352	764	292	90	158	334	875	Projected
2031	802	205	32	55	78	370	802	307	95	166	351	919	Projected

8.3 Toll Revenue Calculations

The toll revenue for horizon year is calculated based on the input from the above data, actual toll rates collected on base year (2019-20), with Traffic growth, WPI growth and toll efficiency has been assumed 5%, 4% and 100% respectively and other inputs considered in revenue calculations is given in table 8-4

Table 8.4: Toll Revenue inputs

Particular	Toll plaza 1	Toll plaza 2
Location	Km 34+100	Km 110+400
4 lane length in Kms	0	0
2 lane length in Kms	40	46.6
Agreement Date	01-09-2015	01-09-2015
Appointed Date	10-04-2016	10-04-2016
Concession period	15	15
Commercial operation date	12-02-2018	12-02-2018
Concession End Date	09-04-2031	09-04-2031
Traffic study year	2020	2020
Vehicle Type	AADT	AADT

Particular	Toll plaza 1	Toll plaza 2
Car/Jeep/Van	769	469
LCV/LGV	389	120
2A-Bus	46	18
2A-Truck	70	32
MAV (2A-6A)	99	46
Growth Rate (%)	5%	5%

The split trip type based on the available toll data from Concessionaire is used to derive the annual toll collection for each plaza. The revenue estimated and presented below. Detailed toll revenue estimation is given in **ANNEXURE 4**.

Table 8.5: Toll Revenue Estimated (in Rs. lakhs)

Financial Year	Annual Revenue of TP1 @ Km 34+100	Annual Revenue of TP1 @ Km 110+400	Total	Remarks
2019-20	304.7988	153.7841	458.5829	Actual
2020-21	327.0265	164.9138	491.9403	Projected
2021-22	357.5165	176.6606	534.1771	Projected
2022-23	400.3364	201.8828	602.2192	Projected
2023-24	436.0128	215.1583	651.1711	Projected
2024-25	466.7338	233.0636	699.7974	Projected
2025-26	507.3352	249.0142	756.3494	Projected
2026-27	543.2788	269.3449	812.6238	Projected
2027-28	610.1199	299.2763	909.3962	Projected
2028-29	649.5864	323.8906	973.477	Projected
2029-30	691.3783	344.2978	1035.676	Projected
2030-31	751.0599	371.1441	1122.204	Projected
2031-32	19.70102	9.724974	29.426	9 Days

CHAPTER 9. OPERATION AND MAINTENANCE

9.1 General

As per Article 17 of CA, the Concessionaire will operate and maintain the Project roads by itself or through O & M Contractors and comply with specification and standards, and other requirements set forth in the Agreement, Good Industry Practice, Applicable Laws, applicable permits and manufacturer guidelines and instructions with respect to toll system.

9.2 Inspection

Inspection system followed is illustrated as divided into the following 3 types.

- **Visual Inspection:** Visual inspections are done at frequent intervals, and are intended to determine any potential traffic hazards to the road user or hampering the aesthetics of the project stretch. Visual Inspections are meant to identify defects that constitute an imminent or immediate hazard to the public.
- **Detailed Inspection:** Detailed Inspections often require some measuring instruments, are done less frequently and are intended more towards determining performance and behavior of various elements. These inspections also indicate if there is any need for thorough inspections. Detailed inspections are carried out primarily to establish programs of periodic or major maintenance tasks, and enhancement requirements not requiring urgent execution
- **Thorough Inspection:** Thorough Inspections are aimed at finding the cause and remedy of specific problems and at specific locations. Specialist's inspections are required once in a while. Thorough Inspections shall be carried out with highly sophisticated instruments

The inspection procedures will assist in identifying the need for replacement or renewal under planned program of maintenance and rehabilitation. The elements viz. pavement, drainage, shoulders / slopes / Earthworks, structures and buildings are covered.

Maintenance program will be submitted to authority not later than 45 days prior to each accounting year.

9.3 Operations

9.3.1. Traffic Flow Operation & Traffic Management Plan

Following are the obligations of the Concessionaire for the regular and emergency operations of the Project Road and Project Facilities.

- 1 Permitting smooth and uninterrupted flow of traffic during normal operating conditions.
- 2 Functioning of the Toll System including charging and collecting the fees from the road user in accordance with the CA.
- 3 Carrying out preventive and periodic maintenance of the Project Road;
- 4 Undertaking routine maintenance including prompt repairs of potholes, cracks, joints, drains, embankments, structures, pavement markings, lighting, road signs and other traffic control devices;

- 5 Undertaking major maintenance such as resurfacing of pavements, repairs to structures, and repairs and refurbishment of tolling system and other equipment;
- 6 Functioning of the lighting System
- 7 Functioning of the Patrolling System
- 8 Functioning of rescue and medical aid services
- 9 Ambulance as and when required
- 10 Functioning of the Project Facilities
- 11 Administrative, Operational and Maintenance Base Camp
- 12 Truck Lay bays
- 13 Pickup Bus stops / Bus Bays
- 14 Protection of the environment and provision of equipment and materials therefore;
- 15 Operation and maintenance of all communication, control and administrative systems necessary for the efficient operation of the Project Road.
- 16 Complying with Safety Requirements in accordance with Article 18.

9.4 Operation of Toll Plaza

There are two lanes in each direction operating at toll plaza, middle lanes are used by Car/LCV for collecting toll and extra wide lanes are utilized by wide vehicles like Bus/Trucks/Tractors and toll exempted vehicles. The cash collected is deposited on daily basis to the escrow account. In case of ETC system Toll collection is connected with Network system and directly deposited into the Escrow account.

9.5 Maintenance of Project road

The maintenance methodology and yearly maintenance programme will guide the Maintenance team to undertake the routine & periodic maintenance works of the Project Facilities. This programme is the basic indicator of the intended works to be carried out by the Maintenance Team over a period of one year. Road maintenance can be carried out in four ways as listed below.

- i. Preventive Maintenance
- ii. Routine Maintenance
- iii. Periodic Maintenance
- iv. Special repairs

9.5.1. Preventive Maintenance

Preventive maintenance is an organized, systematic process of applying a series of preventive treatments over the life of the pavement to minimize life cycle costs.

The strategy of applying periodic treatments at appropriate times in a pavement's life is economical than applying treatment at the end of pavement's life. Preventive maintenance is designed to retard pavement deterioration. Regular preventive maintenance will be carried out to ensure adherence to the Design Requirements and specifications throughout the Concession period.

The flexible pavement is in good condition and hence doesn't require any immediate or preventive interventions.

9.5.2. Routine Maintenance

Routine maintenance, which involves repairing of cracks, replacement of safety girders along the highway, clearance of debris following accidents, ensuring functionality of sign posts, maintenance of a security set-up, and such other activities.

9.5.3. Periodic Maintenance

In contrast to preventive maintenance treatments, periodic maintenance treatments are ideally applied on pavements to improve surface integrity and waterproofing, or to improve skid resistance, without increasing the strength of the pavement significantly. They are sometimes referred to as “functional overlays,” as they are intended to restore or enhance the ability of the roadway to serve its purpose (function), but do not increase the load-carrying capabilities. If the pavement failure is more and demands for a “structural overlay” they are intended to increase load-carrying capabilities of the project road.

The details of periodic maintenance schedule are given below.

Table 9.1: Schedule and status of for Periodic Maintenance

S No.	Scheduled Major Maintenance	Year	Status at site
1	1st Periodic Maintenance	2024	Planned to execute
2	2nd Periodic Maintenance	2031	Planned to execute

9.5.4. Special Repairs

The group of activities performed to restore the roadway following damage due to natural calamities such as heavy floods, sand storms, hurricanes, cyclones, earthquakes or landslides which shall be unpredictable. The affected Project Highway shall be rectified, and the system shall be restored to function as per programme prepared in consultation with Independent Engineer. Typical activities include,

- Culvert and bridge repairs
- Retaining wall repairs and construction;
- Construction of Diversions;
- Floodway repairs; and
- Flood damage restoration works, etc.

9.6 Review of Test Reports

9.6.1. Bump Integrator Test (BI):

Maintenance of road is dependent on several factors, one of which is the condition of Pavement surface. As such Roughness is the measurement of the riding quality, which in turn is the effect of total surface deterioration. Bump Integrator (BI) is one of the equipment needed for roughness measurement. The roughness of pavement surface is designated as uneven index value and expressed as surface roughness from which the condition of the road can be assessed.

The test was conducted in the month of March, 2020. As per Schedule K of CA, if the stretch exceeds 3000mm in a Km shall be rectified. No stretch exceeds the permissible limit.

9.6.2. Benkelman Beam Deflection (BBD):

The performance of flexible pavement is closely related to the elastic deflection of pavement under the wheel loads. The deformation or elastic deflection under a given load depends upon subgrade soil type, its moisture content and compaction, the thickness and the quality of pavement courses, drainage conditions, pavement surface temperatures etc. BBD method is widely followed to evaluate the structural capacity of pavement and for estimation and design of overlay for strengthening of any weak pavement.

Concessionaire has conducted the test in Dec 2019. The test report has been verified and found within permissible limits as per IRC 81.

9.7 O&M Forecast

The O&M costs were estimated based on various parameters of CA and project corridor. The cost summary is given below, and detailed cost estimations are given in **ANNEXURE 5**.

Table 9.2: Proposed Plan for Future Operation & Maintenance Cost (In Crores)

Year	Routine maintenance (In crores)	Incidental maintenance (In crores)	Periodic / Major maintenance	Operational Expenses	Total cost per year
2020	0.291	0.253		0.83	1.37
2021	0.299	0.260		0.85	1.41
2022	0.308	0.268		0.88	1.46
2023	0.318	0.276		0.91	1.50
2024	0.327	0.285	12.17	0.93	13.71
2025	0.337	0.293		0.96	1.59
2026	0.347	0.302		0.99	1.64
2027	0.357	0.311		1.02	1.69
2028	0.368	0.320		1.05	1.74
2029	0.379	0.330		1.08	1.79
2030	0.391	0.340		1.11	16.01
2031	0.402	0.350	14.17	1.15	1.90
2032	0.010	0.009		0.03	0.05
Total	4.13	3.60	26.34	11.78	45.86

CHAPTER 10. REVIEW OF CONCESSION AGREEMENT

10.1 Scope of Work (Article 2)

Article 2 provides the scope of work which includes the following.

- Construction of the Project Highway on the Site set forth in Schedule-A and as specified in Schedule-B together with provision of Project Facilities as specified in Schedule-C, and in conformity with the Specifications and Standards set forth in Schedule-D;
- Operation and maintenance of the Project Highway in accordance with the provisions of Concession Agreement (CA)
- Performance and fulfillment of all other obligations of the Concessionaire in accordance with the provisions of this Concession Agreement (CA) and matters incidental

10.2 Letter of Award

After evaluation of the bids received, Authority will select one bidder considering their score in technical and financial bids. Further Authority will issue a Letter called LOA (Letter of Award) to the selected bidder requiring the execution of agreement within stipulated time. The issued LOA copy given in **ANNEXURE 6**.

10.3 Conditions precedent (Article 4)

Conditions of precedent to be fulfilled by the Authority:

- Providing adequate Right of Way
- Providing necessary approvals as per the Concession Agreement (CA)

Conditions of precedent to be fulfilled by the Concessionaire:

- Provide performance security to the Authority
- Executed and procured Escrow Agreement & Substitution Agreement
- Procured all applicable permits specified in Schedule E
- Executed financing Agreements and delivering 3 copies of Financial Package
- Delivered to the Authority confirmation in original of the correctness of their representations and warranties set forth in Agreement and a legal opinion from the legal opinion from the legal counsel of the Concessionaire

10.4 Major Obligations of the Concessionaire (Clause 5.1)

- The Concessionaire shall obtain necessary permits in conformity with the applicable laws
- Procure appropriate rights for obtaining materials
- Perform and fulfil its obligations under financing Agreements
- To make reasonable efforts to facilitate the acquisition of land required for execution
- Transfer the Project Highway upon termination of the CA

10.5 Obligations relating to the Competing Roads (Clause 6.3)

Neither Authority nor any Governmental Instrumentality shall construct the Competing Road before 10th Anniversary of the Appointed Date.

10.6 Performance Security (Article 9)

- The Concessionaire shall submit the Performance security to the Authority within 180 days from the date of the Agreement,
- The Performance security shall remain in force and effect for a period of one year from the Appointed Date
- Performance Security shall be released upon the Concessionaire expending on Project Construction an Aggregate sum that is not less than 20% of the Total Project Cost.

10.6.1. Tests (Clause 13.3)

For determining that the Project, conforms to the Maintenance Requirements, the Independent Engineer shall require the Concessionaire (Concessionaire shall in turn require the Contractor) to carry out, or cause to be carried out, tests specified by it in accordance with Good Industry Practice. One half of the costs incurred on such tests, and to the extent certified by the Independent Engineer as reasonable, shall be reimbursed by the Authority to the Concessionaire

10.7 Provisional Completion Certificate (Clause 14.3)

Upon completion of works in accordance with the specifications and standards set forth in the Schedule B, C and D of CA and after determining the tests on completion successful the Independent engineer shall issue the Completion Certificate in the form set forth in Schedule J of CA. Copy of the Provisional Completion Certificate is provided at **ANNEXURE-7**.

10.8 Completion Certificate (Clause 14.4)

Upon completion of Punch list items appended to the Provisional Completion Certificate within 90 days of issuance of Provisional Complete Certificate, Completion Certificate shall be issued to the Concessionaire. Copy of the Completion certificate is provided at **ANNEXURE-8**.

10.9 Commercial Operation Date (COD) (Clause 15.1)

- COD shall be the date on which the Provisional Completion Certificate is issued by the Independent Engineer.
- With COD the Project shall enter into commercial service and the Concessionaire is entitled to demand and collect Fee.

10.10 Change of scope (Article 16)

Change of Scope proposal initiated and consented by the Authority are provided at Annexure 10.

10.11 O&M Obligations of the Concessionaire (Clause 17.1)

- Permitting safe, smooth and uninterrupted flow of traffic on the Project road
- Collecting and appropriating the Fee
- Minimising the disruption to traffic in the event of accidents
- Undertaking routine maintenance including prompt repairs of pot holes, cracks, joints, drains, embankments, structures, pavement markings, lighting, road signs and other traffic control devices
- Undertaking major maintenance such as resurfacing of pavements, repairs and refurbishments of tolling system and other equipment
- Preventing any un authorized use of the Project road.
- Protection of environment and provision of equipment and materials
- Complying with safety Requirements in accordance with the provisions of the CA.

10.12 Maintenance Requirements (Clause 17.2)

The Contractor shall procure that at all times during the Operations Period; the Project Highway conforms to the maintenance requirements set forth in Schedule K (the “**Maintenance Requirements**”).

10.13 Maintenance Manual (Clause 17.3)

No later than 180 (one hundred and eighty days prior to the Scheduled Two Lanning Date, the Contractor shall, in consultation with the Independent Engineer, evolve a repair and maintenance manual (the “**Maintenance Manual**”) for the regular and preventive maintenance of the Project in conformity with the Specifications and Standards, Maintenance Requirements, Safety Requirements and Good Industry Practice, and shall provide 5 (five) copies thereof to the Authority and 2 (two) copies to the Independent Engineer. The Maintenance Manual shall be revised and updated once every 3 (three) years and the provisions of this Clause shall apply, mutatis mutandis, to such revision.

10.14 Maintenance Programme (Clause 17.4)

- On or before COD and no later than 45 days prior to the beginning of each Accounting year during the Operation Period as the case may be the Concessionaire shall provide to the Authority and Independent Engineer its proposed annual programme of preventive, urgent and the schedule maintenance.
- The Concessionaire has been submitting the Annual Maintenance Programme regularly as per the above clause.

10.15 Damages for breach of Maintenance Obligations (Clause 17.8)

- In the event that the Contractor fails to repair or rectify any defect or deficiency set forth in the Maintenance Requirements within the period specified therein, it shall be deemed to be in breach of the Agreement and the Concessionaire shall be entitled to recover Damages, to be calculated and paid for each day of delay until the breach is cured, at the higher of the following.
- 0.5% (zero decimal five percent) of the Average Daily Fee, and
- 0.1% (zero point one per cent) of the cost of such repair or rectification as estimated by the Independent Engineer.

10.16 Monthly status reports (Clause 19.1)

During the Operation Period, the Contractor shall, no later than 7 (seven) days after the close of each month, furnish to the Concessionaire, the Authority and the Independent Engineer a monthly report stating in reasonable detail the condition of the Project including its compliance or otherwise with the Maintenance Requirements, Maintenance Manual, Maintenance Program and Safety Requirements, and shall promptly give such other relevant information as may be required by the Concessionaire, Independent Engineer or the Authority. In particular, such report shall separately identify and state in reasonable detail the defects and deficiencies that require rectification.

10.17 Monthly Fee Statement (Clause 19.5)

During the Operations Period, the Contractor shall furnish to the Concessionaire and the Authority, if required by the Contractor, within 7 (seven) days of completion of each month, a statement of Fee substantially in the format set out in the Concession Agreement (“Monthly Fee Statement”).

10.18 Annuity (Clause 25.1.1)

The Authority agrees and undertakes to pay the Concessionaire for each annuity Payment period on each annuity payment date as set forth in schedule Y the sum of Rs 17.64 Crores.

As per Clause 25.2.1, In case the COD is different from the Schedule Y, then the annuity payment schedule shall be suitably modified to be a period of 6 months from the preceding Annuity Payment date.

Table 10.1: Status of Annuity Payments

S No.	Particulars	Paid on
1	1st Annuity	13-Oct-17
2	2nd Annuity	8-May-18
3	3rd Annuity	16-Oct-18
4	4th Annuity	2-Apr-19
5	5th Annuity	1-Oct-19
6	6th Annuity	22-Apr-20
7	7th Annuity	30-Sep-20

10.19 Concession Fee (Article 26):

- In consideration of the grant of Concession the Concessionaire shall pay Concession Fee of Rs1.00 per year during the Concession Period
- Concession Fee shall be paid in advance within 90 days of the commencement of the Accounting Year.
- Yearly the Concessionaire is paying the Concession Fee to the MPRDC

10.20 Toll Fee (Clause 27.1.1)

Toll Fees Shall be revised annually in accordance with Clause 27.2.1.

10.21 Change in Law (Article 41)

The Contractor acknowledges that the Contractor shall be responsible for any consequences arising from any Change in Law and the Contractor shall at its own costs and expenses, undertake the compliance with any such Change in Law, however, in the event any receivables are obtained by the Concessionaire from the Authority, towards the losses incurred by the Concessionaire on account of Change in Law, then the Contractor shall ensure that such receivables are passed to the Concessionaire.

CHAPTER 11. INSURANCE

11.1 Details of Insurance

As per clause 32.1 of the Concession Agreement, the Concessionaire shall affect and maintain at its own cost during the Operation Period such insurances for such maximum sums as may be required under the Financing Agreements and the Applicable laws, and such insurances as may be necessary or prudent in accordance with Good Industry Practice. Copy of the Insurance are provided at **ANNEXURE-9**.

Accordingly, the Concessionaire has procured the following insurances for mitigating the risks

Table 11.1: Insurance Details

Name of the Policy	Insurance Company	Policy No	Effective Period		Remarks
			From	To	
Civil Engineering Completed Risk	National Insurance Company Limited	321300441910001994	27.03.2020	27.03.2021	Road and Structure Toll Building & Booths, TMS, HTMS, Office & It Equipment, Electronic. Equipment, Road Furniture, Fixtures, Electrical Poles, Lighting & Fittings, Signboards & Safety Barrier.
Employees Compensation Insurance Policy	HDFC ERGO General Insurance Company Ltd	3114203677162100000	05.10.2020	04.10.2021	All categories of Employees of the Contractor & sub-contractor engaged in the Project

CHAPTER 12. CONCLUSION

12.1 General:

Based on detailed site inspection, review of various documents and reports as described in the preceding chapters technical over view of the Project is provided below.

12.2 Pavement Condition

The overall project pavement condition is good. RCC drains are constructed in built up locations and earthen drains in rural locations resulting in, effective drainage system along the project road. Shoulder condition is fair.

12.3 Condition of Structures

General condition of Bridges is good. No major structural defects were noticed. General condition of Culverts is good. Observed vegetation growth in vents of Box and Hume Pipe culverts and they are getting cleared during regular maintenance period.

12.4 Traffic Growth

Based on real time traffic data extracted from Schedule N of CA, the traffic growth observed about 17% in both toll plazas. However, 5% growth rate only considered as taken in financial model while estimating forecast of traffic volumes.

12.5 Project Facilities

Two Toll Plazas are located at Km 34+100 & Km 110+400 and are operational. Toll Plaza is operated by ETC Toll collection system and connected by network system monitored in administrative building. Truck lay byes/Bus bays are in Good condition. Medical Aid posts found in functional condition. Avenue plantation and landscaping at Toll Plaza is provided and being maintained. Highway lighting is provided at truck laybys and toll plaza locations and found functional.

12.6 Road safety

Pavement marking is in good condition and number of sign boards are provided as per IRC SP 73-2007. The condition of signboards & other road appurtenances like metal beam crash barriers is fair.

12.7 Maintenance

- The routine maintenance being carried out by O&M contractor effectively, based on documents reviewed, time to time observations made by client/Authority, being complied and no outstanding NCR's are to be attended as on date.
- Major maintenance (MM) /Periodic maintenance was carried out recently and next MM is scheduled in 2024.

12.8 Epilogue

The project is well designed and constructed as per the stipulated specifications besides maintenance work is being carried out effectively and keeping the road traffic worthy, smooth, safe at all times.

ANNEXURES

Annexure 1: Pavement Condition

Condition: G=Good, F=Fair, P=Poor & VP=Very poor Rutting: M=Moderate & S=Severe Drain: LD=Lined open Drain, ULD=Unlined Drain, CD=Covered Drain, NO=No drain, PF=Partial Function, F= Functional

Chainage (Km)		Pavement Condition						Riding Quality		Pavement Edge Drop (cm)	Shoulder		Embankment Condition (Good/Fair / Poor)	Road Side Drain		Remarks
From	To	Cracking (%)	Ravelling (%)	Potholing (%)	Bleeding (%)	Rutting	Patching (%)	Speed (km/hr)	Quality (G/F/P /VP)		Composition	Condition (Fair / Poor/ Damaged)		Type (LD/ULD/ CD/NO)	Condition (PF/F) ***	
31+000	32+000	1	2						G	2	P+E	Fair	Fair	LD	F	
32+000	33+000		2						G	1	E	Fair	Good	ULD	PF	
33+000	34+000								G		E	Fair	Good	ULD	PF	
34+000	35+000								G		E	Fair	Good	ULD	PF	
35+000	36+000								G		E	Fair	Good	ULD	PF	
36+000	37+000								G		E	Fair	Good	ULD	PF	
37+000	38+000								G		E	Fair	Good	ULD	PF	
38+000	39+000								G		E	Fair	Good	ULD	PF	
39+000	40+000								G		E	Fair	Good	ULD	PF	
40+000	41+000								G		E	Fair	Good	ULD	PF	
41+000	42+000								G		E	Fair	Good	ULD	PF	
42+000	43+000								G		E	Fair	Good	ULD	PF	
43+000	44+000								G		P+E	Fair	Good	LD	F	
44+000	45+000								G		E	Fair	Good	ULD	PF	
45+000	46+000								G		E	Fair	Good	ULD	PF	
46+000	47+000								G		E	Fair	Good	ULD	PF	

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From	To	Cracking (%)	Ravelling (%)	Potholing (%)	Bleeding (%)	Rutting	Patching (%)	Speed (km/hr)	Quality (G/F/P /VP)		Composition	Condition (Fair / Poor/ Damaged)		Type (LD/ULD/ CD/NO)	Condition (PF/F) ***	
47+000	48+000								G		E	Fair	Good	ULD	PF	
48+000	49+000								G		E	Fair	Good	ULD	PF	
49+000	50+000								G		E	Fair	Good	ULD	PF	
50+000	51+000								G		P+E	Fair	Good	LD	F	
51+000	52+000								G		P+E	Fair	Good	LD	F	
52+000	53+000								G		P+E	Fair	Good	LD	F	
53+000	54+000								G		P+E	Fair	Good	LD	F	
54+000	55+000								G		E	Fair	Good	ULD	PF	
55+000	56+000	5							G	1	E	Fair	Good	ULD	PF	
56+000	57+000								G		E	Fair	Good	ULD	PF	
57+000	58+000		6						G	3	P+E	Fair	Good	LD	F	
58+000	59+000		5						G	2	P+E	Fair	Good	LD	F	
59+000	60+000		4						G	2	E	Fair	Good	ULD	PF	
60+000	61+000		5						G	2	E	Fair	Good	ULD	PF	
61+000	62+000		6	2			5		F	3	E	Fair	Good	ULD	PF	
62+000	63+000		3						G	1	E	Fair	Good	ULD	PF	
63+000	64+000		5	1					G	1	E	Fair	Good	ULD	PF	

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From	To	Cracking (%)	Ravelling (%)	Potholing (%)	Bleeding (%)	Rutting	Patching (%)	Speed (km/hr)	Quality (G/F/P /VP)		Composition	Condition (Fair / Poor/ Damaged)		Type (LD/ULD/ CD/NO)	Condition (PF/F) ***	
64+000	65+000								G		E	Fair	Good	ULD	PF	
65+000	66+000		4				2		G	2	P+E	Fair	Good	LD	F	
66+000	67+000		5						G	1	E	Fair	Good	ULD	PF	
67+000	68+000		5						G	1	E	Fair	Good	ULD	PF	
68+000	69+000		5						G	1	E	Fair	Good	ULD	PF	
69+000	70+000		5						G	1	E	Fair	Good	ULD	PF	
70+000	71+000								G		E	Fair	Good	ULD	PF	
71+000	72+000								G		E	Fair	Good	ULD	PF	
72+000	73+000		5						G	2	E	Fair	Good	ULD	PF	
73+000	74+000		6						G	2	E	Fair	Good	ULD	PF	
74+000	75+000		5						G	1	E	Fair	Good	ULD	PF	
75+000	76+000		5						G	2	P+E	Fair	Good	LD	F	
76+000	77+000		5						G	2	P+E	Fair	Good	LD	F	
77+000	78+000		5						G	1	E	Fair	Good	ULD	PF	
78+000	79+000								G		E	Fair	Good	ULD	PF	
79+000	80+000								G		E	Fair	Good	ULD	PF	
80+000	81+000								G		E	Fair	Good	ULD	PF	

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From	To	Cracking (%)	Ravelling (%)	Potholing (%)	Bleeding (%)	Rutting	Patching (%)	Speed (km/hr)	Quality (G/F/P /VP)		Composition	Condition (Fair / Poor/ Damaged)		Type (LD/ULD/ CD/NO)	Condition (PF/F) ***	
81+000	82+000		5						G	1	E	Fair	Good	ULD	PF	
82+000	83+000		4						G	1	E	Fair	Good	ULD	PF	
83+000	84+000		5						G	1	E	Fair	Good	ULD	PF	
84+000	85+000		3						G	1	E	Fair	Good	ULD	PF	
85+000	86+000								G		E	Fair	Good	ULD	PF	
86+000	87+000								G		E	Fair	Good	ULD	PF	
87+000	88+000								G		E	Fair	Good	ULD	PF	
88+000	89+000								G		E	Fair	Good	ULD	PF	
89+000	90+000								G		E	Fair	Good	ULD	PF	
90+000	91+000								G		E	Fair	Good	ULD	PF	
91+000	92+000								G		E	Fair	Good	ULD	PF	
92+000	93+000		5				2		G	3	E	Fair	Good	ULD	PF	
93+000	94+000		5						G	1	E	Fair	Good	ULD	PF	
94+000	95+000								G		E	Fair	Good	ULD	PF	
95+000	96+000								G		E	Fair	Good	ULD	PF	
96+000	97+000								G		E	Fair	Good	ULD	PF	

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Chainage (Km)		Pavement Condition						Riding Quality		Pavement Edge Drop (cm)	Shoulder		Embankment Condition (Good/Fair / Poor)	Road Side Drain		Remarks
From	To	Cracking (%)	Ravelling (%)	Potholing (%)	Bleeding (%)	Rutting	Patching (%)	Speed (km/hr)	Quality (G/F/P /VP)		Composition	Condition (Fair / Poor/ Damaged)		Type (LD/ULD/ CD/NO)	Condition (PF/F) ***	
97+000	98+000								G		E	Fair	Good	ULD	PF	
98+000	99+000								G		E	Fair	Good	ULD	PF	
99+000	100+000								G		E	Fair	Good	ULD	PF	
100+000	101+000	2							G	1	P+E	Fair	Good	LD	PF	
101+000	102+000								G		E	Fair	Good	ULD	PF	
102+000	103+000	2	5						G	2	E	Fair	Good	ULD	PF	
103+000	104+000								G		E	Fair	Good	ULD	PF	
104+000	105+000								G		P+E	Fair	Good	LD	F	
105+000	106+000	5							G	1	P+E	Fair	Good	LD	F	
106+000	107+000	2	5						F	1	E	Fair	Good	ULD	PF	
107+000	108+000	5	4				4		F	2	E	Fair	Good	ULD	PF	
108+000	109+000	10	5			M	4		F	4	E	Fair	Good	ULD	PF	
109+000	110+000	15	5	3		M			F	4	P+E	Fair	Good	LD	PF	
110+000	111+000	5	4			M	2		F	1	P+E	Fair	Good	LD	PF	
111+000	112+000								G		E	Fair	Good	ULD	PF	
112+000	113+200								G		E	Fair	Good	ULD	PF	

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Chainage (Km)		Pavement Condition						Riding Quality		Pavement Edge Drop (cm)	Shoulder		Embankment Condition (Good/Fair / Poor)	Road Side Drain		Remarks
From	To	Cracking (%)	Ravelling (%)	Potholing (%)	Bleeding (%)	Rutting	Patching (%)	Speed (km/hr)	Quality (G/F/P /VP)		Composition	Condition (Fair / Poor/ Damaged)		Type (LD/ULD/ CD/NO)	Condition (PF/F) ***	
Bypass																
0+000	1+000	5	3						G	2	E	Fair	Good	ULD	PF	
1+000	2+000								G		E	Fair	Good	ULD	PF	
2+000	3+000								G		P+E	Fair	Good	LD	PF	
3+000	4+000								G		E	Fair	Good	ULD	PF	
4+000	4+400								G		E	Fair	Good	ULD	PF	

Annexure 2 : Condition of Bridges

S. No	Chainage	Type of Structure	Substructure	Superstructure	Expansion Joint	Approach slabs	Drainage spouts	Wearing coat	Bearings	Quadrant Pitching
1	31+792	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Vegetation observed
2	32+291	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
3	35+031	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
4	36+639	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
5	51+062	Minor Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
6	52+241	Minor Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
7	63+305	Minor Bridge	Good	Good	-	Fair	Fair	Fair	Good	Good
8	67+640	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
9	70+843	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
10	75+848	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
11	100+047	Minor Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
12	100+973	Minor Bridge	Good	Good	Fair	Fair	Fair	Fair	-	Good
13	101+344	Minor Bridge	Good	Good	Fair	Fair	Fair	Fair	-	Good
14	106+175	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
15	106+398	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
16	107+958	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
17	108+162	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
18	109+663	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
19	112+383	Minor Bridge	Good	Good	-	Fair	Fair	Fair	-	Good
20	35+611	Major Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
21	54+682	Major Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
22	77+516	Major Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good

S. No	Chainage	Type of Structure	Substructure	Superstructure	Expansion Joint	Approach slabs	Drainage spouts	Wearing coat	Bearings	Quadrant Pitching
23	113+554	Major Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
24	114+323	Major Bridge	Good	Good	Fair	Fair	Fair	Fair	Good	Good
25	80+114	CUP	Good	Good	-	Fair	Fair	Fair	-	-
26	81+265	CUP	Good	Good	-	Fair	Fair	Fair	-	-
27	86+050	CUP	Good	Good	-	Fair	Fair	Fair	-	-
28	96+107	CUP	Good	Good	-	Fair	Fair	Fair	-	-

Annexure 3: Condition of Culverts

Condition of Box /Slab Culverts

S No.	Chainage Km	Box/slab	Return wall	Quadrant pitching	Toe wall	Aprons	Remarks
1	35+87	Good	Good	Fair	Fair	Fair	-
2	40+006	Good	Good	Fair	Fair	Fair	-
3	50+395	Good	Good	Fair	Fair	Fair	Extra
4	51+425	Good	Good	Fair	Fair	Fair	Extra
5	61+251	Good	Good	Fair	Fair	Fair	-
6	70+252	Good	Good	Fair	Fair	Fair	-
7	70+676	Good	Good	Fair	Fair	Fair	-
8	72+038	Good	Good	Fair	Fair	Fair	-
9	72+284	Good	Good	Fair	Fair	Fair	-
10	72+817	Good	Good	Fair	Fair	Fair	-
11	73+69	Good	Good	Fair	Fair	Fair	-
12	74+027	Good	Good	Fair	Fair	Fair	-
13	77+336	Good	Good	Fair	Fair	Fair	-
14	80+27	Good	Good	Fair	Fair	Fair	-
15	83+07	Good	Good	Fair	Fair	Fair	-
16	104+088	Good	Good	Fair	Fair	Fair	-
17	104+53	Good	Good	Fair	Fair	Fair	-
18	106+783	Good	Good	Fair	Fair	Fair	-
19	107+407	Good	Good	Fair	Fair	Fair	-
20	111+636	Good	Good	Fair	Fair	Fair	-

Condition of Pipe Culverts

S No.	Chainage (Km.)	Hume Pipe	Head wall	Quadrant pitching	Toe wall
1	32+885	Good	Fair	Fair	Fair
2	33+500	Good	Fair	Fair	Fair
3	35+134	Good	Fair	Fair	Fair
4	35+502	Good	Fair	Fair	Fair
5	36+113	Good	Fair	Fair	Fair
6	37+116	Good	Fair	Fair	Fair
7	37+413	Good	Fair	Fair	Fair
8	37+677	Good	Fair	Fair	Fair
9	38+453	Good	Fair	Fair	Fair
10	38+756	Good	Fair	Fair	Fair
11	39+034	Good	Fair	Fair	Fair
12	39+135	Good	Fair	Fair	Fair
13	40+629	Good	Fair	Fair	Fair
14	40+809	Good	Fair	Fair	Fair

S No.	Chainage (Km.)	Hume Pipe	Head wall	Quadrant pitching	Toe wall
15	40+941	Good	Fair	Fair	Fair
16	41+232	Good	Fair	Fair	Fair
17	41+682	Good	Fair	Fair	Fair
18	42+820	Good	Fair	Fair	Fair
19	44+655	Good	Fair	Fair	Fair
20	47+872	Good	Fair	Fair	Fair
21	49+485	Good	Fair	Fair	Fair
22	52+603	Good	Fair	Fair	Fair
23	53+004	Good	Fair	Fair	Fair
24	53+561	Good	Fair	Fair	Fair
25	54+358	Good	Fair	Fair	Fair
26	54+814	Good	Fair	Fair	Fair
27	55+175	Good	Fair	Fair	Fair
28	56+050	Good	Fair	Fair	Fair
29	59+639	Good	Fair	Fair	Fair
30	60+140	Good	Fair	Fair	Fair
31	61+686	Good	Fair	Fair	Fair
32	63+450	Good	Fair	Fair	Fair
33	63+995	Good	Fair	Fair	Fair
34	64+490	Good	Fair	Fair	Fair
35	64+686	Good	Fair	Fair	Fair
36	65+381	Good	Fair	Fair	Fair
37	66+765	Good	Fair	Fair	Fair
38	68+172	Good	Fair	Fair	Fair
39	74+442	Good	Fair	Fair	Fair
40	76+186	Good	Fair	Fair	Fair
41	77+189	Good	Fair	Fair	Fair
42	77+723	Good	Fair	Fair	Fair
43	77+728	Good	Fair	Fair	Fair
44	78+560	Good	Fair	Fair	Fair
45	79+350	Good	Fair	Fair	Fair
46	79+500	Good	Fair	Fair	Fair
47	80+345	Good	Fair	Fair	Not visible
48	81+842	Good	Good	Fair	Good
49	83+963	Good	Fair	Fair	Good
50	85+006	Good	Good	Fair	Not visible
51	85+615	Good	Good	Fair	Not visible
52	86+085	Good	Good	Fair	Not visible
53	88+300	Good	Good	Fair	Fair
54	88+380	Good	Good	Fair	Fair
55	88+600	Good	Good	Fair	Fair

S No.	Chainage (Km.)	Hume Pipe	Head wall	Quadrant pitching	Toe wall
56	90+030	Good	Good	Fair	Fair
57	91+396	Good	Good	Fair	Fair
58	92+035	Good	Good	Fair	Fair
59	92+215	Good	Good	Fair	Fair
60	92+702	Good	Good	Fair	Fair
61	92+892	Good	Good	Fair	Fair
62	93+900	Good	Good	Fair	Fair
63	94+445	Good	Good	Fair	Fair
64	95+142	Good	Good	Fair	Fair
65	95+326	Good	Good	Fair	Fair
66	96+750	Good	Good	Fair	Fair
67	98+265	Good	Good	Fair	Fair
68	99+002	Good	Good	Fair	Fair
69	99+431	Good	Good	Fair	Fair
70	102+265	Good	Good	Fair	Fair
71	103+285	Good	Good	Fair	Fair
72	104+300	Good	Good	Fair	Fair
73	109+316	Good	Good	Fair	Fair
74	110+475	Good	Good	Fair	Fair
75	110+966	Good	Good	Fair	Fair
76	111+359	Good	Good	Fair	Fair
77	112+902	Good	Good	Fair	Fair
78	113+933	Good	Good	Fair	Fair

Annexure 4: Toll Revenue Calculations

Toll Plaza-I & 2:

1. Tollable Traffic considered for Toll Revenue in No.s (AADT):

Table-1: Details of Tollable Traffic (Base Year 2019-20)

Vehicle Type	Traffic (AADT)	Traffic (AADT)
	Km 34.100	Km 110.400
Car/Taxi/Van	769	469
LCV	389	120
Bus	46	18
Truck	70	32
MAV	99	46

2. Traffic Growth Rates

Table-2: Details of Growth rates adopted

Year	Car	LCV	BUS	Truck	MAV
2019-25	5.00	5.00	5.00	5.00	5.00
2025-32	5.00	5.00	5.00	5.00	5.00

3. Trip Distribution Ratio as per the Toll Data.

Table-3: Details of Trip Distribution (Base Year 2019-20)

Vehicle Type	Single Trip	Local Pass	Total
Car/Taxi/Van	99.6%	0.4%	100%
LCV	100%	0%	100%
Bus	100%	0%	100%
Truck	100%	0%	100%
MAV	100%	0%	100%

4. Toll Rates :

Table-4: Details of Toll Fee (Base Year 2019-20)

Vehicle Type	Toll Fee at Km 34.100	Toll Fee at Km 110.400
Car/Taxi/Van	25	25
LCV	55	65
Bus	120	135
Truck	140	165
MAV	280	325

Toll Plaza-1 Revenue:

Years	Car/Jeep	Car/Jeep (local pass)	LCV	Bus	Trucks	MAV	Total in RS	Total in Lakh.	Cumulative (in Lacs)
2019-20	6985925	94368	7817810	1991405	3514380	10075995	30479883	304.799	304.799
2020-21	7335221	105279	8208701	2219175	3874001	10960277	32702654	327.027	631.825
2021-22	7701982	110543	9402693	2423339	4207967	11905128	35751653	357.517	989.342
2022-23	9704498	122898	9872828	2642372	4565644	13125404	40033643	400.336	1389.678
2023-24	10189723	136212	11230342	2877249	4948569	14219187	43601282	436.013	1825.691
2024-25	10699209	143023	11791859	3129008	5520747	15389536	46673382	466.734	2292.425
2025-26	11234169	158078	13333871	3398751	5967278	16641371	50733518	507.335	2799.760
2026-27	11795878	165982	14000565	3687644	6444661	18233155	54327884	543.279	3343.039
2027-28	14449950	182995	15750635	3996931	6954863	19676613	61011986	610.120	3953.159
2028-29	15172448	201294	16538167	4327926	7499974	21218834	64958643	649.586	4602.745
2029-30	15931070	211359	17365076	4682030	8082209	22866085	69137828	691.378	5294.124
2030-31	16727623	232014	19448885	5060723	8703917	24932828	75105990	751.060	6045.183
2031-32	17564005	254207	20421329	5465581	9367591	26825876	1970102	19.701	6064.884

Toll Plaza-2 Revenue:

Years	Car/Jeep	Car/Jeep (local pass)	LCV	Bus	Trucks	MAV	Total in RS	Total in Lakh.	Cumulative (in Lacs)
2019-20	4263125	49850	2839395	895905	1923430	5406705	15378410	153.784	153.784
2020-21	4476281	55614	3210701	955679	2042444	5750658	16491376	164.914	318.698
2021-22	4700095	58395	3371236	1040628	2274540	6221166	17666059	176.661	495.358
2022-23	5922120	64921	3792640	1131683	2456503	6820411	20188278	201.883	697.241
2023-24	6218226	71954	3982272	1229241	2650977	7363162	21515832	215.158	912.400
2024-25	6529137	75552	4460145	1333727	2858756	8049045	23306362	233.064	1145.463
2025-26	6855594	83505	4683152	1445588	3159678	8673905	24901421	249.014	1394.477

Years	Car/Jeep	Car/Jeep (local pass)	LCV	Bus	Trucks	MAV	Total in RS	Total in Lakh.	Cumulative (in Lacs)
2026-27	7198374	87680	5224641	1565301	3400603	9457893	26934492	269.345	1663.822
2027-28	8818008	96667	5485873	1693371	3657722	10175992	29927633	299.276	1963.099
2028-29	9258909	106334	6099000	1830335	4023494	11070989	32389060	323.891	2286.989
2029-30	9721854	111651	6403950	1976761	4320684	11894876	34429776	344.298	2631.287
2030-31	10207947	122562	7097712	2133255	4637534	12915403	37114412	371.144	3002.431
2031-32	10718344	134285	7452597	2300456	4975267	13859221	972497	9.72	3012.16

Toll Plaza-1&2 Revenue:

Years	Car/Jeep	Car/Jeep (local pass)	LCV	Bus	Trucks	MAV	Total in RS	Total in Lakh.	Cumulative (in Lacs)
2019-20	11249050	144218	10657205	2887310	5437810	15482700	45858293	458.583	458.583
2020-21	11811503	160893	11419401	3174854	5916446	16710934	49194030	491.940	950.523
2021-22	12402078	168938	12773929	3463967	6482507	18126294	53417712	534.177	1484.700
2022-23	15626618	187819	13665468	3774054	7022147	19945814	60221921	602.219	2086.920
2023-24	16407949	208166	15212614	4106491	7599546	21582349	65117114	651.171	2738.091
2024-25	17228346	218575	16252004	4462735	8379503	23438581	69979744	699.797	3437.888
2025-26	18089763	241582	18017023	4844339	9126956	25315276	75634940	756.349	4194.238
2026-27	18994252	253662	19225206	5252945	9845264	27691047	81262375	812.624	5006.861
2027-28	23267958	279662	21236509	5690301	10612585	29852605	90939619	909.396	5916.257
2028-29	24431356	307628	22637167	6158261	11523468	32289823	97347703	973.477	6889.735
2029-30	25652924	323009	23769026	6658791	12402892	34760962	103567604	1035.676	7925.411
2030-31	26935570	354576	26546596	7193978	13341451	37848230	112220402	1122.204	9047.615
2031-32	28282349	388492	27873926	7766037	14342858	40685096	2942600	29.426	9077.041

Annexure 5: Operation & Maintenance cost
Routine Maintenance cost for 1 year

S No.	Item		Unit	No	Frequency per year	Quantity	Rate	Amount	Remarks
1	General Cleaning in Carriageway & Shoulders Rural area	Monthly	Kms	86.6	12	4	350	14,54,880	04 nos of Labour
2	General Cleaning in Carriageway & Shoulders Urban area	Twice in a month	Kms	4.6	24	4	350	1,54,560	04 nos of Labour
3	Watering in Median Plants	Once in Week	Kms	4.6	52	1	1939	4,63,809	01 nos of Labour
4	Watering in Avenue plants	Once in Week	Kms	0	52	0	1939	-	
5	Median Maintenance (Grass cutting and plant trimming)	Once in Month	Kms	4.6	12	0	21000	-	02 nos of Labour - 2 x 350 = 700 x 30 = 2,52,000
6	ROW Cleaning	Half yearly	Kms	43.3	2	5	350	1,51,550	5 Nos of labour per KM (50% of the Project length)
7	Cleaning of Culverts	Half yearly	Nos	105	2	2	650	2,73,000	3 nos of Labour along with JCB or Excavator
8	Road Furniture Cleaning	Quarterly	Kms	86.6	4	1	350	1,21,240	02 nos of Labour
9	Maintenance of Bus shelters	Monthly	Nos	16	6	1	350	33,600	2 nos/ Bus shelter/month
10	General Cleaning in Building & Facilities	Daily	Nos	2.00	6	15	350	63,000	02 nos of Labour for 30 days
11	Bridges	Half yearly	Nos	23	2	2	350	32,200	02 nos of Labour for removal of vegetation/Structure
	Total							27,47,839	
	EQUIPMENT SUPPLY							-	
1	Truck Tipper 6-8 Cum Capacity	Monthly	Nos	1	12	1	15000	15,000	(2000000 is the cost of vehicle, considering 10% Rental per year)

S No.	Item		Unit	No	Frequency per year	Quantity	Rate	Amount	Remarks
									including maintenance
2	Water Tanker Cap 12 KL for Median	Monthly	Nos	2.2	12	0	440000	-	(2200000 is the cost of vehicle, considering 20% Rental per year) including maintenance
3	Tractor Mounted Water tanker Cap 6 KL for Row	Monthly	Nos		12		160000	-	(800000 is the cost of vehicle, considering 20% Rental per year) including maintenance
4	Mechanical Sweeper	Monthly	Nos		12		500000	-	(2500000 is the cost of vehicle, considering 20% Rental per year) including maintenance
5	Grass cutter	Monthly	Nos	2.2	12	0	12000	1,320	(12000/year)
6	Manhoise/ Skyscraper	Monthly	Nos		12		400000	-	(2000000 is the cost of vehicle, considering 20% Rental per year) including maintenance
7	Bikes	Monthly	Nos	1.0	12	0	2500	2,000	Per Supervisor/Per Month
8	Building Maintenance	Yearly			12	1		-	
9	Toll plaza AMC	Yearly	Nos		12	1	5000	60,000	10000/month
							Total	78,320	
1	Patrolling vehicle	Monthly	Nos	12		1	10000	10000	(1500000 is the cost of vehicle, considering 10% Rental per year) including maintenance
2	Ambulance	Monthly	Nos	12		1	10000	10000	(1200000 is the cost of vehicle, considering 10% Rental per year) including maintenance (1 Ambulance/toll plaza)

Project: Development of Patan – Tendukheda - Rehli Road of SH-15 in the state of Madhya Pradesh on BOT (Toll+Annuity) Basis.

S No.	Item		Unit	No	Frequency per year	Quantity	Rate	Amount	Remarks
3	Tow away trucks and Crane	Monthly	Nos	12			40000	0	(2000000 is the cost of vehicle, considering 20% Rental per year) including maintenance
4	Consumables for Medical Aid Post and Ambulance	Monthly	Nos	12		1	2500	30000	2500 Per month for per set (Per set - Per toll plaza)
5	Consumables for Route Patrolling & Crane	Monthly	Nos	12		1	2500	30000	2500 Per month for per set (Per set - Per toll plaza)
	Total							80,000	
	Grand Total							29,06,159.00	

Incidental cost for 1 year

S No.	Item		Unit	No	Frequency	Quantity	Rate	Amount	Remarks
1	Road marking	Half yearly	Sqm	1	1	2000.67	516	10,32,344	10 % of Total Project length on B/S for 1 year
2	Carriageway Maintenance (Pot Holes etc)	Yearly	Sqm	1	1	352	168	59,136	5% of Flexible Pavement
3	Maintenance of Earthen Shoulder	Half yearly	Cum	1	3	1299	225	8,76,825	5% of total Shoulder length throughout the project
4	Sign Board	Quarterly	Kms	1	1	13	4000	52,000	2.5 % of Total sign boards per half year (considered 500 nos)
5	MBCB	Monthly	RMT			37.5	2400	90,000	2.5% of Total qty per year - (considered 2400 per number)
6	Mile Stone (KM Stone/ HM Stone / ROW stone etc.)	Quarterly	Nos	86.6	4	22	2250	1,98,000	5 % of total stones per year (unable to understand the backup)
7	ROW Fencing (If available)	Quarterly	Kms		4			-	10 % of total ROW fencing per year
8	Kerb	Yearly	Kms	0	1	0.0	250	-	2 % of total Kerbings per year
9	Electrical Poles	Yearly	Nos	128	1	4	55000	2,20,000	3 % of total poles per year
10	Replacement of Rigid pavement Panels	Yearly	Ls	1	1	0.00	4000	-	Considered 1% of the total volume
Total amount for 1 Year								25,28,305	

Operational Expenses

S No	PARTICULARS	Amount
1	Man Power	₹ 46,80,000
2	Fuel for Generator & Vehicles	₹ 28,08,000
3	Electricity	₹ 6,60,000
4	Stationary	₹ 10,000
5	Replacement of Electrical Fixtures	₹ 50,347
6	Refurbishment of Toll Plaza Equipment	₹ 75,000
	Total Amount	₹ 82,83,347

Major Maintenance BOQ

BoQ Item No.	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT	QUANTITY	RATE	AMOUNT
	Pavement (Asphalt & Concrete)							
1	Providing and applying tack coat with Rapid Setting Bitumen Emulsion using emulsion pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom, Ref. to Technical specification 503.			-			-	
(a)	On Bituminous surface @ 2.0 kg to 3.0 kg/10 sqmsqm.	Sqm	5,62,700.00	14.00	78,77,800	5,62,700.00	14.00	78,77,800
2	Providing and laying bituminous concrete using a batch type Hot Mix Plant using crushed aggregates of size (table 500-17), premixed with VG Grade Bitumen and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher	Cum	-	7,480.00		-	7,480.00	

BoQ	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT	QUANTITY	RATE	AMOUNT
	with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers, Pneumatic Tyre Rollers to achieve the desired compaction as per Technical specification clause No. 507 and mix design conforming the IRC -111 and IRC 37.							
	Providing and laying bituminous concrete using a batch type Hot Mix Plant using crushed aggregates of size	Cum	7,033.75	6,800.00	4,78,29,500	7,033.75	6,800.00	4,78,29,500
	Micro surfacing	Sqm	2,81,350.00	160.00	4,50,16,000	2,81,350.00	160.00	4,50,16,000
3	Repair of joint Grooves with Epoxy Mortar Repair of spalled joint grooves of contraction joints, longitudinal joints and expansion joints in concrete pavements using epoxy mortar or epoxy concrete)	MTR S	-	250.00		-	250.00	
4	Texturing of Rigid pavement (considering 50% for 7 years)	Sqm	-	130.00		-	130.00	
	Total				10,07,23,300			10,07,23,300
	Junctions, Traffic Signs Marking and Other Appurtenances			-			-	
1	Providing and laying of cement concrete kerb without channel (M-20 Grade) over WMM foundation using kerb laying machine & proper curing complete, as per drawing & technical specification clause no.409, 1700 and as per the instructions of Employer's representative. - Consider 5% for construction period.	Rmt	-	380.00		-	380.00	
2	Providing and laying lane markings of hot applied	Sqm	20,006.67	516.00	1,03,23,440	20,006.67	516.00	1,03,23,440

BoQ	DESCRIPTION	Unit	QUANTITY	RATE	AMOUNT	QUANTITY	RATE	AMOUNT
	thermoplastic compound 2.5 mm thick including reflectorizing glass beads @ 250 gms. per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes, Ref. to Technical specification 803.							
3	Road Studs	Nos	-	750.00		-	750.00	
4	Kerb painting		-	250.00		-	250.00	
	Total			-	1,03,23,440		-	1,03,23,440
	Grand Total				11,10,46,740			11,10,46,740

Annexure 6: Letter of Award



MADHYA PRADESH ROAD DEVELOPMENT CORPORATION LTD.

(Govt. of M.P. Undertaking)

45-A, Arera Hills, Bhopal-462 011

Tel.: (O) 0755-2765196, 205, 213, 216 (EPABX), 0755-2550995, Fax : 91-755-2572643

Website : www.mprdc.nic.in

No. MPRDC/BOT/P-T R/2015/ 5225
Bhopal, dated 8 July, 2015

M/s Dilip Buildcon Ltd.,
Plot No. 5, Inside Govind Narayan Singh Gate,
Chuna Bhatti,
Kolar Road,
Bhopal
Fax: 4089998

Sub: Development of Patan-Tendukheda-Rehli (SH-15) Road on BOT (Toll+Annuity) basis

In response to your Pre-Qualification you have submitted Technical and Financial Bid for development of Patan-Tendukheda-Rehli (SH-15) Road on BOT (Toll +Annuity) basis. In this connection, kindly refer to the clarification, addendum etc. issued from time to time before submission of the tender document.


Also refer to your bid documents containing an unconditional price bid of Rs.17,64,00,000.00 (Rupees seventeen crores sixty four lacs only) as Annuity Amount payable in terms of Clause 25 of the Concession Agreement.

Pursuant to our acceptance of your tender and decision to award the work to you, we request you to send your acceptance and sign the Concession Agreement within the time stipulated in the Tender.

Yours faithfully

✓ Encl: Duplicate copy of LoA
for acknowledgement




(Arun Paliwal)
General Manager

Connecting People Through quality infrastructure

Annexure 7: Provisional Certificate



Ref. No TL/MC/SAGAR/PTR/177

Date:- 31/03/2017

To,
Project Manager,
DBL Patan-Tendukheda-Rehli Tollways Limited
Above- Union Bank, Shahpura road,
Patan, Dist:- Jabalpur (M.P.)
Email: anilsharma.uandu@gmail.com

Subject: - Development of Patan-Tendukheda-Rehli Road SH-15 road on BOT (Toll – Annuity) basis.

Regarding: - Provisional Completion Certificate.

Ref.:- Your office letter no - DBL/BOT/PTR/MPRDC/2017/200 dated 27/02/2017.


Dear Sir,

The Provisional Completion Certificate Dated 31.03.2017 in respect of **Patan - Tendukheda - Rehli (Including Rehli bypass) SH - 15 Toll – Annuity** road project, is sent here with for your reference and record.

Please acknowledge receipt

Encl. – Provisional Completion Certificate with Punch list.

Thanking You,


(Rakesh Kumar Tiwari)
Team Leader
MC Consulting Engineers
Sagar (M.P.)

Copy to:- (i) Personal Assistance to the Managing Director, MPRDC, Bhopal (M.P.)
(ii) The Chief Engineer, BOT, MPRDC, Bhopal (M.P.)
(iii) The Divisional Manager, MPRDC, Sagar (M.P.)
(iv) The Director M.C. Consulting Engineers Pvt. Ltd., Bhopal (M.P.)
(v) The Director, DBL Patan Rehli Tollways Limited, Bhopal (M.P.)
(vi) File - Copy/Road/ Gen & CA

Encl. – Provisional Completion Certificate with Punch list

T 10, IIIrd Floor, City Centre, Press Complex, Plot No. -1, M.P. Nagar, Zone -1, Bhopal-462011
Tel./Fax: 0755-4295421, Mob.: 9977004686, Email : infraprojectbhopal@gmail.com



PROVISIONAL CERTIFICATE

1. I Rakesh Kumar Tiwari acting as independent Engineer. Under and in accordance with the Concession Agreement dated 1st September 2015 (the Agreement) for development of the Patan- Tendukheda – Rehli Road Section (km 31/10 to 113/00km) of state Highway No. 15 (The Project Highway) on design builds, finance, operate and transfer (DBFOT) on Toll plus Annuity basis, through M/S DBL PATAN REHLI Toll Plus Annuity basis through hereby certify that the Tests specified in Article 14 and schedule -I of the Agreement have been undertaken to determine compliance of the project Highway with the provisions of the Agreement.
2. Constructions Works that were found to be incomplete and/or deficient have been specified in the Punch List appended hereto and the concessionaire has agreed and accepted that it shall complete and /or rectify all such works in the time and manner set forth in the Agreement. (Some of the incomplete works have been delayed as a result of reasons attributable to the MPRDC or due to Force Majeure and the Provisional Certificate cannot be withheld on this account. Through the remaining incomplete works have been delayed as a result of reason attributable to the concessionaire)* I am satisfied that having regard to the nature and extent of such incomplete works, it would not be prudent to withhold commercial operation of the Project Highway pending completion thereof.
3. In view of the foregoing, I am satisfied that the Project Highway can be safely and reliably placed in commercial service of the Users thereof, and in terms of the Agreement, the Project Highway is hereby Provisionally declared fit for entry into commercial operation on this the 31st day of March 2017.

ACCEPTED, SIGNED, SEALED
AND DELIVERED

For and on behalf of
CONCESSIONAIRE, by

(Signature)

Mr. Kuncan Das

Plot No.5 inside Govind Naryana singh gate,
Chuna Bhaarti Kolar Road Bhopal.

SIGNED, SEALED
DELIVERED

For and on behalf of
INDEPENDENT ENGINEER by:

Team Leader

MC Consulting Engineers (P) Ltd.

(M.P.)
Mr. Rakesh Kumar Tiwari

House No.-85, peddar colony shivaji
Ward, Sugar (M.P.)

T-10, 11th Floor, City Centre, Press Complex, Plot No. -1, M.P. Nagar, Zone -1, Bhopal-462011
Tel./Fax: 0755-4295421, Mob.: 9977004686, Email : infraprojectbhopal@gmail.com

List of Balance work to be incorporate to Punch List

Sl. No.	Balance Work	Remark
1.	Structure Protection Work : Protection work , Pitching, water way clearance	Balance
2.	Highway Work - From Km. 77+000 to 90+000 = 12.4 Km. From Km. 114+250 to 117+200 = 2.95 Km. From Km. 20+600 to 31+800 = 1.20 Km.	Balance
3.	Toll Plaza at 34 +000 to 34 +300 and 110+520 to 110+820 is in progress	under progress
4.	Road Marking 20 km completed	Work under progress
5.	Road Signage	Balance
6.	Road Furniture (Kilometer Stone)	Balance
7.	Covered Drain Work	Work under progress

For and on behalf of
PatanTendukhedaRehliTollways Limited


Project Manager

Authorized Signatory

For and on behalf of
Independent Engineer by Rakesh Kumar Tiwari

(Rakesh Kumar Tiwari)
Team Leader
MC Consulting Engineer, Sagar (M.P.)

Annexure 8: Completion Certificate

 **MC CONSULTING ENGINEERS (P) LTD.**
(ISO 9001 : 2000 Certified)
Civil Structural, Highways, Software Engineers Architecture (Architecture, Planning, Designing & Detailed Engineering)
House No.-85, Poddar Colony, Shiva Ji, Ward, Sagar M.P. 07582-237183


Ref. No: - TL/MC/SAGAR/PTR/237 Date: 12/02/2018

To,
Authorized Signature
DBL Patan Rehli Tollways Limited

Subject: - Development of Patan-Tendukheda-Rehli Road SH-15 road on BOT (Toll + Annuity) basis **reg.** - Issuance of Completion Certificate accordance with clause 14.2 of Concession Agreement.
Ref:- Your office letter no. DBLBOT/ P-T-R/MPRDC/2016/27 dated 20.01.2018

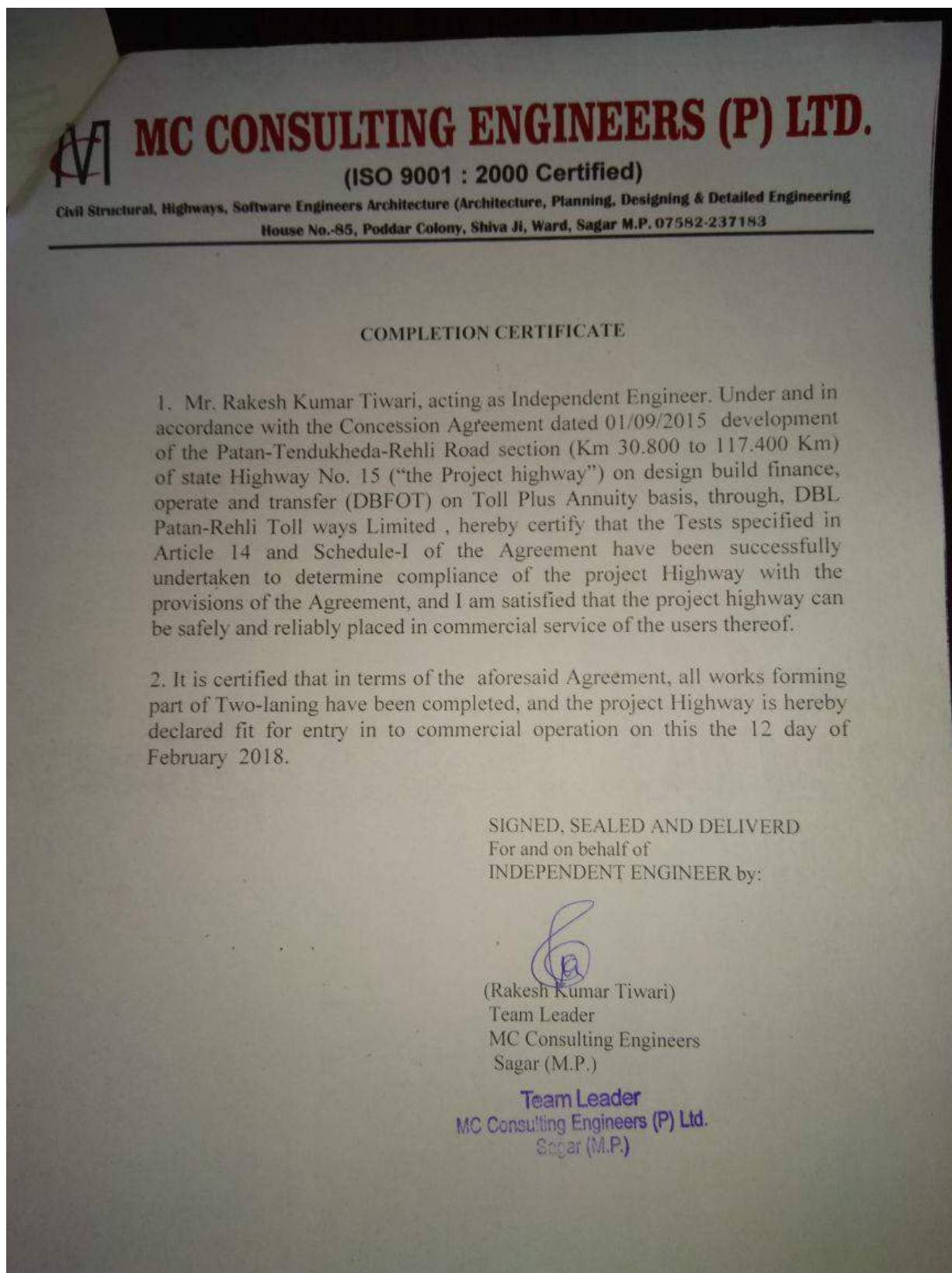
Dear Sir,
Please refer the letter under reference as above, it is requested to issue the Completion Certificate accordance with clause 14.2 of Concession Agreement.
All works forming part of Patan-Tendukheda-Rehli Road have been completed, and the project Highway is found fit for entry in to commercial operation.
Hence the Completion Certificate is issued in favour of DBL Patan Rehli Tollways Limited.

Thanking you,


(Rakesh Kumar Tiwari)
Team Leader
MC Consulting Engineers
Sagar (M.P.)

Copy to:- (i) Chief Engineer(BOT), MPRDC, Bhopal, Bhopal (M.P.).
(ii) The Divisional Manager, MPRDC, Division Sagar, Sagar (M.P.).
(iii) M/s MC Consulting Engineer Pvt. Ltd. Bhopal (M.P.)
(iv) File Copy – Road / Material

T-10, IIIrd Floor, City Centre, Press Complex, Plot No. -1, M.P. Nagar, Zone -1, Bhopal-462011
Tel./Fax: 0755-4295421, Mob.: 9977004686, Email : infraprojectbhupal@gmail.com



Annexure 9: Insurance

पॉलिसी अनुसूची/ Policy Schedule - Civil Engineering Completed Risk

Policy Number:

321300441910001994

जारीकर्ता कार्यालय/Issuing Office

कार्यालय कोड /Office Code: 321300

कार्यालय पता /Office Address: BHOPAL

DIVISION II B-8, Indrapuri, B H E L, Bhopal, Madhya Pradesh - 462022.

State Code: 23, Madhya Pradesh

GSTIN: 23AAACN9987E1ZB

Contact Number: 755 2682822

eMail: 321300@nic.co.in

Mobile Number:

व्यवसाय स्रोत /Business Source: 910355

वितरित चैनल वितरण/Sales Channel Code: 91035500000001

नाम /Name: Aspire Insurance Brokers Pvt Ltd - HO Contact Number: 8291914810

सह दलाल कोड / Co Broker Code:

Customer Care Toll Free Number:

1800 345 0330

email:customer.support@nic.co.in

ग्राहक का नाम /Customer Name: DBL PATAN REHLI TOLLWAYS LTD

पता/ Address: PLOT NO-5, INSIDE GOVIND NARAYAN SINGH GATE, CHUNA BHATTI, KOLAR ROAD, BHOPAL-462016, City: BHOPAL, District: BHOPAL, State: MADHYA PRADESH, PIN: 462016.

Cell: 9826292328

ग्राहक आईडी /Customer ID:

9701881846

फोन /Phone:

ई-मेल /E-Mail:

पैन /PAN: AAFCD4196A

पॉलिसी: 27/03/2020 के 00:00 से 26/03/2021 की मध्य रात्रि तक प्रभावी /Policy Effective from 00:00 hours, on 27/03/2020 to midnight of 26/03/2021

प्रीमियम/ Premium	₹ 22,99,473.00	कवर नोट संख्या और तथि / Cover Note Number and Date	NA
CGST	₹ 2,06,953.00		
SGST/UTGST	₹ 2,06,953.00		
IGST	₹ 0.00		
केरला बाढ़ उपकर/Kerala Flood Cess	₹ 0.00	प्रस्ताव संख्या और तथि / Proposal Number and Date	8800200327087172 Dt. 27/03/2020
कम-जीएसटी टैडीएस / Less:GST_TDS	₹ 0.00		
पुनर्प्राप्त योग्य स्टाम्प ड्यूटी /Recoverable Stamp Duty	₹ 0.00	रसीद संख्या और तथि / Receipt Number and Date	321300811910007666 Dt. 27/03/2020
कुल /Total Amount	₹ 27,13,379.00	पछिली पॉलिसी संख्या और समाप्ति तथि / Previous Policy Number and Expiry Date	NA

(Rupees Twenty Seven Lakh Thirteen Thousand Three Hundred Seventy Nine Only.)

Location:Patan Tendukheda-Rehli (SH-15) Road, Gujarat Patan, Patan, 384265.

Sr.No	Type of Risk	Description Of Risk	Earthquake Zone	Sum Insured of the risk(₹)	Excess(₹)
1	Roads	ROAD AND STRUCTURE Toll Building & Booths, TMS, HTMS, Office & It Equipment, Electronic	Zone IV	2,15,50,00,000.00	1,00,000.00
2	Roads	Equipment, Road Furniture, Fixturs, Electrical Poles Lighting & Fittings, Signboard & Safety Barrier	Zone IV	14,50,00,000.00	1,00,000.00

लागू खंडों, पृष्ठांकनों एवं वारंटी / Clauses, Endorsements and Warranties Applicable: Policy is subject to following conditions : POLICY IS SUBJECT TO THE FOLLOWING CONDITIONS:

- 1.Excess applicable under the policy is: (a) Upto SI of Rs 500 Cr = 10% of Claim subject to Minimum of Rs 5 lacs & (b) SI above 500 Cr & upto 1500 Cr = 10% of Claim subject to Minimum of Rs 10 lacs. Entire Road package will be treated as One location for application of Excess.
- 2 Policy is Applicable for Roads & Road side structures & Toll plazas & Bridges & Flyovers on Land.
- 3.No Coverage for (Road) Transportation Tunnels
- 4.No Coverage for Marine Vessel Impact Damage.
- 5.Each 72 hour period will be treated as One occurrence/event for STFI & EQ for application of Excess.

Printed on 27/03/2020 by ID: 75159

Page no: 1



पॉलिसी अनुसूची/ Policy Schedule - Civil Engineering Completed Risk

Policy Number:

321300441910001994

व्यवसाय स्रोत /Business Source: 910355

जारीकर्ता कार्यालय/Issuing Office

विक्रय चैनल/वेबसाइट/Sales Channel Code:

कार्यालय कोड /Office Code: 321300

91035500000001

कार्यालय पता /Office Address: BHOPAL

नाम /Name: Aspire Insurance Brokers Pvt

DIVISION II B-8, Indrapuri, B H E L, Bhopal, Madhya Pradesh - 462022.

Ltd - HO Contact Number: 8291914810

State Code: 23, Madhya Pradesh

सह दलाल कोड / Co Broker Code:

OSTIN 23AAACN9967E12B

Contact Number: 755 2682822

Customer Care Toll Free Number:

1800 345 0330

eMail: 321300@nic.co.in

email:customer.support@nic.co.in

Mobile Number:

PROJECT DETAILS COVERED UNDER THE POLICY AS FOLLOWS:

Development of Patan-Tendukheda-Rehli (SH-15) Road on BOT (Toll + Annuity) basis.

Name of the co insured under the policy is Dilip Buildcon Ltd. & MPRDCL.

Name of the contractor under the policy is Dilip Buildcon Ltd and subcontractor is VARIOUS, Riot, Strike, and Malicious Damage Clause, Terrorism Damage, Exclusion Warranty, Agreed Blank Clause.

जसिकी गवाही में दत्त/ माह /वर्ष को उपरोक्त उल्लेखित कार्यालय पते पर अधोहस्ताक्षरी को वर्णित अधिलिखित किया जा रहा है उसके हाथ नमूनापत्र कर दिए जाएं। यह अनुसूची, सत्यजन पॉलिसी, खण्ड, पृष्ठकन और पॉलिसी शब्दों, जो कंपनी वेबसाइट <https://nationalinsurance.nic.co.in> पर उपलब्ध है, को एक अनुबंध के रूप में एक साथ पढ़ा जाए तथा कोई भी शब्द या अभिव्यक्ति जिसके लिए यह वर्णित अन्य पॉलिसी या अनुसूची के कतिपय भागों में सत्यजन किया गया हो, एक ही अर्थ वहन करेगा चाहे जहाँ भी उल्लेखित हो। यह आवश्यक दायित्व है कि प्रीमियम चेक के अस्वीकृत के मामले में, यह दस्तावेज स्वतः प्रारम्भिकता भरिस्त हो जाएगा। **IN WITNESS WHEREOF, the undersigned being duly authorized hereunto set his/ her hand at the office address mentioned above, this 27/March/2020. This schedule, the attached policy, the clauses, the endorsements and policy wordings as available in the website <https://nationalinsurance.nic.co.in> shall be read together as one contract and any word or expression to which the specific meaning has been attached in any part of this policy or of the schedule shall bear the same meaning wherever it may appear. It is warranted that IN CASE OF DISHONOUR OF THE PREMIUM CHEQUE, THIS DOCUMENT STANDS AUTOMATICALLY CANCELLED 'AB-INITIO'**

इश्वरीनसुरेंस लिमिटेड



कृत नेशनल इन्शुरेंस कंपनी

निर्दिष्ट For and on behalf of National Insurance Company Limited

अधिकृत हस्ताक्षरकर्ता



TAX INVOICE

Invoice Serial No: 30871E9P00001994

Invoice Date: 27/03/2020

Details Of Supplier:

National Insurance Company Limited.,
BHOPAL DIVISION II B-8, Indrapuri, B H E L, Bhopal, Madhya Pradesh - 462022
State : 23, Madhya Pradesh
GSTIN No : 23AAACN9967E1ZB

Details Of Receiver : DBL PATAN REHLI TOLLWAYS LTD

Address : PLOT NO-5, INSIDE GOVIND NARAYAN SINGH GATE, CHUNA BHATTI, KOLAR ROAD, BHOPAL-462016
City : BHOPAL,
District : BHOPAL,
State : MADHYA PRADESH,
PIN : 462016.

Place Of Supply State : Madhya Pradesh
State Code : 23
GSTIN No : 23AAAFCD4196A1Z1

केरला बाढ़										
सैक कोड/ SAC Code	सेवा का विवरण/ Description of Service	कुल/Total(₹)	छूट/ Discou nt	टैक्स योग्य/ न्यून्य/Taxable Value(₹)	सीजीएसटी की राशि/ CGST	एसजीएसटी/यूटीजीएसटी/ SGST/UTGST	आईजीएसटी/IGST	उपकर/Kerala Flood Cess		
					दर/Rate	राशि/ Amount(₹)	दर/Rate	राशि/ Amount(₹)	दर/Rate	राशि/ Amount(₹)
997137	Other property insurance services	22,99,47 3	0%	22,99,473	9%	2,06,95 3	9%	2,06,95 3	0%	0
TOTAL		22,99,47 3		22,99,473		2,06,95 3		2,06,95 3		0

कुल इनवॉयस न्यून्य (अंकों में) Total Invoice Value (In figures) :
₹ 27,13,379

कुल इनवॉयस न्यून्य (शब्दों में) Total Invoice Value (In words) : **Twenty Seven Lakh Thirteen Thousand Three Hundred Seventy Nine**
केवल/Only.

रविर्स चार्ज के अधीन टैक्स की राशि Amount of Tax Subject to Reverse Charge : No

E.&O.E

कृते नेशनल इन्श्योरेंस कंपनी लिमिटेड For
and on behalf of National Insurance Company Limited

अधिकृत हस्ताक्षरकर्ता/ Authorized Signatory



वसूली रसीद/Collection Receipt

जारीकर्ता कार्यालय कोड/Issuing Office Code : 321300	
जारीकर्ता कार्यालय का नाम व पता/Name and Address of Issuing Office : BHOPAL DIVISION II B-8, Indrapuri, B H E L, Bhopal, Madhya Pradesh - 462022	
राज्य कोड/State Code : 23 ,राज्य का नाम/State Name : Madhya Pradesh	
जीएसटीआईएन/GSTIN : 23AAACN9967E1Z8	
संपर्क संख्या/Contact Number : 755 2682822	
रसीद सं./Receipt No : 321300811910007682	स्कॉल सं. (यदि कोई हो)/Scroll No(if any) : 8821200327000294
रसीद की तिथि व समय/Receipt Date & Time : 27/03/2020. 17:54 hours	स्कॉल तिथि (यदि कोई हो)/Scroll Date(if any) : 27/03/2020

श्री DBL PATAN REHLI TOLLWAYS LTD से सीडी- नकद जमा के रूप में रुपये
Rs. 27,13,379.00 निम्नलिखित लेनदेन के अनुसार धन्यवाद सहित प्राप्त हुआ। उपकरण स्कॉल किया गया है।
Received with thanks from DBL PATAN REHLI TOLLWAYS LTD a sum of Rs. 27,13,379.00 (Rupees Twenty Seven Lakh Thirteen Thousand Three Hundred Seventy Nine Only) by way of CD-Cash Deposit towards the following transactions. The instrument is scrolled.

भुगतान विवरण/Paymode Details :

भुगतान मोड का नाम/Paymode Name :	जमा खाता धारक का नाम/Deposit Account Holder Name :
CD-Cash Deposit	MS DILIP BUILDCON LIMITED
संदर्भ सं./Ref No :	संदर्भ तिथि/Ref Date :
881103220221	
बैंक का नाम (यदि कोई हो)/Bank Name(if any) :	बैंक शाखा (यदि कोई हो)/Bank Branch(if any) :

आपके नकद जमा खाते में समायोजन के बाद उपलब्ध शेष रुपये

The available Balance of your Cash Deposit A/C. after adjustment is - CD a/c. 881103220221 : Balance-
Rs.52540998.74

Adjusted from Receipt No. 321300811910007666. Balance Available - Rs. 47038906

क्र. सं./ S. No	विभाग/ Dept	पॉलिसी/ पृष्ठांकन Policy/Endorsement		व्यव. स्रोत कोड/ Biz Source Code	व्यव.का वर्ग/ विवरण / Class of Business/Narration	राशि ₹. / Amount Rs.
	लेन-देन कोड/ Tr Cd	वर्ष/ Year	संख्या/ Number	विक्रय चैनल/ Sales Channel	लेखा विवरण/ Account Description	
1	44 11	2020	321300441910001994	910355 91035500000001	Civil Engineering Completed Risk Direct Premium CGST SGST Total	22,99,473.00 2,06,953.00 2,06,953.00 27.13.379.00

रोकड़िया/Cashier :

कृते नेशनल इन्श्योरेंस कं. लि./For National Insurance Co. Ltd,

प्राधिकृत हस्ताक्षरकर्ता/Authorised Signatory



HDFC ERGO General Insurance Company Limited



October 10, 2020

DBL PATAN REHLI TOLLWAYS LIMITED

PLOT NO. 5, GOVIND NARAYAN SINGH GATE,
CHUNA BHATTI, BHOPAL MADHYA PRADESH,
BHOPAL,
MADHYA PRADESH, 462016.



Dear Customer,

Sub: Employees Compensation Insurance Policy No: 3114203677162100000

We thank you for having preferred us for your Insurance requirements. We at HDFC ERGO General Insurance believe "Insurance" as not only to be an assurance to indemnify in the event of unfortunate circumstances, but one that signifies protection and support, which you can count on when you need it most.

The Insurance Policy enclosed herewith is a written agreement providing confirmation of our responsibility towards you that puts insurance coverage into effect against stipulated perils.

Please note that the policy has been issued based on the information contained in the proposal form and / or documents received from you or your representative / broker.

Name of the Intermediary : GLOBAL INSURANCE BROKERS PVT LTD

Intermediary Code : 200113159601

Where the proposal form is not received, information obtained from you or your representative /broker, whether orally or otherwise, is captured in the policy document.

If you wish to contact us in reference to your existing policy and /or other general insurance solutions offered by us, you may write to our correspondence address as mentioned below. Alternatively, you may visit our website www.hdfcergo.com. To enable us to serve you better, you are requested to quote your Policy Number in all correspondences.

Thanking you once again for choosing HDFC ERGO General Insurance Company Limited and looking forward to many more years of association.

Yours sincerely,

Authorised Signatory

3114203677162100000

Page 1 of 14

HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U60030MB000791C177117
Registered & Corporate Office:
1st Floor, HDFC House, 105 - 106 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Shandur (West), Mumbai - 400 076

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :

Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited

Certificate of Insurance cum Policy Schedule

Policy No. 3114203677162100000

Employees Compensation Insurance



Insured Name	DBL PATAN REHLI TOLLWAYS LIMITED (PAN Number:AACCD6124B)	Business	OTHERS
Correspondence Address	PLOT NO. 5, GOVIND NARAYAN SINGH GATE, CHUNA BHATTI, BHOPAL MADHYA PRADESH, BHOPAL, MADHYA PRADESH, 462016.		
Mobile		Phone	
		E Mail	
		Policy Issuance Date	10/10/2020
Period of Insurance	From Date & Time	05/10/2020 00:01 AM	To Date & Time
			04/10/2021 Midnight

LAW

The Policy covers Liability of the Insured under the following Law(s) shown as covered, subject to claim being otherwise admissible as per terms, conditions and exclusions of the Policy and subject to Limit of Indemnity as stipulated against each Law:

Sr. No.	Law	Limit of Indemnity
a.	Employee's Compensation Act, 1923 and subsequent amendments thereof prior to the date of issue of this Policy	Subject otherwise, to the terms, conditions & Exclusions of the Policy, the amount of liability incurred by the Insured
b.	Common Law	Subject otherwise, to the terms, conditions & Exclusions of the Policy, the amount of liability incurred by the Insured, but not exceeding:- a) Limit Per Employee for any number of accidents during Period of Insurance ₹. Unlimited b) Limit Per Accident for any number of Employees ₹. Unlimited c) Aggregate Limit for all accidents and claims arising there from during the Period of Insurance ₹. Unlimited

EC-13-0005

3114203677162100000

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)

UIN : IRDAN125P0017V02201112 | IRDAI Reg No.145 | CIN :

U86030MH2007PLC177117

Registered & Corporate Office:
1st Floor, HDFC House, 105 - 106 Backbay Reclamation,

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),

Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699

HDFC ERGO General Insurance Company Limited



Details of Employees Covered

Description of work done by Employees	Declared Number of Employees	Declared Wages during the Period of Insurance	Place/Places of Employment
All categories of employees of DBL & Sub-contractor engaged in DBL - Highly Skilled, Skilled, Semi-Skilled, Unskilled, Engineers, Supervisors, Managers, Daily Labour Etc. - Road Paving, Tarring and Road Making	10	2400000.00	Development of Patan-Tendukheda-Rehli (SH-15) Road on BOT (Toll + Annuity) basis

Premium Details (₹)

Basic Premium	1387.00
Integrated Tax 18%	250.00
Total Premium	1637.00
GST Registration No: 24AABCL5045N1ZE. The contract will be cancelled ab initio in case; the consideration under the policy is not realized.	

List of Endorsements

Endt No	Description	Effective Date
WC-02-0008	Tariff Endorsement	05 October 2020
EC-13-0006	Insurance Contract	05 October 2020
EC-13-0005	Policy Schedule	05 October 2020
WC-02-0010	Medical Expenses Exclusion clause	05 October 2020
EC-13-0007	Communicable Disease Exclusion	05 October 2020
EC_12_0003	Contractors Employees	05 October 2020
01	Business - Construction of Road, Building and Other civil work related to insured trade	05 October 2020
	Warranted that there are no known losses and /or circumstances leading to losses (except for the claims and / or circumstances already reported to HDFC ERGO General Insurance Co. Ltd. This policy document is issued basis the information provided through request for quotation and/ or unsigned proposal form and / or other details provided by the insured / insurance intermediary and/ or through discussions and our final quote sheet issued to you enabling the insurer to decide the terms and conditions of insurance contract.	05 October 2020

3114203677162100000

Page 3 of 14

HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
 U60300MH2007PLC177117
 Registered & Corporate Office:
 1st Floor, HDFC House, 185 - 186 Backbay Reclamation,
 H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
 D-301, 3rd Floor, Eastern Business District (Magnet Mall),
 LBS Marg, Ghandup (West), Mumbai - 400 078

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :
 Toll Free Number: 1800 2700 700
 Telephone : +91 22 6636 3600 Fax: 91 22 6636 3699
 Email : cam@hdfcergo.com

HDFC ERGO General Insurance Company Limited



	Your are requested to inform us within 15 days of receipt of the policy document in the event of any error or omission in the information provided.	
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Subject to terms and Conditions of Employees Compensation Insurance Policy attached herewith.

Mentioned are four special conditions for EC policy with context to the policy wordings.

1. Subrogation condition no.14 does not apply to this policy.
2. Average condition no. 9 does not apply to this policy. However, this is subject to adjustment of premium on the basis of actual number of employees and their wages at the time of claims.
3. This policy is issued to cover employer's legal liability for accidents to employees under - The Fatal Accidents Act, 1855.
4. The Wages declared is estimated wages for the Coming Year. Any Increase or Decrease in wages will be declared at the End of Policy & Subject to that Premium will be charged or refunded

Note: The stamp duty of Rs. 0.69 (Rupees Sixty-Nine Paise Only) is paid by Demand Draft as consolidated stamp duty, vide Receipt/Challan no CSD/293/2020/385/2020 dated 24/01/2020 as prescribed in Government Notification Revenue and Forest Department No Mudrank 2004/4125/CR 690/M-1, dated 31/12/2004

Invoice No	203677162100000	GSTN No	23AACCD6124B2ZD
Place of Supply	MADHYA PRADESH	HSN Code	997139
Policy Issuance Date	10-10-2020	Branch	AHMEDABAD - SHOPPER PLAZA - IV

For HDFC ERGO General Insurance Company Ltd

Broker Name:GLOBAL INSURANCE BROKERS
PVT LTD
Broker Code:200113159601

Duly Constituted Attorney

3114203677162100000

Page 4 of 14

HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U68030MH2007PLC177117
Registered & Corporate Office:
1st Floor, HDFC House, 185 - 186 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Ghandup (West), Mumbai - 400 078

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :

Toll Free Number: 1800 2700 700
Telephone : +91 22 6636 3600 Fax: 91 22 6636 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



EMPLOYEES COMPENSATION INSURANCE

POLICY WORDINGS

WHEREAS the Insured by a Proposal which shall be the basis of this Contract and deemed to be incorporated herein, has applied to HDFC ERGO General Insurance Company Limited (hereinafter called "the Company") for the insurance hereinafter contained for the Business described in the Schedule and has paid or agreed to pay the premium stated in the Schedule as consideration for such insurance.

NOW THIS POLICY WITNESSETH, subject to the terms exceptions and conditions contained herein or endorsed hereon, that if at any time during the Period of Insurance any Employee or Employees of the Insured shall sustain Injury by accident arising out of and in the course of his employment in the Business, for which the Insured is liable to pay compensation under any Law(s) specified in the Schedule, then the Company shall indemnify the Insured up to the Limit of Indemnity against all sums for which the Insured shall be so liable, including costs and expenses for defending any such claim incurred with the Company's consent.

PROVIDED ALWAYS that in the event of any change in the Law(s) or the substitution of other legislation therefore, this Policy shall remain in force but the liability of the Company shall be limited to such sum as the Company would have been liable to pay if the Law(s) had remained unaltered.

DEFINITIONS

This Policy, the Schedule and any Clauses thereon shall be considered one document and any word or expression to which a specific meaning has been attached in Definitions bears that specific meaning wherever it appears in this Policy in bold typeface.

Business means the Business of the Insured as specified in the Schedule in respect of which this Policy is issued.

Injury means physical bodily injury including death resulting from such injury arising out of an accident but does not include any mental sickness, disease, Occupational Disease, unless caused by such physical bodily injury.

Insured means the person or organization specified in the Policy Schedule but does not include their Contractors or Sub Contractors.

Occupational Disease means any occupational disease or illness including but not limited to the diseases listed under Schedule III of the Employees' Compensation Act, 1923 contracted by an Employee due to employment in the Business.

Wages means the remuneration payable to an Employee by the Insured for the employment in the Business and includes any privilege or benefit which is capable of being estimated in money other than a travelling allowance or the value of any travelling concession or a contribution paid by the employer of an employee towards any pension or provident fund or a sum paid to an employee to cover any special expenses entailed on him by the nature of his employment;

Employee or Employees means such person or persons in direct employment under the Insured in the Business, but shall not include any person employed under a Contractor or Sub-Contractor of the Insured unless specifically shown as covered in the Schedule and by an endorsement.

Schedule means the Schedule attached to and forming part of this Policy.

Period of Insurance means the period for which this insurance is availed by the Insured as specified in the Schedule, unless cancelled earlier.

EC-13-0004

3114203677162100000

Page 5 of 14

HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U60030MH2007PLC177117

Registered & Corporate Office:
1st Floor, HDFC House, 105 - 106 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Shandrapur (West), Mumbai - 400 076

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :

Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



Limit of Indemnity means the maximum amount of indemnity as specified in the **Schedule** that will be provided under this Policy by the Company in respect of

- a) any particular claim by an **Employee** and
- b) all claims arising out of all accidents for any number of **Employees** during the **Period of Insurance**.

EXCLUSIONS

This Policy shall not cover liability of the **Insured**:

- (a) For **Injury** caused to **Employee** by accident directly or indirectly caused by or arising from or in consequence of or attributable to war, invasion, act of foreign enemy, hostilities (whether war be declared or not) civil war, mutiny, insurrection, rebellion, revolution or military or usurped power, nuclear weapons material, ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel.
- (b) Accident occurring at any other place than the Place or Places of Employment specified in the **Schedule**, unless the **Employee** was at such other place whilst on duty for the purpose of the **Business** and on the directions of the **Insured** or any of its official authorized to exercise control and supervision over the **Employee**.
- (c) For **Occupational Diseases** contracted by an **Employee**.
- (d) For interest and/or penalty imposed on the **Insured** under any law or otherwise.
- (e) Under any Law for medical expenses in connection with treatment of any **Injury** sustained by an **Employee**
- (f) For persons employed in the **Business** under a **Contractor** or **Sub-Contractor** of the **Insured** unless specifically covered in the **Schedule**
- (g) For **Injury** sustained by person whilst in the employ of the **Insured** otherwise than in the **Business** and/or who has is not declared for insurance under this Policy.
- (h) Assumed by agreement which would not have attached in the absence of such agreement.
- (i) For any sum which the **Insured** would have been entitled to recover from any party but for an agreement between the **Insured** and such party.
- (j) For any accident occurring whilst the **Employee** is under the influence of intoxicating liquor or drugs.
- (k) For any incapacity or death of an **Employee** resulting from his/her deliberate self-injury or the deliberate aggravation of an accidental **Injury**.

CONDITIONS

1. **The Contract:** This Policy and the **Schedule** shall be read together as one contract and any word defined herein and shown in bold shall bear such specific meaning wherever it may appear in the **Policy** or the **Schedule**.
2. **Due Observance:** The due observance and fulfilment of the terms, conditions and endorsements of this **Policy** so far as they relate to anything to be done or not to be done by the **Insured** shall be condition precedent to any liability of the Company to make any payment under this **Policy**.
3. **Misrepresentation/Non-Disclosure:** This **Policy** shall be void in the event of any misrepresentation or non-disclosure in the Proposal and the **Insured** is deemed to warrant the truth and accuracy of the statements and answers in the Proposal which form the basis of this **Policy**.
4. **Written Communication:** Every notice or communication to be given or made under this **Policy** shall be delivered in writing to the Company.
5. **Safeguards:** The **Insured** shall take reasonable precautions to prevent accidents and disease and shall comply with all statutory obligations, manufacturer's recommendations and other safety regulations in conduct of the **Business**.

EC-13-0004

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)

U68030MH2007PLC177117

Registered & Corporate Office:
1st Floor, HDFC House, 105 - 106 Backbay Reclamation,
H. T. Park Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Shandrapur (West), Mumbai - 400 076

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :

Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



6. **Claim Intimation:** In the event of any occurrence which may give rise to a claim under this Policy the Insured shall as soon as possible, and in any case within a period of thirty days of such occurrence, give notice thereof to the Company in writing with full particulars. Every letter claim writ summons and process shall be notified to the Company immediately on receipt. Notice shall also be given to the Company immediately the Insured shall have knowledge of any impending prosecution inquest or fatal enquiry in connection with any such occurrence as aforesaid.
7. **Company's Rights After Loss:** No admission offer promise or payment shall be made by or on behalf of the Insured without the consent of the Company which shall be entitled, without being obliged to do so, if it so desires to take over and conduct in his name the defence or settlement of any claim or to prosecute in his name for its own benefit any claim for indemnity or damages or otherwise and shall have full discretion in the conduct of any proceedings and in the settlement of any claim and the Insured shall give all such information and assistance as the Company may require.
8. **Declaration of Employees and Wages:** It is clearly agreed and Understood that the Insured shall be bound at all times to declare all Employees and Wages payable in respect of such Employees on the basis of which the Premium for this Policy is calculated.
- In case of increase in Employees or Wages subsequent to insurance, Insured shall keep the Company intimated and obtain Endorsement by payment of necessary additional premium.
- The Insured shall as and when require by the Company permit inspection of its records to verify the Wages and Employees and shall also provide duly authenticated copies thereof if so required the Company.
9. **Average:** Notwithstanding anything contained hereinabove,
- (i) a) If the number of Employees (whether on duty or otherwise) employed by the Insured on the date of accident is higher than the number covered under this Policy, the Company shall indemnify Insured's liability arising out of such accident, only in such proportion that the number of Employees covered bears to the Employees found employed on the date of accident.
- b) If the amount of Wages declared for this insurance for all Employees is less than the actual Wages paid until date of accident, the Company shall be liable to indemnify on any claim only in proportion that the Wages declared bears to the Wages paid. For the purpose of this clause, the Wages declared shall be calculated proportionately for the period from commencement of Policy until date of accident for comparison with the actual wages paid during such period to determine applicability of this clause.
- c) If the liability of the Insured for any claim by an Employee is determined on the basis of Wages higher than covered under this Policy, the Company shall be liable to indemnify only in proportion that the Wages covered under the Policy for the Employee/employees bears to the Wages on the basis of which Insured is held liable. For the purpose of this clause, the Wages covered in respect of any Employee shall be deemed to be the average wage per Employee in the category under which the Employee falls as specified in the Schedule, unless actual Wages paid at the time of accident is substantiated by submission of documentary evidence to the Company.
- (ii) If more than one of the above clauses is found applicable in respect of a claim, only such clause under which the liability of the Company is least shall be applied.
10. **Maintenance of record of Employees/Wages:** The Insured undertakes to maintain an accurate record of the Employees and Wages in respect of the Business throughout the Period of Insurance, in compliance with all statutory requirements or otherwise, and allow the Company to inspect such records during or upon expiry of this Policy.

EC-13-0004

3114203677162100000

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U60030MB1200791C177117
Registered & Corporate Office:
1st Floor, HDFC House, 105 - 106 Backbay Reclamation,
H. T. Parkish Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Shandup (West), Mumbai - 400 076

LIN : IRDAN12SP0017V02201112 | IRDAI Reg No.146 | CIN :
Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



11. **Contribution:** If at the time of the happening of an accident covered by this Policy there shall be any other insurance covering the same risk in respect of the Employee whether or not effected by the Insured, then the Company shall not be liable to contribute more than its rateable proportion of the amount that would otherwise be payable under this Policy.
12. **Cancellation:** The Insured may cancel this Policy by sending at least 15 days written notice to the Company and in such event the premium shall be adjusted in accordance with Condition 8 above.
- Company also reserves the right to cancel this Policy immediately upon becoming aware of any mis-representation, fraud, non-disclosure of material facts or non-cooperation by or on behalf of the Insured; the Company is not obliged to refund the premium already paid under the Policy.
- Notice of cancellation will be mailed to the Insured last known address. If notice of cancellation is mailed, proof of mailing will be sufficient proof of notice.
- Company shall have no obligation to give notice that the Policy is due for renewal or renew this Policy upon expiration or cancellation.
13. **Forfeiture:** If the Insured shall make any claim or connive in the making of any claim, knowing the claim to be false or fraudulent, the Policy shall become void and all claims will stand forfeited.
14. **Subrogation:** In the event of any payment under this Policy, the Company shall be subrogated to the extent of such payment to all the Insured's rights of recovery and the Insured shall execute all papers required and shall do everything necessary to secure and preserve such rights, including the execution of such documents necessary to enable the Company effectively to bring suit in the name of each Insured.
15. **Alteration and Assignment:** No change in, modification of, or assignment of interest under this Policy shall be effective except when made by a written endorsement to this Policy which is signed by an authorised employee of the Company.
16. **Premium Payment:** It is hereby agreed that, as a condition precedent to any liability under this Policy, any premium due must be paid and actually received by the Company in full. However, where the remittance made by the Insured is not realised by the Company the Policy shall be treated as void-ab-initio.
17. **Arbitration:**
- a) If any dispute or difference shall arise as to the quantum to be paid under this Policy (liability being otherwise admitted) in respect of any claim, such difference shall independently of all other question be referred to the decision of a sole arbitrator to be appointed in writing by the parties to or if they cannot agree upon a single arbitrator to a panel of three arbitrators to be appointed in accordance with the provisions of the Arbitration and Conciliation Act, 1996. The arbitration shall be governed by Indian law. The venue of arbitration shall be within India.
- b) It is clearly agreed and understood that no reference to arbitration can be made if the Company has either not admitted or has disputed liability in respect of any claim under or in respect of this Policy.
- c) In the event that these arbitration provisions shall be held to be invalid then all such disputes or differences shall be referred to the exclusive jurisdiction of the Indian Courts.
- d) It is further expressly agreed and declared that if the Company shall disclaim liability in respect of any claim and is not within 12 calendar months from the date of such disclaimer be made the subject matter of a suit or proceeding before a Court of law or any other forum, it shall for all purposes be deemed to have been abandoned and shall not thereafter be recoverable hereunder.
18. **Law and Jurisdiction:** It is hereby declared and agreed that this contract of insurance and all claims there under shall be governed by Indian Law and any legal proceeding in respect thereof shall be raised a competent court of India. All claims shall be paid in Indian Rupees only.

EC-13-0004

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U60030MH2007PLC177117
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H. T. Parkish Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Shandrapur (West), Mumbai - 400 076

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :
Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3000 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



Tariff Endorsement

Endorsement

Policy Period	Effective Date	From	00:01	hours	October 05, 2020
	Expiry Date	To (Midnight)			October 04, 2021
Effective Date	October 05, 2020				
Policy Number	3114203677162100000				
Insured	DBL PATAN REHLI TOLLWAYS LIMITED				
Name of Company	HDFC ERGO General Insurance Company Limited				
Date Issued	October 10, 2020				

Tariff Endorsement	<p>It is hereby understood and agreed that any work in connection with the use of explosives or in connection with the construction of sewers exceeding in any part a depth of 3 Metres from the surface or in connection with tunnelling is expressly excluded from the indemnity granted under this Policy.</p> <p>Subject to otherwise to the terms, provisions and conditions of the within Policy.</p>
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Authorised Representative

WC-02-0008

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U68030MH2007PLC177117
Registered & Corporate Office:
1st Floor, HDFC House, 185 - 186 Backbay Reclamation,
H. T. Parish Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Ghandup (West), Mumbai - 400 078

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :
Toll Free Number: 1800 2700 700
Telephone : +91 22 6636 3600 Fax: 91 22 6636 3699
Email : cam@hdfcergo.com

HDFC ERGO General Insurance Company Limited



Coverage for Contractors Workers/ Employees

Endorsement

Policy Period Effective Date From 00:01 hours : October 05, 2020
 Expiry Date To (Midnight) : October 04, 2021
Effective Date October 05, 2020
Policy Number 3114203677162100000
Insured DBL PATAN REHLI TOLLWAYS LIMITED
Name of Company HDFC ERGO General Insurance Company Limited
Date Issued October 10, 2020

Coverage for Contractors Workers/ Employees	In consideration of the payment of an additional premium it is hereby understood and agreed that the indemnity herein granted is extended to cover the legal liability of the Insured to Employees in the employment of Contractors performing work for the Insured while engaged in the Business in respect of which the within Policy is granted, but only so far as regard claims under the Employees Compensation Act, 1923, and subsequent amendments of said Act prior to the date of the issue of this Policy.
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1. **Contractor's Name:** Details to be provided at the time of the Claim
Registered Address: Details to be provided at the time of the Claim

Sr. No.	Description of work done by Employees	Declared Number of Employees	Declared Wages/Contract Value during the Period of Insurance	Place/Places of Employment
1	All categories of employees of DBL & Sub-contractor engaged in DBL - Highly Skilled, Skilled, Semi-Skilled, Unskilled, Engineers, Supervisors, Managers, Daily Labour Etc. - Road Paving, Tarring and Road Making	0	Contractual employees is included in the total number of employees. However split of contractual employees to be provided at the time of claim.	Development of Patan-Tendukheda-Rehli (SH-15) Road on BOT (Toll + Annuity) basis

Authorised Representative

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
 U68030MH2007PLC177117
 Registered & Corporate Office:
 1st Floor, HDFC House, 185 - 186 Backbay Reclamation,
 H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
 D-301, 3rd Floor, Eastern Business District (Magnet Mall),
 LBS Marg, Shandrapur (West), Mumbai - 400 078

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :
 Toll Free Number: 1800 2700 700
 Telephone : +91 22 6636 3600 Fax: 91 22 6636 3699
 Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



Medical Expenses Exclusion

Endorsement

Policy Period	Effective Date	From	00:01	hours	October 05, 2020
	Expiry Date	To (Midnight)			October 04, 2021
Effective Date	October 05, 2020				
Policy Number	3114203677162100000				
Insured	DBL PATAN REHLI TOLLWAYS LIMITED				
Name of Company	HDFC ERGO General Insurance Company Limited				
Date Issued	October 10, 2020				

Medical Expenses Exclusion	This policy does not cover Medical Expenses
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All other terms and conditions remain unchanged.


Authorised Representative

WC-02-0010

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
U66000MH2007P1C177117
Registered & Corporate Office:
1st Floor, HDFC House, 195 - 196 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Ghandup (West), Mumbai - 400 075

UN : IRDAN12SP0017V02201112 | IRDAI Reg No. 546 | CIN :
Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699
Email : cam@hdfcergo.com

HDFC ERGO General Insurance Company Limited



GRIEVANCE REDRESSAL PROCEDURE

If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:

- Call Center (Toll free helpline)
1800 2 700 700 (accessible from any Mobile and Landline within India)
1800 226 226 (accessible from any MTNL and BSNL Lines)
- Emails - grievance@hdfcergo.com
- Designated Grievance Officer in each branch.
- Company Website - www.hdfcergo.com
- Fax : 022 - 66383600
- Courier : Any of our Branch office or corporate office

You may also approach the Complaint & Grievance (C&G) Cell at any of our branches with the details of your grievance during our working hours from Monday to Friday.

If you are not satisfied with our redressal of your grievance through one of the above methods, you may contact our Head of Customer Service at

The Complaint & Grievance Cell,
HDFC ERGO General Insurance Company Limited
D-301,3rd Floor, Eastern Business District (Magnet Mall),LBS Marg,
Bhandup (West), Mumbai - 400078,
e-mail: grievance@hdfcergo.com

In case you are not satisfied with the response / resolution given / offered by the C&G cell, then you can write to the Principal Grievance Officer of the Company at the following address

The Chief Grievance Officer
HDFC ERGO General Insurance Company Limited
D-301,3rd Floor, Eastern Business District (Magnet Mall),LBS Marg,
Bhandup (West), Mumbai - 400078 .
e-mail: cco@hdfcergo.com

You may also approach the nearest Insurance Ombudsman for resolution of your grievance. The contact details of Ombudsman offices are mentioned below if your grievance pertains to:

- Insurance claim that has been rejected or dispute of a claim on legal construction of the policy
- Delay in settlement of claim
- Dispute with regard to premium
- Non-receipt of your insurance document

You may also refer our website <https://www.hdfcergo.com/customer-care/grievances.html> for detailed grievance redressed procedure.

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
UB0030MB00079/C177117
Registered & Corporate Office:
1st Floor, HDFC House, 185 - 186 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Bhandup (West), Mumbai - 400 078

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :
Toll Free Number: 1800 2700 700
Telephone : +91 22 6636 3600 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



Ombudsman Offices	
Jurisdiction	Office Details
Gujarat, Dadra & Nagar Haveli, Daman and Diu	AHMEDABAD Office of the Insurance Ombudsman, 2nd floor, Ambica House, Near C.U. Shah College, 5, Navyug Colony, Ashram Road, Ahmedabad - 380 014. Tel.: 079 -27546150 / 27546130 Fax: 079 - 27546142 Email: bimalokpal.ahmedabad@gbic.co.in
Orissa	BHUBANESHWAR - Shri. B. N. Mahira Office of the Insurance Ombudsman, 62, Forest park, Bhubaneswar - 751 009. Tel.: 0674 - 2596461 /2596455 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@gbic.co.in
Tamil Nadu, Pondicherry Town and Karaikal (which are part of Pondicherry)	CHENNAI - Shri Virender Kumar Office of the Insurance Ombudsman, Fatima Akhtar Court, 4th Floor, 453, Anna Salai, Teynampet, CHENNAI - 600 018. Tel.: 044 - 2433988 / 24335284 Fax: 044 - 24339884 Email: bimalokpal.chennai@gbic.co.in
Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura	GUWAHATI Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor, Nr. Panbazar over bridge, S.S. Road, Guwahati - 781001(ASSAM). Tel.: 0361 - 2132204 / 2132205 Fax: 0361 - 2732837 Email: bimalokpal.guwahati@gbic.co.in
Madhya Pradesh Chattisgarh	BHOPAL - Shri. R. K. Srivastava Office of the Insurance Ombudsman, Janak Vihar Complex, 2nd Floor, 6, Mahiya Nagar, Opp. Aitel Office, Near New Market, Bhopal - 462 003. Tel.: 0755 - 2786201 / 2786202 Fax: 0755 - 2786203 Email: bimalokpal.bhopal@gbic.co.in
Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh	CHANDIGARH - Shri. Manik B. Sonawane Office of the Insurance Ombudsman, S.C.O. No. 101, 102 & 103, 2nd Floor, Beta Building, Sector 17 - D, Chandigarh - 160 017. Tel.: 0172 - 2708198 / 2708468 Fax: 0172 - 2708274 Email: bimalokpal.chandigarh@gbic.co.in
Delhi	DELHI - Smt. Sandhya Baliga Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi - 110 002. Tel.: 011 - 23239833 / 23237539 Fax: 011 - 23230858 Email: bimalokpal.delhi@gbic.co.in
Andhra Pradesh, Telangana, Yanam and part of Territory of Pondicherry	HYDERABAD - Shri. G. Rajeswara Rao Office of the Insurance Ombudsman, 6-2-46, 1st floor, 'Main Court', Lane Opp. Saleem Function Palace, A. C. Guards, Lakdi-Ka-Pool, Hyderabad - 500 004. Tel.: 040 - 65504123 / 23312122 Fax: 040 - 23378599 Email: bimalokpal.hyderabad@gbic.co.in
Kerala, Lakshadweep, Mahe-a part of Pondicherry	ERNAKULAM - Shri. P. K. Vijayakumar Office of the Insurance Ombudsman, 2nd Floor, Pullat Bldg., Opp. Cochin Shipyard, M. G. Road, Ernakulam - 682 015. Tel.: 0484 - 2358759 / 2359338 Fax: 0484 - 2359338 Email: bimalokpal.ernakulam@gbic.co.in
Rajasthan	JAIPUR - Shri. Ashok K. Jain Office of the Insurance Ombudsman, Jeevan Nidhi - II Bldg., Gr Floor, Bhawani Singh Marg, Jaipur - 302 005. Tel.: 0141 - 2740363 Email: Bimalokpal.jaipur@gbic.co.in
Districts of Uttar Pradesh : Lalitpur, Jhansi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhadra, Fatehpur, Pratapgarh, Jaunpur, Varanasi, Gaziapur, Jalaun, Kanpur, Lucknow, Unnao, Sitapur, Lakhimpur, Bahraich, Barabanki, Raebareilly, Srivasthi, Gonda, Faizabad, Amethi, Kaushambi, Balrampur, Basti, Ambedkarnagar, Sultanpur, Mahanagar, Sandikamagar, Azamgarh, Kushinagar, Gorakhpur, Deoria, Mau, Ghazipur, Chandauli, Ballia, Siddharthnagar	LUCKNOW - Shri. N. P. Bhagat Office of the Insurance Ombudsman, 6th Floor, Jeevan Bhawan, Phase-II, Nawal Kishore Road, Hazratganj, Lucknow - 226 001. Tel.: 0522 - 2231330 / 2231331 Fax: 0522 - 2231310 Email: bimalokpal.lucknow@gbic.co.in
Karnataka	BENGALURU - Shri. M. Parshad Office of the Insurance Ombudsman, Jeevan Souths Building, PID No. 57-27-N-19 Ground Floor, 19/19, 24th Main Road, JP Nagar, 1st Phase, Bengaluru - 560 078. Tel.: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@gbic.co.in
West Bengal, Bihar, Sikkim, Jharkhand, Andaman & Nicobar Islands	KOLKATA - Shri. K. B. Saha Office of the Insurance Ombudsman, Hindustan Bldg. Annex, 4th Floor, 4, C.R. Avenue, KOLKATA - 700 072. Tel.: 033 - 22124339 / 22124340 Fax: 033 - 22124341 Email: bimalokpal.kolkata@gbic.co.in
Goa, Mumbai Metropolitan Region excluding New Mumbai & Thane	MUMBAI - Shri. A. K. Deshpande Office of the Insurance Ombudsman, 3rd Floor, Jeevan Sava Annex, S. V. Road, Santacruz (W), Mumbai - 400 054. Tel.: 022 - 26108552 / 26108980 Fax: 022 - 26108052 Email: bimalokpal.mumbai@gbic.co.in
Maharashtra, Area of New Mumbai and Thane excluding Mumbai Metropolitan Region	PUNE - Shri. A. K. Sahoo Office of the Insurance Ombudsman, Jeevan Dashaan Bldg., 2nd Floor, C.T.S. Nos. 195 to 198, N.C. Kelkar Road, Narayan Path, Pune - 411 030. Tel.: 020 - 32341320 Email: bimalokpal.pune@gbic.co.in
State of Uttaranchal and the following Districts of Uttar Pradesh: Agra, Aligarh, Bagpat, Bareilly, Bijnor, Budaut, Bulandshahr, Etah, Kanoo, Mairpur, Mathura, Meerut, Moradabad, Muzaffarnagar, Oranjiya, Pilibhit, Etawah, Farrukhabad, Firozabad, Gautamibodhanagar, Ghaziabad, Haridwar, Shahjahanpur, Hapur, Shamli, Rampur, Kashganj, Sambhal, Amroha, Hathras, Kanishamnagar, Baharanpur.	NOIDA Office of the Insurance Ombudsman, Email: bimalokpal.noida@gbic.co.in

STATUTORY NOTICE: "INSURANCE IS THE SUBJECT MATTER OF SOLICITATION"

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HDFC ERGO General Insurance Company Limited (Formerly HDFC General Insurance Limited)
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LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :
 Toll Free Number: 1800 2700 700
 Telephone : +91 22 6636 3600 Fax: 91 22 6636 3699
 Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited



EXCLUSION - COMMUNICABLE DISEASE

1. Notwithstanding any provision, clause or term of this Insurance Contract to the contrary, this Insurance Contract excludes any loss, cost, damage, liability, claim, fines, penalty or expense or any other amount of whatsoever nature, whether directly or indirectly and/or in whole or in part, related to, caused by, contributed to by, resulting from, as a result of, as a consequence of, attributable to, arising out of, arising under, in connection with, or in any way involving (this includes all other terms commonly used and/or understood to reflect or describe nexus and/or connection from one thing to another whether direct or indirect):
 - 1.1. a Communicable Disease and/or the fear or threat (whether actual or perceived) of a Communicable Disease and/or the actual or alleged transmission of a Communicable Disease regardless of any other cause or event contributing and/ or occurring concurrently or in any sequence thereto, and
 - 1.2. a pandemic or epidemic, as declared by the World Health Organisation or any governmental authority.
2. As used herein, Communicable Disease means: any infectious, contagious or communicable substance or agent and/or any infectious, contagious or communicable disease which can be caused and/or transmitted by means of substance or agent where:
 - 2.1. the disease includes, but is not limited an illness, sickness, condition or an interruption or disorder of body functions, systems or organs, and
 - 2.2. the substance or agent includes, but is not limited to, a virus, bacterium, parasite, other organism or other micro-organism (whether asymptomatic or not); including any variation or mutation thereof, whether deemed living or not, and
 - 2.3. the method of transmission, whether direct or indirect, includes but not limited to, airborne transmission, bodily fluid transmission, transmission through contact with human fluids, waste or the like, transmission from or to any surface or object, solid, liquid or gas or between organisms including between humans, animals, or from any animal to any human or from any human to any animal, and
 - 2.4. the disease, substance or agent is such:
 - 2.4.1. that causes or threatens damage or can cause or threaten damage to human health or human welfare, or
 - 2.4.2. that causes or threatens damage to or can cause or threaten damage to, deterioration to, contamination of, loss of value of, loss of marketability of or loss of use or usefulness of, tangible or intangible property.

For avoidance of doubt, Communicable Disease includes but is not limited to Coronavirus Disease 2019 (Covid -19) and any variation or mutation thereof.

Authorised Representative

3114203677162100000

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U68030MH2007PLC177117
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1st Floor, HDFC House, 105 - 106 Backbay Reclamation,
H. T. Parekh Marg, Churchgate, Mumbai - 400 020

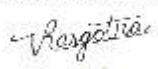
Customer Service Address:
D-301, 3rd Floor, Eastern Business District (Magnet Mall),
LBS Marg, Shandup (West), Mumbai - 400 076

LIN : IRDAN125P0017V02201112 | IRDAI Reg No.146 | CIN :

Toll Free Number: 1800 2700 700
Telephone : +91 22 6638 3600 Fax: 91 22 6638 3699
Email : care@hdfcergo.com

HDFC ERGO General Insurance Company Limited
TAX INVOICE



Details of Insured Insured Name : DBL PATAN REHLI TOLLWAYS LIMITED Correspondence Address : PLOT NO. 5, GOVIND NARAYAN SINGH GATECHUNA BHATTI, BHOPAL MADHYA PRADESH BHOPAL, MADHYA PRADESH -462016 Billing Address : PLOT NO. 5, GOVIND NARAYAN SINGH GATE, CHUNA BHATTI, BHOPAL, BHOPAL, MADHYA PRADESH, PIN-462016. Place of Supply : Madhya Pradesh State Code : 23 PAN : AACCD6124B GSTIN : 23AACCD6124B2ZD				Details of Insurer Insurer Name : HDFC ERGO General Insurance Company Limited Branch Address : 206, SEC FL. SHOPPER PLAZA IV, OPP. BSNL TEL EXCH RD, NAVARANGPURA AHMEDABAD, 380006. GSTIN : 24AABCL5045N1ZE Policy No. : 3114203677162100 Certificate No. : 3114203677162100000 Invoice No. : 203677162100000 Policy issue date / Invoice date : 10/10/2020							
Premium Details (₹)											
S.No.	Description of Services	HSN Code	Premium Amount	CGST		SGST		IGST		Total Tax	Premium Value with Tax
				Tax %	Amount	Tax %	Amount	Tax %	Amount		
1	Employees Compensation Insurance Policy	997139	1387	9%	0	9%	0	18%	250	250	1637
Total Invoice Value										1837	
Total Invoice Value (in Words)		RUPEES ONE THOUSAND SIX HUNDRED THIRTY-SEVEN AND ZERO PAISE ONLY									
Whether Tax is payable on Reverse charge basis : No											
										For HDFC ERGO General Insurance Company Ltd  Authorised	

Annexure 10: Change of Scope



M.P. Road Development Corporation Ltd.

CIN : UMS203MP2004SGC018758

(Govt. of M.P. Undertaking)

45-A, Arera Hills, Bhopal-462011

☎ : 0755-2527290 / 2765205 Fax : 0755-2572643, Web : mprdc.nic.in

Letter No.:/Patan-Tendukheda-Rehli/COS/06/2017, Bhopal Date : 09.2017
To,

Team Leader,
M/s MC Consulting Engineers Pvt. Ltd.,
H No. 85, Poddar Colony,
Shivaji Ward, Sagar [M.P.]

Sub. :- Development of Patan-Tendukheda-Rehli Road (SH-15) on BOT (Toll+Annuity) Basis. *Regarding Minutes of Meeting of Advisory Committee.*

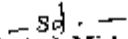
Ref. : M/s MC Consulting Engineers (P) Ltd., letter no. TL/MC/SAGAR/PTR/Gen & CA/186, Date 24.04.2017.

A meeting of Advisory Committee has been held on 22.08.2017 to decide the Change of Scope of Patan-Tendukheda-Rehli (SH-15) road project. Change of Scope items is hereby in-principle approved by the Advisory Committee. Minutes of meeting is enclosed herewith.

Please refer T.O. letter no. 6198, dated 22.07.2015 (Copy enclosed), as per instruction of MD, MPRDC after in-principle approval of Change of Scope, Financial Implication of approved Change of Scope should be checked and certified by a Committee formed at the level of General Manager concerned. The Committee will be headed by General Manager (Field), IE, concern DM & AGM along with one member of MPRDC, FQ of the level of DGM.

You are requested to submit the Financial Implication of in-principle approved Change of Scope items to this office through GM Level Committee.

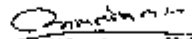
Encl. :- Minutes of Meeting (14 pages).


(Ashutosh Mishra)
Chief Engineer (BOT)
MPRDC, Bhopal

Encl. No.:/Patan-Tendukheda-Rehli/COS/06/2017, Bhopal Date 09.2017
Copy to :-

1. General Manager, MPRDC, Namadapuram [M.P.] for information & necessary action please.
2. Divisional Manager, MPRDC, Sagar [M.P.] for information & necessary action please.
3. Concessionaire, M/s DBL Patan-Rehli Tollway Ltd., Bhopal, for information & necessary action please.

Encl. :- Minutes of Meeting (14 pages).


Chief Engineer (BOT)
MPRDC, Bhopal

Connecting People Through quality infrastructure

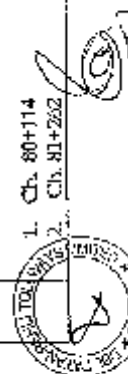
10/11

MINUTES OF MEETING

A meeting of Advisory Committee was held on 22.08.2017 in MPRDC, Bhopal to discuss the Change of Scope proposal of Patan-Tendukheda-Rehli Road Project (Toll+Annuity). Following Officials were present in the meeting.

1. Shri A.S. Chendke, Technical Advisor, MPRDC, Bhopal.
2. Shri Anil Chansoria, E-in-C, MPRDC, Bhopal.
3. Shri Sunil Mukati, General Manager (BOT), MPRDC, Bhopal.
4. Shri R.K. Tiwari, Team Leader, I.E. M/s MC Consulting Engineers Pvt. Ltd., Sagar.
5. Shri Nitin Shrivastava, Authorized Signatory of Concessionaire, M/s DBL Patan Rehli Tollways Ltd., Bhopal.

S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
1	Reduction in formation width from 8.75 mtr. to 7.6 mtr. With reduction from Km 77+600 to Km 99+000 (Nauradehi WLS) = 21.40 Km		Single layering (3.75 mtr.) with 2.5 mtr. granular shoulder formation width 8.75 mtr. (Fig-2.6 as per Schedule - D)	Reduction in formation width from 8.75 mtr. to 7.6 mtr. and carriageway width from 3.75 mtr. to 3.6 mtr. with formation width of 7.6 mtr. from Km 77+600 to Km 99+000 (Nauradehi WLS) = 21.40 Km	Agree with the justification of the Concessionaire that the WTS permitted development in 7.6 mtr formation width only in Nauradehi WLS from Km 77+600 to Km 99+000 in a length of 21.40 Km. The work done with 7.6 mtr formation width and 3.60 mtr carriageway width shall be treated as positive (COS & work with 8.75 mtr formation width and 3.75 mtr carriageway width shall be treated as negative COS.	Agree with the recommendation of the IE that, the work done with 7.6 mtr formation width and 3.60 mtr carriageway width shall be treated as positive COS & work with 8.75 mtr formation width and 3.75 mtr carriageway width shall be treated as negative COS.
2	Construction of retaining walls at following locations on approaches of cattle underpasses due to Right-of-way enhancement.			To protect the high embankment due to restricted ROW of 7.6m in Secondary Area in the approaches of cattle underpasses, Concessionaire has constructed retaining wall.	Concessionaire has constructed retaining walls in following locations due to restricted ROW of 7.6m in Secondary Area:- 1. Ch. 84+134 2. Ch. 85+262 3. Ch. 86+045 Total 796.553m retaining wall	Agree with the recommendation of the IE that, retaining wall in a length of approximate 796.553m is consider under positive Change of Scope and provision of toe wall and pitching on slopes in all the above

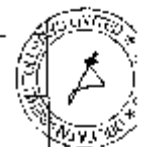


S. No.	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
	3. Ch. 85+045			walls on following locations:- 1. Ch. 80+114 2. Ch. 83+262 3. Ch. 86+045	constructed on approaches of 03 nos. cattle under passes on locations as mentioned above. As per scope of the project, Concession has to construct 83.10m length in Minor Bridges proposed in the scope. Hence, remaining 713.45m additional length of retaining wall may be treated as positive Change of Scope. It is recommended to consider additional length of retaining walls i.e. approximate 713.45m under positive Change of Scope and provision of toe wall and pitching on slope in all the above three locations treated as negative Change of Scope. Also reduction in shoulders width will be treated as negative Change of Scope.	three location treated as negative Change of Scope. Also reduction in shoulders width is consider as negative Change of Scope.
3	Retaining of existing 7 mtr wide PQC in a length of 200m with both side 4 mtr widening with flexible pavement from Ch. chainage 52+600 to 53+200 = 0.7 Km length in Tendukheda town.		Re-construction to four lanes with flexible pavement from Km 52+600 to 53+300 = 0.7 Km in Tendukheda town.	Retaining with 200m BC overlay of existing 7 mtr wide PQC in a length of 200 mtr with both side 4 mtr widening with flexible pavement from Km 52+600 to 53+300 = 0.7 Km in Tendukheda town.	Agree with the justification of the Concessionaire that, the condition of existing rigid pavement (7.0m wide) was satisfactory and to be retained with bituminous overlay by 40mm BC with both side 4.0 mtr widening with flexible pavement. Therefore the reconstruction to four lanes with flexible pavement from Km 52+600 to 53+300 = 0.7 Km in Tendukheda town shall be treated as negative COS and the overlay with 40 mm BC over 7.0 mtr wide retained PQC, both side 4 mtr widening with flexible pavement shall be treated as positive COS.	Agree with the recommendation of the IE that, the reconstruction to four lanes with flexible pavement from Km 52+600 to 53+300 = 0.7 Km in Tendukheda town shall be treated as negative COS and the overlay with 40 mm BC over 7.0 mtr wide retained PQC, both side 4 mtr widening with flexible pavement shall be treated as positive COS.



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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
4	Deletting of 14 nos. Pipe Cutouts as below :-					
1.	Ch. 44/1		New Construction with 1X1200 HP/CD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that as per topography the CD is not required. This shall be treated as negative CDS.	Agree with the recommendation of the IE that, this shall be treated as negative CDS.
2.	Ch. 47/2	HP/CD formation width 10 mtr.	Widening with 1X1000 HP/CD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that the existing CD not found on spot. This shall be treated as negative CDS.	Agree with the recommendation of the IE that, this shall be treated as negative CDS.
3.	Ch. 50/2		New Construction with 1X1000 HP/CD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that, as per topography the CD is not required. This shall be treated as negative CDS.	Agree with the recommendation of the IE that, this shall be treated as negative CDS.
4.	Ch. 51/6a	HP/CD 1X900mm	Reconstruction with 2X1200 mtr. pipe to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that, the existing CD not found on spot. This shall be treated as negative CDS.	Agree with the recommendation of the IE that, this shall be treated as negative CDS.
5.	Ch. 55/10	HP/CD 1X1000mm	Reconstruction with 1X1200 mtr. pipe in 4 lane portion.	Deletion	Agree with the justification of the Concessionaire that, the existing CD has been blocked and buried by the residents and is non-functional and is redundant. This shall be treated as negative CDS.	Agree with the recommendation of the IE that, this shall be treated as negative CDS.
6.	Ch. 62/7		New Construction with 1X1000 HP/CD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that, as per topography the CD is not required. This shall be treated as negative CDS.	Agree with the recommendation of the IE that, this shall be treated as negative CDS.



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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
7.	Ch. 76/9	FFCD 1X1000mm	Reconstruction with 1X1200 mm pipe to 12 mtr formation width	Deletion	Agree with the justification of the Concessionaire that the existing CD not found on spot. This shall be treated as negative COS.	Agree with the recommendation of the IE that, this shall be treated as negative COS.
8.	Ch. 85/3	-	New Construction with 1X1000 LFCDD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that, as per topography the CD is not required. This shall be treated as negative COS.	Agree with the recommendation of the IE that, this shall be treated as negative COS.
9.	Ch. 88/8	FFCD 1X900mm	Reconstruction with 1X1200 mm pipe to 12' mtr formation width	Deletion	Agree with the justification of the Concessionaire that the existing CD not found on spot. This shall be treated as negative COS.	Agree with the recommendation of the IE that, this shall be treated as negative COS.
10.	Ch. 92/6	LFCDD 1X1000mm	Reconstruction with 1X1200 mm pipe to 12' mtr formation width	Retaining of existing LFCDD 1X1300 with 8 mtr formation width in Nauradehi WLS.	Agree with the justification of the Concessionaire that, the condition of the existing FFCD with 1X1000 mm with 8 mtr formation width is satisfactory and can be retained for single lane road in Nauradehi WLS. This shall be treated as negative COS.	Agree with the recommendation of the IE that, this shall be treated as negative COS.
11.	Ch. 113/8	-	New Construction with 1X1200 LFCDD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that, as per topography the CD is not required. This shall be treated as negative COS.	Agree with the recommendation of the IE that, this shall be treated as negative COS.
12.	Ch. 113/4	-	New Construction with 1X1000 FFCD to 12 mtr. formation width.	Deletion	Agree with the justification of the Concessionaire that, as per topography the CD is not required. This shall be treated as negative COS.	Agree with the recommendation of the IE that, this shall be treated as negative COS.

5. New Construction of Pipe cutouts at following localities:-

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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IC	Decision of the Committee
1.	Ch. 32+603	No provision	No Provision	Reconstruction with 1X1200 mm pipe to 12 mtr formation width as a 1X600 mm dia HPCCD actually found at site.	Agree with the justification of the Concessionaire that, a 1X600 mm dia HPCCD actually found at site in dilapidated condition, but is required as per topography. Therefore, reconstruction with 1X1200 mm in 12 mtr formation width is required. This shall be treated as positive CCG.	Agree with the recommendation of the IC that, this shall be treated as positive CCG.
2.	Ch. 55-540	No provision	No Provision	New construction with 1X1200 mm pipe to 24 mtr skew formation width	Agree with the justification of the Concessionaire that, a 1X1200 mm dia HPCCD is essential as per requirement of junction/topography in 24 mtr skew formation width. This shall be treated as positive CCG.	Agree with the recommendation of the IC that, this shall be treated as positive CCG.
3.	Ch. 56+020	No provision	No Provision	New construction with 1X1200 mm pipe to 12 mtr formation width	Agree with the justification of the Concessionaire that, a 1X1200 mm dia HPCCD is essential as per requirement of topography in 12 mtr formation width. This shall be treated as positive CCG.	Agree with the recommendation of the IC that, this shall be treated as positive CCG.
4.	Ch. 58+990	No provision	No Provision	Reconstruction with 1X1200 mm pipe to 12 mtr formation width as a 1X600 mm dia HPCCD actually found at site.	Agree with the justification of the Concessionaire that, as a 1X1200 mm dia HPCCD actually found at site in dilapidated condition, but is required as per topography. Therefore, reconstruction with 1X1200 mm in 12 mtr formation width is required. This shall be treated as positive CCG.	Agree with the recommendation of the IC that, this shall be treated as positive CCG.
5.	Ch. 59+640	No provision	No Provision	Reconstruction with 1X1200 mm pipe to 12 mtr formation width	Agree with the justification of the Concessionaire that, a 1X600 mm dia HPCCD actually found at site in dilapidated condition, but is required as per topography. Therefore, reconstruction with 1X1200 mm in 12 mtr formation width is required. This shall be treated as positive CCG.	Agree with the recommendation of the IC that, this shall be treated as positive CCG.

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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
				12 mtr formation width as a 1X600 mm dia HPCL actually found at site.	dilapidated condition, but is required as per topography. Therefore, reconstruction with 1X1200 mm in 12 mtr formation width is required. This shall be treated as positive COS.	as positive COS.
				Reconstruction with 1X1200 mm pipe to 12 mtr formation width as a 1X600 mm dia HPCL actually found at site.	Agree with the justification of the Concessionaire that, a 1X600 mm dia HPCL actually found at site in dilapidated condition, but is required as per topography. Therefore, reconstruction with 1X1200 mm in 12 mtr formation width is required. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
6.	Ch. 65+450	No provision	No Provision	New construction with 1X1000 mm pipe to 12 mtr formation width	Agree with the justification of the Concessionaire that, a 1X1000 mm dia HPCL is essential as per requirement of topography in 22 mtr formation width. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
7.	Ch. 64+000	No provision	No Provision	Reconstruction with 1X1200 mm pipe to 12 mtr formation width as a 1X600 mm dia HPCL actually found at site.	Agree with the justification of the Concessionaire that, a 1X600 mm dia HPCL actually found at site in dilapidated condition, but is required as per topography. Therefore, reconstruction with 1X1200 mm in 12 mtr formation width is required. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
8.	Ch. 75+490	No provision	No Provision	New construction with 2X1000 mm pipe to 7.5 mtr formation width in Naumadeh WLS	Agree with the justification of the Concessionaire that, a 1X1000 mm dia HPCL is essential as per requirement of topography in 7.6 mtr formation width in Naumadeh WLS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
9.	Ch. 88+250	No provision	No Provision			

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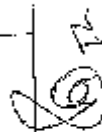
S. No	Particulars of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
					WLS. This shall be treated as positive COS.	
10.	Cn. 88+780	No provision	No Provision	New construction with 1X1000 mm pipe to 7.6 mtr formation width in Nauradahi WLS	Agree with the justification of the Concessionaire that, a 1X1000 mm dia HPCLD is essential as per requirement of topography in 7.6 mtr formation width in Nauradahi WLS. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
11.	Cn. 97+000	No provision	No Provision	New construction with 1X1000 mm pipe to 7.6 mtr formation width in Nauradahi WLS	Agree with the justification of the Concessionaire that, a 1X1000 mm dia HPCLD is essential as per requirement of topography in 7.6 mtr formation width in Nauradahi WLS. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
12.	Ch. 98+260	No provision	No Provision	New construction with 1X2000 mm pipe to 7.6 mtr formation width in Nauradahi WLS	Agree with the justification of the Concessionaire that, a 1X2000 mm dia HPCLD is essential as per requirement of topography in 7.6 mtr formation width in Nauradahi WLS. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.
13.	Ch. 109+330	No provision	No Provision	New construction with 1X1000 mm pipe to 12 mtr formation width	Agree with the justification of the Concessionaire that, a 1X1000 mm dia HPCLD is essential as per requirement of topography in 12 mtr formation width. This shall be treated as positive COS.	Agree with the recommendation of the IE that, this shall be treated as positive COS.




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5. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IB	Decision of the Committee
6	Reduction in formation width from 12 mtr. to 7.6 mtr. in HPCD (1x1000) of Nauradehi Sanctuary area.					
1.	78+500		New construction of Pipe Culvert (1x1000) with 12m formation width.	Reduction in formation width from 12 mtr. to 7.6 mtr. in HPCD (1x1000) in Nauradehi Sanctuary area.	Agree with the reason that Construction of HPC (1x1000mm) with 7.60m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IB that, this shall be treated as negative COG.
2.	55+000		New construction of Pipe Culvert (1x1000) with 12m formation width.	Reduction in formation width from 12 mtr. to 7.6 mtr. in HPCD (1x1000) in Nauradehi Sanctuary area.	Agree with the reason that Construction of HPC (1x1000mm) with 7.60m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IB that, this shall be treated as negative COG.
3.	86+020		New construction of Pipe Culvert (1x1000) with 12m formation width.	Reduction in formation width from 12 mtr. to 7.6 mtr. in HPCD (1x1000) in Nauradehi Sanctuary area.	Agree with the reason that Construction of HPC (1x1000mm) with 7.60m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IB that, this shall be treated as negative COG.
4.	88+638		New construction of Pipe Culvert (1x1000) with 12m formation width.	Reduction in formation width from 12 mtr. to 7.6 mtr. in HPCD (1x1000) in Nauradehi Sanctuary area.	Agree with the reason that Construction of HPC (1x1000mm) with 7.60m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IB that, this shall be treated as negative COG.




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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IT	Decision of the Committee
5.	90+120		New construction of Pipe Culvert (2X1000) with 12m formation width.	Reduction in width from 12 mtr. to 7.6 mtr in IPCCD in Nauradehi Sanctuary area.	Agree with the reason that Construction of IPCC (1x1000mm) with 7.6m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IT that, this shall be treated as negative COS.
6.	91+00		New construction of Pipe Culvert (2X1000) with 12m formation width.	Reduction in width from 12 mtr. to 7.6 mtr in IPCCD in Nauradehi Sanctuary area.	Agree with the reason that Construction of IPCC (1x1000mm) with 7.6m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IT that, this shall be treated as negative COS.
7	92+200		New construction of Pipe Culvert (2X1000) with 12m formation width.	Reduction in width from 12 mtr. to 7.6 mtr in IPCCD in Nauradehi Sanctuary area.	Agree with the reason that Construction of IPCC (1x1000mm) with 7.6m formation width in Nauradehi Sanctuary due to restricted ROW. Hence, reduction in formation width from 12.0m to 7.6m is recommended as negative variation under change of scope.	Agree with the recommendation of the IT that, this shall be treated as negative COS.
7	Reduction in formation width from 12 mtr. to 7.6 mtr in IPCCD in Nauradehi Sanctuary area.				(2X1000mm IPCC)	
2.	79+500		New construction of Pipe Culvert (2X1000) with 12m formation width.	New construction of Pipe Culvert (2X1000) with reduced formation width of 7.5 mtrs.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi W.S.S. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IT that, this shall be treated as negative COS.



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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
2	82+950		New construction of Pipe Culvert (2X1200) with 12m formation width.	New construction of Pipe Culvert (2X1000) with reduced formation width of 7.6 mtrs.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
3	92+068		New construction of Pipe Culvert (2X1000) with 12m formation width.	New construction of Pipe Culvert (2X1000) with reduced formation width of 7.6 mtrs.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
5	Reduction in formation width from 12 mtr. to 7.6 mtr. in HPCL in Nauradehi Secondary area.					
1	77+722	Existing Pipe Culvert of 2X1000 at Km 78/9.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to negative variation under change of scope.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
2	79+410	Existing Pipe Culvert of 1X900 at Km 78/9.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to negative variation under change of scope.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
3	80+165	Existing Pipe Culvert of 1X900 at Km 81/2.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to negative variation under change of scope.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.



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S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
1.	86+102	Existing Pipe Culvert of 1X900 at Km 86/8.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to restriction.	12.0m to 7.6m shall be treated as negative variation under change of scope. Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
5.	93+892	Existing Pipe Culvert of 1X900 at Km 93/8.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to restriction.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
6.	93+882	Existing Pipe Culvert of 1X900 at Km 93/2.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to restriction.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
7.	94+180	Existing Pipe Culvert of 1X900 at Km 94/10.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to restriction.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.
8.	94+142	Existing Pipe Culvert of 1X900 at Km 94/4.	Reconstruction of Pipe Culvert (1X1200) with 12m formation width.	Reconstruction of Pipe Culvert (1X1200) with 7.6m formation width instead of 12m due to restriction.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative COG.



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S. No.	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule-B	As proposed by the Competent authority	Reason/Recommendation of the IF	Decision of the Committee
9	Roadway in formation width from 12 mtr. to 7.6 mtr. in HPCD in Nauradehi Sanctuary area. 1. 31-565	New construction of Pipe Culvert (2X1200) with 7.6m formation width.	New construction of Pipe Culvert (2X1200) with 7.6m formation width.	restriction	negative variation under change of scope.	Agree with the recommendation of the IF that this shall be treated as negative COG.
					Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IF that this shall be treated as negative COG.
					Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IF that this shall be treated as negative COG.
10	Construction of Cattle U-dipass (C.T.R) of 7.6 mtr. formation width at Ch. 80+114 in Nauradehi Sanctuary area in place of Minor Bridge (1x6.00m).	Existing TCW at Km 96/III	New construction of Minor Bridge (1X8.00 mtr.) height 3.0 mtrs at Ch. 80+114 with 12.0m formation width.	Restructuring of Culvert type (2X1200) with formation width 7.6 mtrs.	Agree with the justification that the formation width is restricted to 7.6 mtr. and increase in height from 3.0 mtr. to 4.0 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IF that, reduction in formation width from 12.0m to 7.6m shall be treated as negative COG.
11	Construction of Cattle Underpass (C.T.R) of 7.6 mtr. formation width at Ch. 80+114 in Nauradehi Sanctuary area in place of Minor Bridge (1x6.00m).	Existing TCW at Km 96/III	New construction of Minor Bridge (1X8.00 mtr.) height 3.0 mtrs at Ch. 80+114 with 12.0m formation width.	Restructuring of Culvert type (2X1200) with formation width 7.6 mtrs.	Agree with the justification that the formation width is restricted to 7.6 mtr. and increase in height from 3.0 mtr. to 4.0 mtr. in Nauradehi WLS Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IF that, reduction in formation width from 12.0m to 7.6m shall be treated as negative COG.

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Date: _____

S. No	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IP	Decision of the Committee
	formation width at Ch. 81+265 in Nauradehi Sanctuary area in place of Minor Bridge (2x10.0m)		height 2.0 mtr at Ch. 81+180 with formation width of 12 mtrs.	width at Ch. 81+180 within WLS.	2.0 mtr. to 4.0 mtr. in Nauradehi WLS (fence), reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under COG with increase in height from 2.0 mtr to 4.0 mtr shall be treated as positive COG.	formation width from 12.0m to 7.6m shall be treated as negative variation under COG with increase in height from 2.0 mtr to 4.0 mtr shall be treated as positive COG.
12	Construction of Cattle (CUP) of (1x10m) with 7.6 mtr. formation width at Ch. 84+100 in Nauradehi Sanctuary area in place of Slab culvert (1x10m).	H/C at (2x1000) km 88/710	Reconstruction of Slab Culvert (1x4.0 mtr.) height 2 mtr at Ch. 84+950 with formation width of 12 mtrs.	Construction of CUP (1x10m) with 7.6m formation width at Ch. 85-950 within Nauradehi WLS.	Agree with the justification that the formation width is restricted to 7.6 mtr. and increase in height from 2.0 mtr. to 4.0 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under COG with increase in height from 2.0 mtr to 4.0 mtr shall be treated as positive COG.	Agree with the recommendation of the IP that reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under COG with increase in height from 2.0 mtr to 4.0 mtr shall be treated as positive COG.
18	Construction of Cattle (CUP) of (1x8m) with 7.6 mtr. formation width at Ch. 94+107 in Nauradehi Sanctuary area in place of Minor Bridge (1x8.0m).	ICW at Km 87/8	Re-construction of Minor Bridge (1x8.0 mtr.) height 3.6 mtr with formation width of 12 mtrs.	Construction of Cattle Underpass (CUP) of (1x8m) with 7.6 mtr. formation width in Nauradehi Sanctuary area.	Agree with the justification that the formation width is restricted to 7.6 mtr. and increase in height from 3.6 mtr. to 4.0 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under COG with increase in height from 3.6 mtr to 4.0 mtr shall be treated as positive COG.	Agree with the recommendation of the IP that reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under COG with increase in height from 3.6 mtr to 4.0 mtr shall be treated as positive COG.



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S. No.	Particular of Item	Provisions as per Schedule - A	Provisions as per Schedule - B	As proposed by the Concessionaire	Reason/Recommendation of the IE	Decision of the Committee
14	Reduction in formation width from 12m to 7.6m in box culvert (1X2.0m) at Ch. 80+370 in Nauradehi Sanctuary area.	Slab Culvert (1X1) at Km 87/3	Re-construction of Culvert (1X4.0) at Ch. 80+300 with formation width of 12 mtrs.	Reduction in formation width from 12 mtr. to 7.6 mtr in Box Culvert (1X4) at Ch. 80+370 in Nauradehi Sanctuary area.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative C.O.S.
15	Reduction in formation width from 12m to 7.6m in box culvert (1X3.5m) at Ch. 80+070 in Nauradehi Sanctuary area.	Slab Culvert (1X1) at Km 89/10	Re-construction of slab Culvert (1X3.5) at Ch. 82+900 with formation width of 12 mtrs.	Reduction in formation width from 12 mtr. to 7.6 mtr in Box Culvert (1X3.5) at Ch. 80+070 in Nauradehi Sanctuary area.	Agree with the justification that the formation width is restricted to 7.6 mtr. in Nauradehi WLS. Hence, reduction in formation width from 12.0m to 7.6m shall be treated as negative variation under change of scope.	Agree with the recommendation of the IE that, this shall be treated as negative C.O.S.
16	Widening of MNB at ch. 108+400	MNB 2X8m RCC Slab 8.4 mtr. Wide) at Km 108/70	Retained 108+020, Width-8.20m	Widening of MNB 2X8 mtr. RCC slab at ch. 108+100 from 8.4 mtr to 12 mtr. width	Agree with the justification that the formation width of the road is 12 mtr. therefore, it was essential to increase the width of the existing 2X8 mtr RCC slab bridge to 12 mtr to match with the formation width of road. Therefore, widening of MNB 2X8 mtr RCC slab from 8.4m to 12m shall be treated as positive change of scope.	Agree with the recommendation of the IE that, this shall be treated as positive C.O.S.



Authorized Signatory
M/S DCL Patan Rehli
Toll Ways Ltd.

Independent Engineer

Chief Engineer (BOT)
MPRDC, Bhopal

Chief Engineer (BOT),
MPRDC, Bhopal

Technical Advisor
MPRDC, Bhopal

Engineer-in-Chief
MPRDC, Bhopal

Print

Page 1 of 1

Subject: Patan Tendukheda Rehli Project: MPRDC letter no. 9696 Minutes of meeting of Advisory Committee

From: DILIP BUILDCON LTD (db@dilipbuildcon.co.in)

To: arunk@dbl.co.in;

Cc: manishmehta@dbl.co.in; maintenance@dbl.co.in; nitesh@dilipbuildcon.co.in;

Date: Saturday, 9 September 2017 2:44 PM

Dear Sir,

Please find attached herewith MPRDC letter no. 9696 Minutes of meeting of Advisory Committee. This is for your information and necessary action please.

With Regards,

Dilip Buildcon Limited,
CIN: L45201MP2006PLC018689,
Regd. Office: Plot No. 5,
Inside Govind Narayan Singh Gate,
Chuna Bhatti, Kolar Road,
Bhopal - 462 016 (M.P.),
Ph.:0755-4029999,
Fax: 0755-4029998,
Corporate Email: db@dilipbuildcon.co.in
Website: www.dilipbuildcon.co.in

Attachments

- 9696 Minutes of meeting of Advisory Committee.pdf (739.24 KB)

<https://mg.mail.yahoo.com/neo/launch?.rand=43p30rdd0916t>

09-Sep-17

Annexure 11: Project Photos



