

Resolution Plan of Suratgarh Bikaner Toll Road Company Pvt Ltd.

July 2021

This Resolution Plan contains proprietary and confidential information regarding Suratgarh Bikaner Toll Road Company Pvt. Ltd. (SBTRCPL). This Resolution Plan has been prepared by the management project finance team of SBTRCPL. There are financial projections presented in this Resolution Plan, which have been prepared for the limited purpose of circulation amongst the Banks/Fls/Institutions who have shown their interest in financing the project or have already financed the project. The financial projections represent to the best of knowledge and judgment of the management of SBTRCPL based on its expected financial position, results of operations and cash flow situation for the projection period. Financial projections require the exercise of judgment and are subject to uncertainties concerning the effect that changes in legislation or economic or other circumstances may have on future events and different people may have a different view in future. There will usually be differences between projected and actual results because events and circumstances do not occur as expected. These projections are subject to changes in economic conditions, legislation and other force-majeure circumstances.

This Resolution Plan is divided into chapters & sub-sections only for the purpose of reading convenience. Any partial reading of this Resolution Plan may lead to inferences, which may be at divergence with the conclusions and opinions based on the entirety of this Resolution Plan. The information set forth in this document is intended solely for the use of potential lenders & existing lenders to SBTRCPL to whom it has been delivered and recipients may undertake such investigations as they deem fit before making any commitment.

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Table of Contents

1.	Company Overview and Restructuring Plan	5
1.1	Company Background	5
1.2	Project Background	
1.3	Reasons for Delay	
1.4	Grounds for Resolution of Account	7
1.5	Traffic Analysis	8
1.6	Extension of Concession Period	8
1.7	Reasons for extension of the project Completion	10
1.8	Actual Toll Collection	
1.9	USP of the Resolution Plan	12
1.10	Present proposal and indicative terms	13
2.	Project Company	
2.1	Company/Project Information	
2.2	Management and Board of Directors	
3	Concession Agreement	22
3.1	Grant of Concession	
3.2	Obligations	27
3.3	Project Development and Operations	
3.4	Financing Arrangements	29
3.5	Variation in Traffic Growth	32
3.6	Force Majeure	
3.7	Events of Default & Termination Provisions	34
3.8	Other Agreements	
4	Project Corridor & Scope	
4.1	Location of the Project Corridor	36
4.2	Villages and Urban Settlements	
4.3	Salient Features	
4.4	Tourism and Pilgrimage Sites	
4.5 4.6	Project Facilities	
5	Project Execution	
5.1	Contractual Structure for Project Implementation	61
5.2	Project Consultants	61
5.3	EPC Contract	
5.4	Independent Engineer	
5.5	Permits & Approvals	
5.6	Project Insurance	
5.7	Current Status	63
6	Projected Financial Indications	
6.1	Assumptions	64
6.2	Kev Financial Indicators	69
6.3	Projected Profit & Loss Statement	70
6.4	Projected Balance Sheet	
6.5	Projected Cash Flow Statement	72
6.6	Debt Service Coverage Ratio (DSCR)	/3
6.7	Cash Debt Service Coverage Ratio (Cash DSCR)	
7	Summary & Conclusion	
Q	Current Site Photos	78

Abbreviations

1 D.T.					
ADT	Average Daily Traffic				
BOQ	Bill of Quantity				
вот	Build Operate Transfer				
CA	Concession Agreement				
CAGR	Compounded Annual Growth Rate				
COD	Commercial Operations Date				
DBFOT	Design, Build, Finance, Operate and Transfer				
DC	Design Consultant				
DCCO	Date of Commencement of Commercial Operations				
DFC	Dedicated Freight Corridor				
DSCR	Debt Service Coverage Ratio				
DSRA	Debt Service Reserve Account				
EPC	Engineering, Procurement and Construction				
FC	Financial Closure				
FM	Force Majeure				
GDP	Gröss Domestic Product				
GOR	Government of Rajasthan				
IE	Independent Engineer				
IRR	Internal Rate of Return				
Km	Kilometer				
LCV	Light Commercial Vehicle				
LD	Liquidated Damages				
LoA	Letter of Award				
MAV	Multi-Axle Vehicle				
MBL	MBL Infrastructures Limited				
MoEF	Ministry of Environment & Forest				

MoRTH	Ministry of Road Transport & Highways
MOU	Memorandum of Understanding
MPRDC	Madhya Pradesh Road Development Corporation Limited
NCD	Non-convertible Debentures
O&M	Operations and Maintenance
OD	Origin-Destination
PAT	Profit after tax
PBDIT	Profit before depreciation interest tax
PBT	Profit before tax
PAT	Profit after tax
PCU	Passenger Car Unit
PMC	Project Management Consultant
PNB	Punjab National Bank
PWD	Public Works Department
ROB	Railway Over Bridge
RP	Resolution Plan
SBTRCPL	Suratgarh Bikaner Toll Road Company Private Limited
SPV	Special Purpose Vehicle
SSA	State Support Agreement
TMC	Turning Movement Count
TP	Toll Plaza
TRA	Trust and Retention Account
TVC	Traffic Volume Count
WPI	Wholesale Price Index

1. Company Overview and Restructuring Plan

1.1 Company Background

The Governor of the State of Rajasthan acting through the Chief Engineer (NH), Public Works Department, Government of Rajasthan, and (the Authority") engaged in the development of National Highways as an executive agency for and on behalf of Ministry of Road Transport & Highways, Govt. of India invited proposals for Development of Bikaner-Suratgarh Section of NH-15. The length of the project corridor is around 172.38 Km including Bikaner Bypass in the State of Rajasthan which is to be executed through Public Private Partnership on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

The Concession was awarded to the Consortium led by MBL Infrastructures Ltd based on quoted premium of Rs. 2.51 Crores in the first year of COD and an increase of 5% thereafter per year. PWD Rajasthan issued its Letter of Acceptance (LoA) on 9th January 2012. The project is implemented through a Special Purpose Vehicle (SPV) namely **Suratgarh Bikaner Toll Road Company Private Limited ("SBTRCPL")** and Concession Agreement (CA) was signed between Rajasthan PWD and SBTRCPL on 9th May, 2012.

1.2 Project Background

SBTRCPL shall develop the project on DBFOT basis. The original concession period is for 16 years including construction period of 2 Years. However, there have been some delays on part of the authority because of which the same will be extended. The Project Road starts at Km. 553.869 of NH-11 and ends at Km. 173.000 of NH-15 (via Km. 10.630 of NH-15). The proposed length of the project road is around 172.384 km including 9.845 km of Bikaner Bypass. The work involves improvement of project corridor by strengthening and widening the road to two lanes with paved shoulders along with 4 laning at section of 2 Km. from Chainage Km. 70.014 to Km. 72.015 at Loonkaransar Town and another 2.336 Km from Km. 170.048 to Km. 172.384 at Suratgarh. Upon completion of the Concession Period, SBTRCPL would hand over the Project Highway to the Chief Engineer (NH) PWD, Rajasthan. The State Support Agreement (SSA) was signed by the State Government of Rajasthan and MoRTH on 13th April, 2010 for providing the support and services specified therein and forms an integral part of the Concession Agreement and a certified true copy of the State Support Agreement has been provided by Rajasthan PWD to the Concessionaire. It is envisaged that the State Government will provide full support to the Concessionaire for implementing the project and thereafter for operating and maintaining it throughout the Concession Period.

Some of the key provisions of the Concession Agreement are as under: -

- Concession period of 16 years including construction period of 2 years;
- Collection of tolls from Commercial Operation Date
- Existing and additional Right of Way shall be made available to SBTRCPL by PWD, Rajasthan free from all encumbrances and free of cost;
- Provision for State Support Agreement, Substitution Agreement and Escrow Agreement;
- Termination payments under Event of Default and Force Majeure events;

The total length of the project corridor is 172.384 kms including 9.845 Km long Bikaner Bypass. The project Highway passes through two districts namely Bikaner and Sriganganagar. Bikaner has two Tehsils namely Bikaner & Loonkarasar whereas Sriganganagar has one tehsil viz. Suratgarh falling on the existing alignment. These tehsils have been directly benefitted by implementation of Project

Road. The terrain is mainly plain. In rural areas there are private agriculture fields on both sides of the road. Due to IGNP canal network irrigation facilities are available along the road.

The existing pavement was of 2 lane configuration having 7.0 m wide carriageway with 1.5-2.5-metre-wide gravel shoulder on both sides throughout the project length except having 7.00+7.00 mtr. wide 4-Lane carriageway with 2.00+2.00 mtr. wide (c.c) shoulders from Km. 70/700 to Km. 71/800 in urban portion of Loonkaransar. The pavement thickness varied in the range of 325-540 mm and consists of:

• Sub base : 100 mm to 250 mm

Base : 105 mm to 240 mm base of WB

Bituminous course : 120 mm to 225 mm bituminous layers

The condition of existing pavement was generally good. However, at some places the pavement was showing sign of distress due to inadequate pavement thickness, heavy axle loads and inadequate maintenance. The general defects noticed were Cracking, Raveling, Potholes, Edge breaking and depressed shoulders. The shoulders in majority of length were of gravel with fair to poor condition. The side drainage was generally good. The road surface was blacktopped with SDBC. In some portion BM was also laid under SDBC. The side soil is generally silty/sandy. The embankment height of the Project Highway varied from at ground level to about 6m, near the approaches for the bridges.

There were 92 Existing structures in the project corridor – 2 Nos. Major Bridges, 6 Nos. Minor Bridges and 84 Culverts (of which 23 are slab culverts and 61 are pipe culverts). The existing two-lane highway was saturated in terms of design carrying capacity. There is no comparable alternative road. There was no ROB/RUB existing in the project corridor. However, one railway level crossing exists on the project road at Km 45/957 near Bamanwali village on Bikaner Bhatinda Railway section where ROB is proposed.

Due to change of scope, certain items have been added like a new bridge on IGNP Canal, a Vehicular underpass at Suratgarh, Change in toll equipment specifications, Dismantling & rebuilding of shops & buildings at Lunkaransar town portion.

1.3 Reasons for Delay

The project was delayed for reasons beyond the control of the concessionaire. Some of the reasons are as follows:

- 1. Delay in Environment Clearance
- 2. Delay in approval of GAD & Detailed Drawings of ROB at Km 45+981
- 3. Delay in acquisition of land for Toll Plazas and the Rest Area
- 4. Delay in approval for case of shifting of the site of the Major Bridge on Ghagghar river at km 163+101 from RHS to LHS due to non-availability of ROW on RHS;
- 5. Delay in approval for the case of re-construction of the Major Bridge over Indira Gandhi Main Canal at Km 157+631 instead of repairing/strengthening of the Existing Bridge catered for in the Concession Agreement & subsequently delay in approval of GAD of the same
- 6. Delay in approval for construction of VUP @ km 172+100
- 7. Delay in approval for the case of repair and strengthening of Minor Bridge at Km 107+050 instead of re-construction as catered for in the Concession Agreement
- 8. Delay in approval for cutting down of trees
- 9. Encroachments/Hindrances etc. within the ROW in Loonkaransar Town portion on the service road areas.
- 10. Forest clearance was obtained on 12.05.2017 and conveyed to the Concessionaire on 15.05.2017.
- 11. Unavailability of additional funding of Rs. 50 crores by way of Priority Term Loan II

1.4 Grounds for Resolution of Account

- The account turned NPA due to Delay in Date of Commencement of Commercial Operations (DCCO) due to reasons beyond the control of the concessionaire which have already been mentioned.
- 2. Due to delay in Date of Commencement of Commercial Operations, the cost of project has increased substantially due to an increase in Interest during Construction, other Preliminary expenses like Independent Engineer fees & company overheads and increase in Construction Cost. The same has to be funded.
- 3. The Concessionaire continued to service interest despite the delay in the project and non-funding of additional Interest During Construction (IDC) & an increase in other expenses and that led to a shortage of fund for completion of the project and later the account turned NPA.
- 4. The Parent Company, MBL Infrastructures Ltd. could not invest the funds for completion of the project as it was brought under the purview of IBC, 2016.
- 5. Account is a stressed asset as it is NPA with all lenders.
- 6. PCOD was achieved on 15th February 2019 and the tolling commenced from 17th Feb, 2019. The authority had granted PCOD on the condition that the Rs 50 crores will be disbursed from the lenders.
- 7. Currently the project is likely to be terminated if the balance work on the date of PCOD is not completed soon. Termination of the project will lead to a complete loss for the banks as well as the Parent company of the Concessionaire and will leave the Concessionaire & banks with no alternative apart from litigation with the authority which is a long-drawn process.
- 8. The authority has fulfilled its Conditions Precedent and now if the Concessionaire doesn't complete the project, it will be at fault. The case of Concessionaire is becoming weaker with each passing day in front of the authority.
- 9. Further, the IE vide his letter dated 15th April 2021 has determined the extension of time upto 31st December, 2021 for the completion of the project. The consortium lenders have not yet provided the NOC to the lead bank for sanction of the Priority Loan II of Rs. 50 crores. Consequently, the company has been executing works for completion of the project out of its own cash flows from the toll collections. Due to imposition of the lockdown restrictions owing to the first and second wave of Covid-19 in the country and various other reasons, the work slowed down. During this period balance Change of Scope works shall also be completed.
- 10. Due to delay in completion of the project, users of the project road i.e. Public at large, Army, Business Users like transporters etc. are suffering. It is in national interest to complete the project as soon as possible.
- 11. After the completion, the risk profile of the project is significantly reduced since the construction risk is mitigated & the cash flows are expected to increase as the toll fee will increase by 3.46% immediately upon completion of the balance construction work apart from yearly increase in fee & traffic growth expected every year. Also, since the road will be complete, new traffic will divert to this route. Also, the support from local administration like Police etc. would improve as the public pressure due to non-completion would be reduced. The concessionaire is likely to further reduce the exemptions and increase collections as a result of the same. Already the Provisional COD has been achieved leading to start of toll collections. This milestone leads to a significant rate cut in most of the BOT projects. Since banks have taken the risk from the start of the project and the project is almost complete, they must enjoy the benefit of the business from the company after the commencement of operations.

1.5 Traffic Analysis

The tolling for the project has commenced from 17th February 2019. Based on the traffic data for the financial year 2019-20, the average traffic is as follows:

Vehicle Type	Km 25	Km 85	Km 145
Car	1786	1247	1213
Minibus/LCV	645	417	357
LCV Tractor	83	114	109
Bus	176	161	158
Truck (2 axle)	301	286	279
Truck (3 axle)	428	395	396
MAV	2001	1855	1746
Oversized vehicles	1	1	2

There are no probable alternative routes assessed on the project road.

National Highway - 15 (now NH-62) is one of the most important prime arterial of Rajasthan state, traversing through important towns which will be directly benefitted by implementation of Project Road.

Huge investments and manufacturing capacities are being created in the region and it is likely to lead to a tremendous increase in demand for Goods and services in the region resulting in rapid increase in traffic.

1.6 Extension of Concession Period

- There are provisions in the Concession Agreement which cover the traffic risk for the project. If the actual traffic on the target date is lesser than the target traffic then the concession period is suitably extended.
- As per Article 29.2.1 of the concession agreement "If the Actual Average Traffic falls short of the Target Traffic, then for every 1% shortfall, the concession period shall, subject to concession fee in accordance with the agreement, be increased by 1.5% subject to a maximum of 20% of the concession period".
- As per article 29 of the Concession Agreement:
 - o Target Date: April 01, 2021 (Target Date)
 - o Target Traffic: 18337 PCUs per day
- Actual Average Traffic is the average of the actual traffic determined by traffic sampling for the following specified dates:
 - o 01 April, 2020
 - o 01 April, 2021
 - o 01 April, 2022
- Traffic sampling is to be conducted for a continuous period of 7 days not exceeding 15 days prior to the above mentioned three dates.
- Increase in Concession Period:

Particulars	Units	Apr-20	Apr-21	Apr-22	3 years	2 years
		Actual	Actual	Projected	(2020-2022)	(2021-2022)
Actual Traffic (PCUs per day)	Nos.	10845	14002,	14702		
Average Actual Traffic	Nos.				13183	14352
Target Traffic (PCUs per day)	Nos.				18337	18337
Difference (%) (A)	%				28.11%	21.73%
Increase in CP (B)	%				20.00%	20.00%
Concession-Period (C)	Years			*	16 Years	16 Years
Increase in CP (B*C)	Years				3.20 Years	3.20 Years

- Due to delays on part of the authority as well as Change in Law, the Concessionaire will also raise claims against the authority (after completion to minimize the risk of negative reactions from the authority) which may give a one time the cash flow boost to the project and lead to a further increase in Concession Period.
- The Concession period shall be increased by 3.20 years viz. from September 2029 to November 2032 due to low traffic than the target traffic

1.7 Reasons for extension of the project Completion

IE has recommended the extension of the time for completion of the project till 31.12.2021 vide letter dated 15.04.2021 due to following reasons:

- (a) Delay in obtaining permission for tree cutting
- (b) Hindrance in Construction of VUP @km 172+103 along with approaches
- (c) Hindrance in execution of Service Road in Suratgarh Town
- (d) Hindrance in execution of balance works in Ghaghar Bridge and its approaches due to shifting of 132 KV transmission line and pending land dispute
- (e) Hindrance/delay for change of scope works of IGNP canal bridge at Km157+838
- (f) Delay due to Covid-19 pandemic
- (g) Protest against farm laws

1.8 Actual Toll Collection

S No	Month	In Rs.	S No	Month	in Rs.
1	Feb-19	19,956,675	15	Apr-20	11,508,315
2	Mar-19	51,318,226	16	May-20	54,215,439
3	Apr-19	54,052,086	17	Jun-20	61,831,599
4	May-19	52,531,627	18	Jul-20	52,873,896
5	Jun-19	50,265,074	19	Aug-20	55,939,054
6	Jul-19	42,016,170	20	Sep-20	61,262,588
7	Aug-19	40,201,278	21	Oct-20	69,299,422
8	Sep-19	45,678,140	22	Nov-20	64,388,859
9	Oct-19	50,446,063	23	Dec-20	69,725,202
10	Nov-19	51,123,920	24	Jan-21	16,632,006
11	Dec-19	54,432,861	25	Feb-21	62,369,381
12	Jan-20	54,766,690	26	Mar-21	74,483,865
13	Feb-20	59,542,885	27	Apr-21	76,362,889
14	Mar-20	46,346,355	28	May-21	63,801,565

- 1. Toll collection was suspended from 26th March, 2020 to 19th April, 2020 leading to zero collection during this period. Lockdown was implemented in the state of Rajasthan from 22nd March, 2020 leading to significantly lower toll collection upto 26th March, 2020. A nation-wide lockdown was implemented from 25th March 2020 up to 3rd May, 2020.
- 2. There was extraordinary reduction in toll collection in January 2021 due to non-operation of toll Plazas of the Project Highway on account of protests against the farm laws ('Kisan Andolan'). It has impacted the toll collections for the average period of 29 days on all the 3 toll plazas.
- 3. The second wave of covid has impacted the revenues of the Concessionaire. The state government of Rajasthan has issued circulars from time to time imposing several restrictions including lockdown/restriction/curfew since April. Apart from Rajasthan, several other states in India have imposed lockdowns. The traffic started falling down since the mid of April and is down by about 30% in the month of May as the lockdown became very strict. This is

expected to continue till the mid of June month. However, it is bit uncertain as to when things will be normalised.

A third wave of Covid is also expected in the next few months which may lead to further lockdowns & restrictions leading to a fall in revenue in the peak months of toll collection (November to June are peak months of toll collection). Therefore, it is expected that toll collection for FY 21-22 will be lower than expected.

1.9 USP of the Resolution Plan

- The Project Sponsor is experienced and has demonstrated a good track record in development of infrastructure projects. The Concessionaire is supported by a team of qualified professionals.
- The physical progress of the project is 96.54%; thereby removing uncertainties & construction risk.
- The project has achieved its PCOD and toll operations have commenced from February, 2019
- Once the project is fully completed, the risk of the banks is reduced significantly due to the possibility of termination payments from the authority.
- No additional funding is requested; project to be completed out of cash flows from toll collections.
- Lenders to take 10% of each EPC payment to MBL by way of cutback. Till March 2021, total cutback of Rs. 1.78 Crs has already been taken by the lenders.
- Total promoter's contribution shall be Rs 50 crores. Of this, Rs 25 crores shall be contributed prior to implementation of the plan (this amount shall be utilized towards funding change of scope/cutback/creating cash balance for operations and maintenance). The balance amount of Rs 25 crores shall be contributed in the first quarter of Implementation.
- Change of scope works shall be funded by the promoters through a separate account. This
 amount shall be reimbursed by MoRTH to the promoters. The outstanding credit balance of the
 promoter (against change of scope funding) in the books of the company at the time of
 implementation shall form part of promoter contribution of Rs. 25 Crs to be infused before
 implementation.
- 10% of the restructured debt to be repaid within 15 months from the 1st repayment thereby upgrading the account by 31st March 2023.
- DSRA shall be maintained at a level equivalent to 3 months of principal and interest servicing in the particular year starting March 2022.
- Good traffic volumes with continued economic growth is expected in the region.
- Absence of alternative routes which can provide a comparable level of riding quality and service to users.
- Risk Mitigating Contractual Arrangements like the State Support Agreement, Substitution Agreement, Escrow Agreement; Land acquisition risk to be borne by Authority; termination payments by Authority under various events of defaults, etc. provide effective mitigation of risks inherent in the project.

1.10 Present proposal and indicative terms

The company had got sanction of Rs 450 crores from the consortium of bankers led by Punjab National Bank for the said project to meet a cost of Rs. 620.07 crores with the proposed COD as 4^{th} November 2014 and a door-to-door tenure of 12.75 years (including a construction period & moratorium period of 3 years).

However, due to delay in fulfilment of conditions precedent by the client i.e. PWD, Rajasthan, there was a shifting of the appointed date to 16th September, 2013 and due to further delays in handing over of land & other permissions, the Independent Engineer had determined the deferment of Project Milestone III to 11th December, 2016 & extended the scheduled COD to 31st March, 2017 vide its letter dated 18th October, 2016. The Independent Engineer has further determined extension of time upto 30th June 2021 vide his letter dated 13th August, 2020, considering the delay in getting finance to fund the completion and several other delays beyond the control of the Concessionaire. The Concessionaire has already applied for extension of time for COD and shall get the necessary extension upto 31st December, 2021.

Since the entire finance of Rs 620.07 crores as originally stipulated (Equity of Rs 170.07 crores & Debt of Rs 450 crores) was already spent and the project was stuck up since October, 2016, Punjab National Bank, the lead bank of the consortium gave a priority loan of Rs 25 crores in the end of June, 2018. Independent Engineer had originally recommended the Provisional COD vide letter dated 23rd November, 2018. But due to the concerns of the authority regarding Concessionaire's ability to complete the project without further funding, the authority delayed granting of Provisional COD citing one reason after the other. Finally, the PCOD was granted on 15th February, 2019 after an undertaking by the Lead Bank that it will sanction a priority loan of Rs 50 crores based on the assessment of the balance work at Rs 69.95 crores under the original scope and Rs 25.99 crores under change of scope by the authority.

In the meeting of consortium of lenders held on 5th March 2019, it was informed to the lenders that for completing the balance work of the project, additional amount of Rs 69.95 crores is required, which will be met from Priority loan of Rs 50 crores and internal accruals (from collection of toll) of Rs 19.95 crores. In order to complete the project and collect full toll, it was requested to the consortium to sanction Priority Loan—II for Rs 50 crores. It was informed to the consortium banks that the company is regularly paying interest & instalments of Priority Loan—I of Rs 25 crores sanctioned by PNB which has been used for achieving Provisional COD.

It was also conveyed to consortium of lenders that timely achievement of Completion of the project is of utmost importance and in the interest of all stakeholders including the consortium lenders, otherwise the Provisional COD is liable for cancellation and concession agreement is liable for termination and entire investment of all stake holders including the lenders is unsecured and liable for loss. It was also mentioned in the consortium meeting that while giving provisional COD, one of the conditions of the Authority was that the Lenders will provide assurance for sanction of additional fund of Rs 50 crores for achieving Completion.

A meeting was held at headquarters of Ministry of Road Transport & Highways on 31.07.2019 where senior officials of all consortium banks, authority representatives, Independent Engineer etc. were present and ADG, MoRTH had requested for early release of Rs 50 crores priority loan in the interest of the project, public as well as National Interest. He also communicated the minutes vide Office Memorandum dated 16.08.2019. In fact, he again wrote a letter dated 11.10.2019 along with minutes of the said meeting requesting the lead bank to sanction Rs 50 crores priority loan with a copy to all the other consortium banks.

However, the said priority loan of Rs. 50 crores was not sanctioned and the Concessionaire is continuing the construction of the balance works of the project from the available cash-flows from the toll collections. Concessionaire expects the completion of the original scope of project by 31st December 2021. Repayment and interest payments to start from January 2022 onwards.

Apart from the work of Rs 69.95 crores as per the original scope of work, work of Rs 25.99 crores will be executed under Change of Scope. As per LIE report dated 13th May, 2021 an amount of Rs. 30.36 crores of work out of the Rs. 69.95 crores of balance work is pending to be constructed and out of the said Rs. 25.99 crores of change of scope work, Rs. 15.03 crores of work is left to be executed.

Moreover, there has also been additional change of scope works to the extent of Rs. 30.97 crores. This amount will be reimbursed by MoRTH. This work is to be done for the construction of proposed Indira Circle Flyover @ Km 171+100 along with LVUP @ Km 171+ 700 with provision of RE wall in approaches. This work is not going to affect the completion certificate of the Concessionaire. This amount shall be funded by promoters.

It is also pertinent to mention that the equipment for overloading have been installed and the extra toll on account of overloading of vehicles has been started but the same will be streamlined only on Completion of the project. As per guidelines, the concessionaire can collect toll up to ten times in case of overloading vehicles. However, we have projected the same on conservative assumption that 20% of 3 axle and Multi Axle Trucks are overloaded and average fee of 3 times of the toll applicable (i.e. 2 times extra fee) is collected from overloaded vehicles.

With the collection of tolls and with the strict enforcement of toll on overloaded vehicles post completion, the company will generate sufficient cash flow for servicing of interest, repayment of loan on Priority loans and existing loans.

Since the Provisional COD & Full project completion are revised from the original schedule and since the cost of the project has gone up, the repayment schedule has been prepared according to the revised cash flows.

The EPC contractor for the project is MBL, which is also the sponsor of the Concessionaire. As per the Joint Lenders Meeting dated 3rd December 2020, it was decided that 10% of cutback from each EPC billing of MBL shall be paid to the lenders of the Concessionaire. 10% retention money shall be refunded to MBL on induction of promoter's contribution.

Accordingly, the Concessionaire will retain 10% of all the amounts due and payable to MBL, on account of EPC billings and while making the balance payment to MBL (i.e. 90%). Total cutback amount is expected to be Rs 5.57crs (FY 2020-21: Rs. 1.78 crores and April to December 21: Rs 3.79 crores). The amount of Rs. 5.57 crores shall be adjusted against the Project Term Loan, thereby reducing the Principal Outstanding Balance to Rs. 444.43 crores. Due to the delays in the project, increase in cost as well as lesser than estimated toll collections, it is proposed that from the date of irregularity of accounts of various banks (from end of 2016 onwards), interest be charged up to 31st December 2021 @ simple interest of PNB 1-year MCLR rate + 0.25% spread amounting to Rs. 182.67 crores. This amount shall be considered as unsustainable debt. This amount of Rs. 182.67 crores shall be converted into Non-Convertible Debentures carrying 0.01% p.a. coupon. From January 2021, the Concessionaire will start paying interest @ PNB 1-year MCLR + 0.25% spread, on the principal amount of the Project term loan i.e., Rs 444.43 crores. The repayment schedule of the principal amount of Rs 444.43 crores and the Non-Convertible Debentures of Rs. 182.67 crores as on 31st December 2021 has been drawn up in this plan as per the cash flows estimated. Concessionaire is paying 10% of the project term loan and NCD by 31st March 2023, ensuring upgradation of the account by March 2023 (within 15 months from the implementation date).

Repayment of the project loan is proposed to completed by September 2029 and NCDs repayment has been proposed to be completed by 31st March 2031.

Promoter Infusion

Promoters will infuse funds totaling to Rs. 50 crores to ensure accelerated repayment for lenders and thereby reinforcing their confidence in the company. This amount may be arranged in the form of equity/unsecured loan/sub-ordinated debt as the case may be.

Promoter Contribution shall be made in the following manner:

- Total promoters' contribution shall be Rs 50 crores. Of this, Rs 25 crores shall be contributed
 prior to implementation of the plan (this amount shall be utilized towards funding change of
 scope works/ 10% cutback/ creating cash balance for operations and maintenance). The
 balance amount of Rs 25 crores shall be contributed in the first quarter of Implementation.
- Change of scope works shall be funded by the promoters through a separate account. This amount shall be reimbursed by MoRTH to the promoters. The outstanding credit balance of the promoter (against change of scope funding) in the books of the company at the time of implementation shall form part of promoter contribution of Rs. 25 Crores to be infused before implementation.

The key financial indicators of the project during the period of repayment of debt are as under:

Financial Indicator	Results
Average DSCR	1.31
Average Cash DSCR	1.32

Terms and Conditions

The terms and conditions are as follows:

Borrower	Suratgarh Bikaner Toll Road Company Private Limited (SBTRCPL)				
Sponsors	MBL Infrastructures Ltd.				
Purpose	To part finance the cost of "Development and Operation of Bikaner-Suratgarh Section of NH-15 (now NH-62) by Two Laning with Paved Shoulder in the State of Rajasthan through Public Private Partnership on Design, Build, Finance, Operate and Transfer (DBFOT) Basis"				
Provisional COD (90.86%)	15th February, 2019 (Tolling started from 17th February, 2019)				
Provisional Completion for additional length of 9.780 Km (96.54%)	18th March, 2021 (Tolling started from 1st April, 2021)				
Expected Completion of the Project	31st December, 2	021			
Restructuring Implementation date	Date of all the sa all the lenders	nctions, appro	vals and completion of documentation by		
Revised Project Cost	Rs. 810.42 Crores		6		
	Particulars	Debt as on 31.12.21	Terms of Restructuring		
	Project Loan (Sustainable debt)	444.43*	To continue as Term Loan repayable in 93 staggered monthly installments commencing from January 2022 to September 2029		
Restructured Debt (Rs. in crores)	Unpaid Interest (Unsustainable debt)	182.67**	To be converted to Non-Convertible Debentures carrying coupon of 0.01% p.a. redeemable in monthly installments from January 2022 to March 2031		
	Total	627.10			
	**Unpaid interest year MCLR + 0.25 December, 2021	Rs. 5.57 crores has been cale 5% spread) from amounting to	culated at simple interest @ 7.60% (PNB 1- m the date of irregularity up to 31st Rs. 182.67 crores.		
Accelerated Repayment	December, 2021 amounting to Rs. 182.67 crores. Excess cash above cash balance of Rs. 15 crore will be used for accelerated payment to the lenders. This amount shall be repaid towards sustainable debt and unsustainable debt in the proportion of their original amount at the time of implementation (Sustainable-71%, Unsustainable-29%)				
Rate of Interest	PNB 1-ye Debt. • January 1 monthly	 the time of implementation (Sustainable-71%, Unsustainable-29%) After date of irregularity up to 31st December 2021, simple interest@ PNB 1-year MCLR + 0.25% spread, is to be treated as Unsustainable Debt. January 2022 onwards on the Project Term Loan, interest to be paid monthly PNB 1-year MCLR + 0.25% spread Coupon on Non-Convertible Debentures of 0.01% p.a. to be paid 			

Repayment period	Repayment of the Project Term Loan in 93 staggered monthly installments commencing from January 2022 till September 2029 Non-Convertible Debentures to be redeemed in monthly installments commencing from January 2022 to March 2031 Pre-payment at Concessionaire's request may be allowed at the end of every month without any penalty That proved to be a septimution shall be Ps 50 erores. Of this Ps 25 erores shall						
Promoter Contribution Total promoter's contribution shall be Rs 50 crores. Of this, Rs 25 crores shall be contributed prior to implementation of the plan (this amount shall be utilized towards funding change of scope works/ 10% cutback/creating cash balance for operations and maintenance). The balance amount of 25 crores shall be contributed in the first quarter of Implementation.							
	Particulars	Rs. in crores					
	Cutback Amount in FY 2020-21	1.78					
Cułback Money	Balance Work left as on 31.03.2021: Original Scope of Works (Payment to be made net of TDS @ 2%) O&M Payments (Payment to be made net of TDS @ 2%) Total Net Payments to be made	32.89 5.00 37.89					
payable to lenders	Cut Back @ 10% (April 2021 to December 2021)	3.79					
[[]]	Total Cut Back	5.57					
	Term Loan. 10% retention money shall be refunded to MBL promoter's contribution. The Rupee Term Loan together with interest, costs, expense						
Security	 Monies whatsoever shall be secured by: A first charge on all the movable and immovable the project Company. A first charge on the Escrow Account (after reparloan). A first charge/assignment of all toll revenues and re Borrower from the Project or otherwise (after reparloan). A first charge on all intangible assets including but respect Goodwill, undertaking, uncalled capital, and Interest Rights of the Project Company. Assignment in favor of the lenders, all the rights, title the Borrower from all contracts, insurances, licenses the assets of the Project and all project document concession agreement), which the Borrower is procontractor guarantees, liquidated damages and a relating to the project. Lender's security package listed in the Project Documents to the project in specified circumstances. Pledge of 51% of the equity shares in the project of the compliance with the Banking Regulations Act. Corporate Guarantee of MBL Infrastructures Ltd. to 	yment of Priority aceivables of the yment of Priority not limited to the llectual Property and interests of s in, to, under all its (including the arty to including II other contracts ument, including in respect of the					

-	The afores	aid security v	will rank pari-p	assu amongst	the Lenders for	
Prepayment Penalty	 Nil prepayment penalty on Project Term Loan & NCDs in case of securitization of toll and pre-payment of dues of existing term loan lenders Nil prepayment penalty on Project Term Loan & NCDs in case prepayment is done from surplus cash flows of the project 					
DSRA	 DSRA shall be maintained at a level equivalent to 3 months of principal and interest servicing in the particular year starting Marc 2022 					
Penal Interest	dat	e			narges levied till	
Right to Recompense	flov	vs stipulated b		estructuring plai	ove the net cash n shall be utilized	
	Ye	ear	Project Term Loan Instalment	NCD Instalment	Total	
	2021-22 (Jan 22- Mar 22)		14.81	6.09	20.90	
	2022-23		29.63	12.18	41.81	
		3-24	31.11	0.91	32.02	
Repayment		4-25	31.11	0.91	32.02	
Schedule		5-26	44.43	0.91	45.34	
	2026-27		66.67	0.91	67.58	
	2027-28		77.78	0.91	78.69	
	2028-29		88.89	0.91	89.80	
	2029-30		60.00	45.68	105.68	
	2030-31		0.00	113.26	113.26	
		TAL	444.43	182.67	627.10	
	V	Project	Term Loan	N	CD	
	Year	Repayment	Cumulative	Repayment	Cumulative	
ā	2021-22 (Jan 22 – Mar 22)	3.33%	3.33%	3.33%	3.33%	
	2022-23	6.67%	10.00%	6.67%	10.00%	
Cumulative Annual	2023-24	7.00%	17.00%	0.50%	10.50%	
Repayments	2024-25	7.00%	24.00%	0.50%	11.00%	
	2025-26	10.00%	34.00%	0.50%	11.50%	
	2026-27	15.00%	49.00%	0.50%	12.00%	
	2027-28	17.50%	66.50%	0.50%	12.50%	
	2028-29	20.00%	86.50%	0.50%	13.00%	
	2029-30	13.50%	100.00%	25.00%	38.00%	
	2030-31	0.00%	100.00%	62.00%	100.00%	

2. Project Company

2.1 Company/Project Information

Name	Suratgarh Bikaner Toll Road Company Private Limited
CIN	U45400WB2012PTC174476 of 2011-2012
Industry	Transportation (Roads)
Registered Office	'Divine Bliss', 2/3 Judges Court Road, 1st Floor, Kolkata – 27
Corporate Office	303, 3 rd Floor, Baani Corporate One Building, Commercial Center, Jasola, New Delhi – 110025
Project Scope	Development and operation of the Bikaner–Suratgarh Section of NH-15 (from Km 553.869 of NH-11 to Km 173.000 of NH-15) via Km 10.630 of NH-15 by Two Laning with paved shoulder in the State of Rajasthan through Public Private Partnership on Design Build, Finance, Operate and transfer (DBFOT – Toll) basis in state of Rajasthan
Date of Incorporation	20th February, 2012
Constitution	Private Limited Company
Project Length	Design length: 172.384 Km.
Issue of LOA	9 th January, 2012
Date of Signing CA	9 th May, 2012
Financial Closure	30 th March 2013
Appointed Date	16th September 2013
Construction Period	From 16th September, 2013 to 31st December, 2021
Provisional COD (90.86%)	15th February, 2019
Provisional COD (96.54%)	18 th March, 2021
Expected Completion	31st December, 2021
Original Concession End Date	15 th September, 2029
Concession End Date (due to actual traffic being less than target traffic)	30 th November, 2032

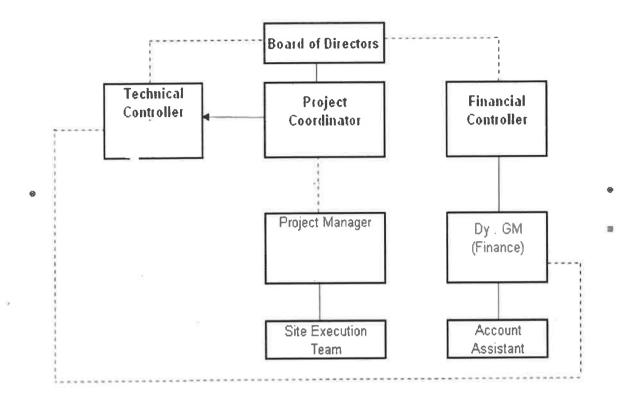
2.2 Management and Board of Directors

The Articles of Association (AoA) of Suratgarh Bikaner Toll Road Company Private Limited provide for a minimum of 2 and a maximum of 12 Directors on the Board of the Company. The Board of SBTRCPL comprises of the following directors:

Name	Designation	Qualification	Experience
Mr. Anjanee Kumar Lakhotia	Director	Chartered Accountant; B.Com (Hons)	He is a commerce graduate from St. Xavier's College, Kolkata and a fellow member of the Institute of Chartered Accountants of India. He has over two decades of experience in the infrastructure industry.
Mr Surendra Agarwal	Director	M.Tech (IIT Delhi)	He is M.Tech (Structural Engg.) from IIT (Delhi) and MBA (Finance), having more than two decades of experience in the field of Project Management/Highway, Bridge & Structural Engineering.
Mr Ashwini Kumar Singh	Independent Director	Electrical Engineer	He holds a degree in electrical engineering from Jadavpur University, Kolkata. He has been associated with SAIL as part of their senior management for more than twenty years, and with Essar Steel Limited as the resident director of their Jharkhand Unit. He was also associated with the Rourkela Steel Plant and the Muktanand Steel Plant as the managing director. He is a fellow member of the Institute of Engineers, Indian Council of Arbitration, All India Management Association and the National HRD Network.
Ms. Sunita Palta	Independent Director	Post Graduate Diploma in Journalism & Anthropology	She is a post graduate in anthropology from Miranda House, Delhi University with a post-graduate diploma in journalism from Indian Institute of Mass Communication, New Delhi. She has held academic positions with the World Food Programme and UNICEF on Child Rights Issues as part of Integrated Child Development Services of the Government of India.

SBTRCPL has experienced project coordinator for the development of the Project. He is suitably assisted by a team of professionals at various levels specializing in critical functions related to design & planning, management of contracts, liaising with Rajasthan PWD/ Independent Engineer, tolling strategy, finance & accounts.

The organizational structure of the company is as follows:



Direct Reporting
Shadow Reporting

3 Concession Agreement

Government of Rajasthan had authorized PWD, Rajasthan to invite proposals on behalf of Ministry of Road Transport & Highways, Govt. of India for Development and Operation of Bikaner - Suratgarh Section of NH-15 (from Km. 553.869 of NH-11 to Km.173.000 of NH-15) via Km. 10.630 of NH-15 by Two Laning with paved shoulder in the State of Rajasthan through Public – Private Partnership on Design, Build, Finance, Operate and Transfer (DBFOT – Toll) basis. Based on the evaluation of bids received, PWD, Rajasthan selected the consortium led by MBL Infrastructures Ltd for construction, operation and maintenance of the said section.

The contract was awarded based on its offer to pay highest premium of Rs. 2.51 Crores in the first year of COD (and an increase of 5% thereafter every year) to the Rajasthan PWD who issued its Letter of Award (LoA) on 9.01.2012. The Consortium members incorporated Suratgarh Bikaner Toll Road Company Private Ltd (SBTRCPL) on 20th February, 2012. The Concession Agreement has been signed on 9th May, 2012 between Rajasthan PWD and SBTRCPL. The Concession Period is 16 years & starts from the appointed date. The Construction period as stipulated in the Concession Agreement is 730 days from the Appointed Date. The Appointed Date of the project is 16th September, 2013. Due to various delays in fulfilment of conditions precedent, delay in handing over of land & other permissions, COVID-19 first & second wave, the Independent Engineer IE vide its letter dated 15th April 2021 recommended the extension of time up to December 2021. Upon completion of the Concession Period, SBTRCPL would hand over the Project Highway to PWD, Rajasthan.

3.1 Grant of Concession

Rights and Obligations

The Concession granted shall entitle SBTRCPL to:

- Concession period of 16 years (Construction period 2 yrs + Tollable Period 14 Yrs);
- Concessionaire shall complete the entire project highway before the 2nd anniversary of the Appointed Date;
- Right of way, unencumbered access and license to the Site;
- Finance and Construct the Project Highway;
- Manage, operate & maintain the Project Highway and regulate the use thereof by third parties;
- Demand, collect and appropriate the fees from vehicles and users liable for payment of fees
 for using the Project Highway or any part thereof and refuse entry of any vehicle to the Project
 Highway if the due Fee is not paid;
- Perform and fulfill all of the obligations under and in accordance with the Concession Agreement;
- Bear and pay all expenses, costs and charges in connection with or incidental to the performance of the obligations under the Concession Agreement;
- Not assign, transfer or sublet or create any lien or encumbrance on the Concession Agreement or the concession granted or on the whole or any part of the Project Highway nor transfer, lease or part possession there of save and except as expressly permitted by the Concession Agreement or the Substitution Agreement.

Concession Period

Concession period is of 16 years from the Appointed Date (including construction period of 2 years).

The 730th day from the Appointed Date is the scheduled date for completion of project. In the event the two laning is not completed within 270 days from the scheduled Two Laning date, unless the delay is due to reasons attributable to the Government or Force Majeure, the government shall be entitled to terminate the CA.

The Independent Engineer vide its letter no. ICT:687:TPV:9215 dated 18th October, 2016 has deferred the Project Milestone III to 11th December, 2016 and the scheduled completion date of construction

of the project to 31st March, 2017. The Independent Engineer vide letter no. ICT:687:TPV:4128 dated 31st May, 2019 has recommended the extension of time for the balance works upto 31st March, 2020. The Chief Engineer, PWD Rajasthan has also recommended Extension upto 31st March, 2020 vide his letter no. F-7 (259)/Part-IV/BOT/PPP-NH/D-126 dated 18.07.2019. The Independent Engineer vide his letter no. ICT:687:TPV:3526 dated 13th August, 2020 has given the extension upto 30th June, 2021. Further extension for completion upto 31st December 2021 is recommended by IE vide its letter dated 15th April 2021. Considering the present conditions and issues faced by the concessionaire due to external factors the completion of the construction work as per original scope would be done by the concessionaire out of the cash flows available from the toll collections by 31st December, 2021.

Accordingly, the concession period will be extended by the Authority in accordance with the power granted to the Authority, in terms of the Clause 35.3 of the Concession agreement, in proportion to the delay that may be caused in the achievement of COD, given the delay in procurement of ROW, Land acquisition/ transfer of land in favour of PWD and other clearances and approvals.

Important execution dates are given in table below:

Particulars	Date Date
Date of Signing of CA	9th May, 2012
Financial Closure	30 th March 2013
Appointed Date	16th September 2013
Original COD (as per CA)	16 th September, 2015
Provisional COD	15th February, 2019 (Toll Collection started from
(90.86%)	17 th Feb, 2019)
(96.54%)	18th March, 2019 (Collection from 01.04.21)
Expected Completion of the Project	31st December, 2021
Original end of Concession Period	15 th September, 2029
End of Concession Period (due to actual traffic being less than target traffic	30 th November, 2032

Performance Security

As per requirements of concession agreement, SBTRCPL had submitted an irrevocable and unconditional Bank Guarantee of Rs. 25.05 Crores to PWD, Rajasthan towards performance security as per requirements of CA.

BG No. 5073212BG000217 dated 02.11.2012 of Rs. 18 crores issued by State Bank of Patiala, New Delhi and BG No. 64201LG001812 dated 02.11.2012 of Rs. 7.05 crores issued by Punjab National Bank, Noida were submitted vide letter no. SBTPL/2012/1656 dated 02.11.2012.

The Performance Security shall remain in force and effect for a period of one year from the Appointed Date, but shall be released earlier if 20% or more of the Total Project Cost has been expended in the project.

The Performance Security has already been released by the client i.e. PWD, Rajasthan.

Premium

On the COD date the Concessionaire shall pay a premium in the form of an additional Concession Fee of Rs. 2.51 crores (Rupees Two Crores and Fifty-One Lakhs Only) as due to the authority that year, due and payable for the period remaining in that year. The aforesaid amount of 'Premium' shall be applicable for first year. If payment of such 'Premium' is due and payable for part of the financial year, then only pro-rata payments @ 1/12th of such Premium shall be payable for each month of such part financial year and part of the month shall be deemed to be full month for the purpose of assessing the due amount of Premium. For each subsequent year of the Concession Period after 1st year of COD, the Premium shall be escalated @ 5% (five percent) as compared to immediately preceding year. The Concessionaire is paying the premium on time to MoRTH.

Fees/Toll Charges

The Concessionaire (SBTRCPL) shall have the sole and exclusive right to demand and collect toll from the Users on and from the COD in accordance with the CA and the National Highways Fee (Determination of Rates and Collection) Rules, 2008 read along with the National Highway Fee (Determination of Rates and Collection) Amendment Rules 2010 and National Highways Fees (Determination of Rates and Collection) Amendment Rules 2011 (the "Fee Rules"). The said "Fee Rules" has prescribed levying toll on following basic rates from different types of vehicles as under which shall be rounded off to the nearest 5 (five) rupees in accordance with the Fee Rules.

Type of vehicle	Base rate of fee per vehicle per km (in rupees)
Car, jeep, Van or Light Motor Vehicle	0.65
Light Commercial Vehicle, Light Goods Vehicle or Mini Bus	1.05
Bus or Truck 2 Axle	2.20
Truck (Three Axle)	2.40
Multi Axle Truck (4 – 6 Axle)	3.45
Oversized vehicle (7 or more Axle)	4.20

The rate of fee for use of a section of National Highway having two lanes and on which average investment for up gradation has exceeded Rupees two & half crores per Km shall be sixty percent of the rate specified.

The rates specified under rule 4 shall be increased without compounding by three percent each year with effect from 1st day of April, 2008 and such increased rate shall be deemed to be the Base Rate for the subsequent years.

The Base Rates will increase on every toll plaza every year on the basis of Wholesale Price Index and will be rounded off to the nearest five rupees. The increase will be made effective from 1st April every year, based on the wholesale price index for the year ending 31st December. The basic toll rates will be as per the rates notified effective as on 01-09-2007. The calculation of toll increase every year will be done as per the formula given below:-

Basic Wholesale Price Index for the - WPI (A)
Month of December of the preceding year

Wholesale Price Index - WPI (B)

Of the week ending on 6th Jan, 2007

Formula for Calculation: -

Applicable rate of fee = Base rate + Base rate * [WPI (A) - WPI (B) / WPI (B)] * 0.4

Local traffic will remain exempted from payment of toll. Such vehicles will be issued monthly passes by the Concessionaire. Such passes will be issued to the eligible vehicle owners by the Concessionaire on production of necessary documents and after payment of a monthly fee of Rs.150 to be revised annually to reflect the variation in WPI as compared to the WPI of the year ended March 31, 2007. Local traffic means Private Car/Jeep or equivalent vehicle which is owned by a person who resides within 20 km from the Toll Plaza.

The toll fee will be collected at 3 Toll Plazas which are proposed at the following chainage as per

S.No	Location of Toll Plaza		Length for which Toll collected
	(Existing Chainage)	(Design Chainage)	
1	Km 25.500	At Km 24.739	Kms.50.155 (excluding 9.845 Km. on Bikaner bypass)
2	Km 84.500	At Km 84.025	Kms.60.000
3	Km 145.000	At Km 144.400	Kms.52.384

In addition to the above, the Concessionaire shall be entitled to levy and collect toll fee for the Bypass costing more than Rs. 10 cr. (Rupees ten crores) as specified below at the following Toll Plaza as per CA:

S.No.	Location of Toll Plaza	Nature of	Length,	Cost
	(Design Chainage)	Structure	Km	(in Rs. Crore)
1	Km. 24.739	Bikaner Bypass	9.845	19.30

The current fee table (valid upto 31st March, 2022) is as follows:

Khara Toll Plaza (Km 25)	Single Journey	Return Journey	Monthly pass	50% Discount
PCJ	45	70	1565	25
Minibus/LCV	75	115	2530	40
BUS	160	240	5305	80
Truck (2 axle)	160	240	5305	80
Truck (3 axle)	175	260	5785	85
MAV (4-6 axle), Heavy Construction Machinery	250	375	8315	125
Oversized Vehicles (7 or more axles)	305	455	10125	150

Bhadera Toli Plaza (Km 85)	Single Journey	Return Journey	Monthly pass	50% Discount
PCJ	45	65	1475	20
Minibus/LCV	70	105	2385	35
BUS	150	225	4995	75
Truck (2 axle)	150	225	4995	75
Truck (3 axle)	165	245	5445	80
MAV (4-6 axle), Heavy Construction Machinery	235	350	7830	115
Oversized Vehicles (7 or more axles)	285	430	9535	145

Hindore Toll Plaza (Km 145)	Single Journey	Return Journey	Monthly pass	50% Discount
PCJ	35	55	1190	20
Minibus/LCV	60	85	1925	30
BUS	120	180	4035	60
Truck (2 axle)	120	180	4035	60
Truck (3 axle)	130	200	4400	65
MAV (4-6 axle), Heavy Construction Machinery	190	285	6325	95
Oversized Vehicles (7 or more axles)	230	345	7700	115

Revision of Fee

The Concessionaire and the authority agree that the fee shall be revised annually and will be made effective from 1st April every year, subject to the provisions of the Fee Rules.

Additional Tollway:

As per the Concession Agreement, Additional Tollway is defined as any expressway or other toll road between; inter alia, Bikaner and Suratgarh i.e. Km 553.869 of NH-11 and Km 173.000 of NH-15 via Km 10.630 on National Highway No.15. However, Additional Tollway does not include any expressway or other toll road connecting this stretch if the length of such expressway or toll road exceeds the length of the existing route comprising the project highway by 20% thereof.

The CA provides that PWD, Rajasthan or any Government Agency shall not construct any expressway or other toll road for use of traffic any time before the 12th anniversary from the Appointed Date.

In the event if the Additional Tollway is opened to traffic between the 8th and 16th anniversary from the Appointed Date, the Concessionaire shall be entitled to an additional Concession Period, which shall be equal in duration to the period between the opening of the Additional Tollway and the 16th anniversary.

PWD, Rajasthan also undertakes that the toll fee to be levied and collected during the Concession Period from any vehicle or class of vehicles using the Additional Tollway, shall at no time be less than 25% (Twenty five percent) higher than the Fee levied and collected from similar vehicles using the Project Highway.

Competing Road:

As per the Concession Agreement, Competing Road means a road connecting the two end points of the Project Highway and serving as an alternative route thereof, such road being an existing paved road, which has been widened by more than 2 metres of paved road for at least 75% of the total length at any time after the date of this Agreement, or a new road, which is constructed after such date, as the case may be, but does not include any road connecting the aforesaid two points if the length of such road exceeds the length of the Project Highway by 20%.

The CA stipulates that neither Rajasthan PWD nor any Government Instrumentality shall, at any time before the 10th year of the Appointed Date, construct or cause to be constructed any competing road; provided that the restriction shall not apply if the average traffic on the Project Highway in any year exceeds 90% (ninety per cent) of its designed capacity where the designed capacity of the road is 24,500 PCUs.

Main Obligations of Suratgarh Bikaner Toll Road Company Private Limited:

- Design, engineer, procure, construct, operate and maintain the Project on BOT basis in accordance with the provisions of the CA;
- Obtain necessary approvals / clearances and comply with all Applicable Laws and Applicable Permits;
- Arranging necessary finance for the project and Perform and fulfill its obligations under the Financina Agreements;
- Make reasonable efforts to facilitate the acquisition of land required for the purpose of the Agreement;
- Support, cooperate with and facilitate PWD, Rajasthan in the implementation and operation of the Project;
- Transfer the Project Highway to PWD, Rajasthan upon Termination of the CA;
- SBTRCPL shall submit to the authority all the Project Agreements or amendments or replacements thereto within 7 days of execution, duly attested by the director for their review and comments;
- SBTRCPL shall not undertake or permit any Change in Ownership, except with the prior approval of PWD, Rajasthan;
- Concessionaire shall ensure that the personal engaged by it in the performance of its obligations under CA are at all times properly trained for the respective functions.

Main Obligations of PWD, Rajasthan:

- Assist and provide support to the Concessionaire in procuring Applicable Permits required from any Government Instrumentality for the project implementation;
- Provide reasonable support and assistance to the Concessionaire in obtaining all the necessary infrastructure facilities and utilities including water and electricity on similar terms as available to other commercial customers;
- Make best endeavors to procure that no local tax, toll or charge is levied or imposed on the use of whole or any part of the Project Highway;
- Maintain the project highway prior to the Appointed Date, at its own cost and expense, so that its traffic worthiness and safety are at no time materially inferior as compared to its condition 7 (seven) days prior to the last date for submission of the Bid, and in the event of any material deterioration or damage other than normal wear and tear, undertake repair thereof, or pay to the Concessionaire the cost and expense, as determined by the Independent Engineer, for undertaking such repair after the Appointed Date;
- Neither PWD, Rajasthan nor the Government shall at any time before the 10th (tenth) anniversary of the appointed date construct or cause to be constructed any Competing Road.

Conditions Precedent:

The "Conditions Precedent" required to be fulfilled by both the Concessionaire and Rajasthan PWD on or before the Appointed Date are as under:-

PWD, Rajasthan shall have granted vacant access and Right of Way to the Concessionaire to the extent that area of the Site to which vacant access and Right of Way has not been Granted to the Concessionaire shall not be more than 20% (as per "Appendix" to be

prepared jointly as per CA) of the total area of the site required and necessary for the Two-Lane Project Highway;

PWD, Rajasthan shall issue the Fee Notification;

- PWD, Rajasthan shall have procured all Applicable Permits relating to environmental protection and conservation of the site, if applicable;
- PWD, Rajasthan to procure approval of the Railway authorities in the form of General Arrangement Drawing for construction of ROB/RUB at level crossings on the Project Highway:
- The Concessionaire shall have provided Performance Security to PWD, Rajasthan and shall have executed the Escrow Agreement and the Substitution Agreement;
- The Concessionaire shall have procured all the Applicable Permits as per Schedule E;
- The Concessionaire shall have executed the Financing Agreements and delivered 3 Copies to PWD, Rajasthan of the Financing Agreements, Financial Package and the Financial Model duly attested by a director;
- SBTRCPL shall have delivered to PWD, Rajasthan a confirmation, in original, of its representations and warranties;
- SBTRCPL shall have delivered to PWD, Rajasthan a legal opinion from the legal counsel with respect to its authority to enter into the CA and the enforceability of the provisions thereof;
- Each party shall promptly inform the other party when any condition precedent for which it is responsible has been satisfied

3.3 Project Development and Operations

Existing and Additional Right of Way

Existing and additional right of way shall be made available to the Concessionaire by PWD, Rajasthan free from all encumbrances and without the Concessionaire is required to make any payment to PWD, Rajasthan on account of any costs, expenses and charges for the use of such sites for the duration of the Concession Period.

The Concession Agreement also stipulates the damages payable by PWD, Rajasthan and the Concessionaire respectively in the event of non-availability of Site and non-completion of construction within the stipulated schedule.

The project site had been handed over by the Government to the Concessionaire on 'as is where is basis' which is not fully vacant and free of all encumbrances as per concession agreement. Accordingly, the concessionaire has requested for extension of concession period and hand over of land. Currently, the project is free from all encumbrances.

Construction & Commercial Operations

As per the provisions of the CA, M/s ICT Private Limited were appointed on 30th July 2013 as an Independent Engineer (IE) by PWD, Rajasthan.

The IE would monitor the construction and operations of the project. IE would also help assist in resolution of disputes, if any, which may arise between PWD, Rajasthan & the Concessionaire.

Change of Scope

PWD, Rajasthan has the right to Change the Scope of the project (addition/deletion to the works and services on or about the Project Highway) as compared to the Scope of Work specified in the Schedules of the Concession Agreement. Within the 7 days of issuing Change of Scope order, the Govt. shall make an advance payment to the Concessionaire in a sum equal to the 20% of the cost of Change of Scope as agreed hereunder, and in the event of a dispute 20% of the cost assessed by the Independent Engineer. The Concessionaire shall, after commencement of work, present to the govt., bills for the payment in respect of the works in progress or completed works along with supporting documents. Within 30 days of receipt of such bills, the PWD, Rajasthan shall disburse to the Concessionaire such amounts as are certified by the Independent Engineer as reasonable after making proportionate deduction for advance payment. However, all costs arising out of any Change of Scope Order issued during the Construction Period shall be borne by the Concessionaire

to the extent of 0.25% of the Total Project Cost i.e. upto the limit of Rs. 1.25 Crore (0.25% of Rs. 501.08 Crores). Three Change of Scope Orders have been issued in favour of the Concessionaire –

- 1. IGNP Canal Work @ Km 157+838
- 2. 4 Iane Vehicular Under Pass at Suratgarh @Km 172+100 & Bus shelter at Km 53+900
- 3. Hybrid ETC & MSWIM in all the 6 lanes at all the 3 toll plazas

As per VIP request, the Honourable Cabinet minister & authority has asked the Concessionaire to submit Change of Scope work of Flyover at Indira Circle at Suratgarh. Accordingly, the same has been applied for by the Concessionaire for an amount of Rs 30.97 crores.

Operation and Maintenance

The Concessionaire shall operate and maintain the Project Highway either by itself or through the O&M contractor and if required, modify, repair or improve the Project Highway to comply with the provisions of the CA, applicable laws and applicable permits, and conform to good industry practice. The O & M obligations of the Concessionaire include:

- Permit safe smooth and uninterrupted flow of traffic on the project highway during normal operating conditions;
- Collect and appropriating the Fee;
- Undertake preventative maintenance of the project highway;
- Undertake routine maintenance including prompt repairs of potholes, cracks, concrete joints, drains, line marking, lighting and signage;
- Undertake major maintenance such as resurfacing of pavements, repair to structures, repairs
 and refurbishment of tolling system and hardware and other equipments;
- Prevent encroachments and unauthorized use of the Project Highway.
- Shall not close any lane of the project highway for undertaking maintenance or repair work without written approval from IE.
- Protection of the environment including provisions of equipment & materials thereof, operations and maintenance of all communications, control and other systems for efficient operations;
- Complying with safety requirements.

The CA also provides for damages for breach of maintenance obligations.

On or before and no later than 45 days prior to the beginning of each accounting year during the operation period, the Concessionaire shall provide the authority and IE, its proposed annual programme ("Maintenance Programme") to comply with the maintenance requirements.

3.4 Financing Arrangements

Financial Close

The financial closure of the Company was achieved on 30th March 2013. The total debt sanctioned is Rs. 450 crores. Punjab National Bank is the lead Bank of the consortium banking arrangement.

Escrow Account:

The Concessionaire (SBTRCPL) has opened an Escrow Account with Punjab National Bank (Escrow Bank) prior to the Appointed Date and all funds constituting the financing package for meeting the total project cost are routed through such Escrow Account.

During operations period, all fees to be collected by M/s SBTRCPL from the users of the project highway shall be exclusively deposited therein. The CA also defines the priorities in accordance with which the above funds are to be applied under different conditions. The Escrow Agreement governing the setting up and operations of the Escrow Account was executed between the Senior Lenders, Rajasthan PWD, M/s SBTRCPL and an Escrow Bank.

Priority of Payments from Escrow⁻A/c:

Withdrawals of payments during Concession	Withdrawals of payments in the event of
period	termination post COD
a) All taxes due and payable by the concessionaire	a) All taxes due and payable by the Concessionaire in respect of this Project
b) All payments related to the construction of project highway in accordance with the financing agreements	b) 90% of the Debt Due excluding Subordinate Debt
c) O&M expenses subject to the ceiling, if any, set forth in the Financing Agreements	c) Outstanding Concession Fee
d) O&M expenses and other costs and expenses incurred by PWD, Rajasthan as per CA	d) All payments and damages as due and payable by the Concessionaire to PWD, Rajasthan as per CA including Premium, repayment of Revenue Shortfall Loan and any claims due to Termination
e) Concession fee due and payable to PWD, Rajasthan	e) Retention and payments relating to the liability for defects and deficiencies as per Article 39 of the CA
f) Monthly proportionate provision of Debt Service payments due in an accounting year	f) Outstanding Debt Service including the balance of Debt Due
g) Premium due and payable to Rajasthan PWD	g) Outstanding Subordinated Debt
h) All payments and damages due and payable to Rajasthan PWD as per CA including repayment of Revenue Shortfall Loan	h) Incurred or accrued O&M Expenses
i) Monthly proportionate provision of debt service payments in respect of Subordinated Debt	i) Any other payments required to be made under the CA
j) Any reserve requirements set forth in the Financing Agreements	j) Balance, if any, in accordance with the instructions of the Concessionaire
k) Balance, if any, in accordance with the instructions of the Concessionaire	

Insurance

The Concessionaire has taken Contractor's All risk insurance policy from The Oriental Insurance Company Ltd. and workmen compensation insurance policy from United India Insurance Company Ltd. towards risks associated during the construction period and shall effect and maintain during

operations period such insurances for sums as may be required in accordance with the financing agreements, applicable laws and good industry practice.

Any additional insurance that may be required by law and under all applicable major project contracts will be put in place.

Construction Period	Operation Period
Contractor's all risk insurance	Third party liability
Third party liability	Property all risk insurance including loss of revenue
Workmen compensation	Workmen Compensation

Construction Phase Insurance

Contractor's All Risk Insurance (CAR)

The Concessionaire had taken Contractor's All risk insurance policy from The Oriental Insurance Company Ltd. and workmen compensation insurance policy from United India Insurance Company Ltd. towards risks associated during the construction period. It would cover physical loss or damage to the works, including permanent and temporary works for the project, materials, supplies, equipment and other property relating to the construction of the project up to the take-over from the various Contractor(s) and would extend to the Defects Liability Period. The policy will cover physical loss or damage resulting from, but not limited to, fire, lightning, earthquake, explosion, riot, civil commotion, malicious damage, damage from vehicles, storm, tempest, flood and damage consequent upon defects in design, materials or workmanship including any physical loss or damage arising during the testing and commissioning periods of the project. Since the Provisional COD has been achieved, CAR is no more required.

Change of Law

If as a result of change in law, the Concessionaire suffers an increase in costs or reduction in net aftertax return or other financial burden, the aggregate financial effect of which exceeds the higher of Rs.1 Crore or 0.5% of the Realisable Fee in any Accounting Year, the Concessionaire may so notify PWD, Rajasthan and propose amendments to the CA so as to place the Concessionaire in the same financial position as it would have enjoyed had there been no such Change in Law resulting in the cost increase, reduction in return or other financial burden.

Similarly, if as a result of Change in Law, the Concessionaire benefits from a reduction in costs or increase in net after–tax return or other financial gains, the aggregate financial effect of which exceeds the higher of Rs 1 crore or 0.5% of the realisable fee in any accounting year, PWD, Rajasthan may so notify the Concessionaire and propose amendments to the CA so as to place the

Concessionaire in the same financial position as it would have enjoyed had there been no such Change in Law resulting in the decreased costs, increase in return or other financial gains.

Thus, there is adequate provision in the Concession Agreement to protect the financial interest of the Concessionaire due to any Change in Law/Legislation.

3.5 Variation in Traffic Growth

The Concession Agreement provides for sharing of risk due to variation in traffic growth and has adequate provision which is quite favourable from Concessionaire's perspective in this regard.

As per the CA, the "Target Traffic" as on 1st April 2021 ("Target Date") has been specified as 18,337 ("Target Traffic") PCUs per day. PCUs for the purpose of CA shall include only motorized vehicles liable to pay toll fees and the Exempted Vehicles and does not include Tractors, M/Cycles and non-motorized vehicles.

In the event that the Actual Traffic falls short of the Target Traffic by more than 2.5% on the Target Date, then for every 1% shortfall as compared to the Target Traffic, the Concession Period shall, subject to payment of Concession Fee in accordance with the CA, be increased by 1.5% thereof; provided that such increase in Concession Period shall not in any case exceed 20% of the Concession Period. Accordingly, as mentioned in section 1.6, the extension of concession period under the said provisions is arrived at 3.20 years. Similarly, in the event the Actual Traffic exceeds the Target Traffic on Target Date by more than 2.5%, then for every 1% excess as compared to the Target Traffic, the Concession Period shall be reduced by 0.75% thereof; provided that such reduction in Concession Period shall not in any case exceed 10% thereof.

Provided further that in lieu of a reduction in Concession Period, the Concessionaire may elect to pay, in addition to the Concession Fee, a further premium equal to 25% of the Realizable Fee, no later than two years prior to the Transfer Date.

If the average daily traffic of PCU's in any Accounting Year shall exceed the designed capacity of the Project Highway, the Authority at its option may cause preparation of a Detailed Project Report (DPR). The said DPR, inter-alia will assess the cost as may have to be incurred for augmentina the capacity of the Project Highway such that its capacity shall have increased sufficiently for carrying the then current traffic in accordance with the corresponding provisions of the Indian Roads Congress publication no. IRC:64-1990 or any substitute thereof and extension of Concession Period, if any, that may be required to yield the Concessionaire a post-tax return on equity (Equity IRR) of 16% per annum, such assessment being made at an assumed debt:equity ratio of 70:30. Such extension of Concession Period shall be however limited to 5 (five) years. For avoidance of doubt, it is stated that there shall be no reduction in the Concession Period as originally accepted. The Authority may thereafter, at their sole option, issue a notice to the Concessionaire, (to be responded within a period of three months from the date of such notice), to undertake within six months of such notice, augmentation so determined by the Authority. For this purpose, all realizable fees that shall accrue from three months from the date of issuance of the aforesaid notice by the Authority, requiring the Concessionaire to procure capacity augmentation under this clause, shall be included in the assessment of revenue generated against the capacity augmentation and the equity IRR calculations as aforesaid shall be so based on such revenues. On refusal or non-acceptance by the Concessionaire to undertake such augmentation, either absolutely or on such extension of Concession Period as, assessed under the DPR, or on the failure of the Concessionaire to undertake such auamentation on the due date so intimated by the Authority, an Indirect Political Event shall be deemed to have occurred and the Authority may in its discretion terminate this Agreement by issuing a Termination Notice and making a Termination Payment under and in accordance with the provisions of Clause 34.9.2 of the concession agreement (relating to Termination payments for Indirect Political Event as mentioned in the following section of Force Majeure); without the "Authority being liable to issue any further notice under this provision.

3.6 Force Majeure

The Force Majeure (FM) events under the concession are classified into three categories viz. Non-Political FM Events, Indirect Political FM Event and Political Event.

The concession further provides for following payments for termination due to SBTRCPL under the FM events:

FM Events	Event		Termination Payment
Non-political	а. b. c. d. e.	Acts of God, epidemic, extremely adverse weather conditions, lightning, earthquake, cyclone, flood, volcanic eruption or fire, radioactive contamination. Strikes or boycotts Any Judgment or court order made against the Concessionaire in any proceedings for reasons other than (i) failure of the Concessionaire to comply with any Applicable Law or Applicable Permit, or (ii) on account of breach of any Applicable Law or Applicable Permit or of any contract, or (iii) enforcement of this Agreement, or (iv) exercise of any of its rights under this Agreement by the PWD, Rajasthan; Failure or delay of a Contractor due to Non-Political Event Discovery of geological conditions, toxic contamination or archaeological remains, etc.	Payment of an amount equal to 90% of the debt due less Insurance Cover.
Indirect Political Event	b. Confirmed (Even conting con	In act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, errorist or military action, civil commotion or politically motivated abotage; Civil.commotion, boycott or politically notivated sabotage which prevents collection of Fees, adustry wide or statewide strikes or adustrial action which prevent collection of Fees ailure or delay of a Contractor due to an Indirect Political Event Any Indirect Political Event that causes a Non-Political Event that causes a Non-Political Event that to and c - for a period exceeding a nuous period of 7 days in an aunting Year.)	Payment equivalent to a. Debt due less Insurance Cover. In case any insurance claims forming part of Insurance Cover are not paid, then 80% of such unpaid claims shall be included in the computation of debt due. b. 110% of the adjusted equity

a. Change in Läw;	a. Debt due
 b. Expropriation or compulsory acquisition by any Governmental Agency of any Project Assets or rights of the Concessionaire or of the Contractors; c. Unlawful or unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause any clearance or approval 	b. 150% of the Adjusted Equity
d. Any failure or delay of a Contractor	
	 b. Expropriation or compulsory acquisition by any Governmental Agency of any Project Assets or rights of the Concessionaire or of the Contractors; c. Unlawful or unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause any clearance or approval required by SBTRCPL

In addition to suitable provision of Termination Payment in case of Force Majeure Events as mentioned herein above, the Concession Agreement also provides for following remedy in case of Force Majeure Event on the Concession: -

- i) If Financial Close is delayed due to Force Majeure Event, the period set forth in the CA for achieving Financial Close shall be extended on pro rata basis;
- ii) If Project Completion Schedules are delayed due to Force Majeure Event before COD, the Concession Period and the Project Completion Dates shall be extended on pro-rata basis;
- iii) After COD if the Concessionaire is unable to collect toll fee due to Force Majeure Event, the Concession Period shall be extended by a period during which the Concessionaire was prevented from toll collection. In case of partial collection of fees where the daily collection is less than 90% of Average Daily Fee, the Concession Period shall be extended proportionately on daily basis.

3.7 Events of Default & Termination Provisions

SBTRCPL Event of Default

If SBTRCPL fails to perform its duties under the Concession or perform its statutory obligations or construct the Project Highway as per the schedule or operate and maintain the project facilities, PWD, Rajasthan may instruct SBTRCPL to remedy such default within the specified cure period, or where no cure period is specified, then within a cure period of 60 days. If, however, SBTRCPL does not remedy its default to the satisfaction of PWD, Rajasthan or goes into liquidation, reconstruction or similar process or becomes insolvent, PWD Rajasthan can terminate the agreement by giving a further fifteen-day notice period.

PWD. Rajasthan's Event of Default

If PWD, Rajasthan commits a material default and such default has a Material Adverse Effect on the Cancessionaire; or PWD, Rajasthan repudiates this agreement or evidences an irrevocable intention not to be bound by this Agreement; or the State commits a material default in complying with the provisions of the State Support Agreement and such default has a Material Adverse Effect on the

Concessionaire; or PWD, Rajasthan has delayed any payment that has fallen due under this Agreement, and if these defaults are not remedied within the cure period of 90 days.

Compensation Provisions

The CA provides for the following compensation provisions on termination of the Concession Agreement under various events of termination:

Event of Default	-		During construction (after financial closure)	During operations
Concessionaire's ev	vent	of	No payment	Payment equal to 90 % of Debt Due less Insurance Cover
PWD, Rajasthan ev default	vent	of	a. The total Debt Due, plusb. 150% of the Adjusted Equity	W

3.8 Other Agreements

Substitution Agreement

The PWD, Rajasthan, Project Sponsors and Lender has executed Substitution Agreement on 30th March 2013, under which the senior lenders would have the right to substitute the sponsors with another concessionaire under the following circumstances:

- In case of a Concessionaire Default as per the CA, which entitles PWD, Rajasthan to terminate the CA
- In case of any material default in payment under the financing documents.

State Support Agreement

The Government of Rajasthan and Government of India acting through MoRTH has executed State Support Agreement on 13th April 2010 whereby the State Government agrees and undertakes to provide following support and services to the Concessionaire as specified therein:

- Provide applicable permits to the extent GoR or any government agency is entitled to issue;
- Ensure free flow of traffic on the project highway;
- Provide necessary infrastructure facilities and utilities support including water, electricity and telecommunication facilities to the Concessionaire on terms similar to other commercial customers;
- Ensure that all relevant municipal and other local authorities and bodies including Panchayats in the State do not levy or impose local taxes on the project highway or on the traffic and/or Goods moving on the project highway without obtaining prior express written consent of the GoR and after prior consultation with PWD, Rajasthan.

The State Support Agreement is an integral part of the Concession Agreement and a certified true copy of the aforesaid State Support Agreement has been furnished by Rajasthan PWD to the Concessionaire.

4 Project Corridor & Scope

4.1 Location of the Project Corridor

The Project Highway is Bikaner - Suratgarh Section of NH-15. Bikaner-Suratgarh Project commences at Km 553.869 of NH 11 at Bikaner and terminates at Km 173.000 of NH 15 at Suratgarh. Now the highway has been renamed to NH-62. Earlier, National Highway 15 is a major National Highway in Western and Northwestern India. It connects Kandla in Gujarat with Pathankot in Punjab, therefore traffic from Gujarat going to Punjab, passes through our Project Coridor. This 1,526 km (948 mi)-long highway passes through Pathankot, Amritsar, Kotkapura, Bhatinda, Ganganagar, Bikaner, Jaisalmer and Barmer. At Bikaner, the National Highway 11 terminates on this Highway. Of its total length of 1,526 km, the National Highway 15 traverses 350 km in Punjab, 906 km in Rajasthan, and 270 km in Gujarat.

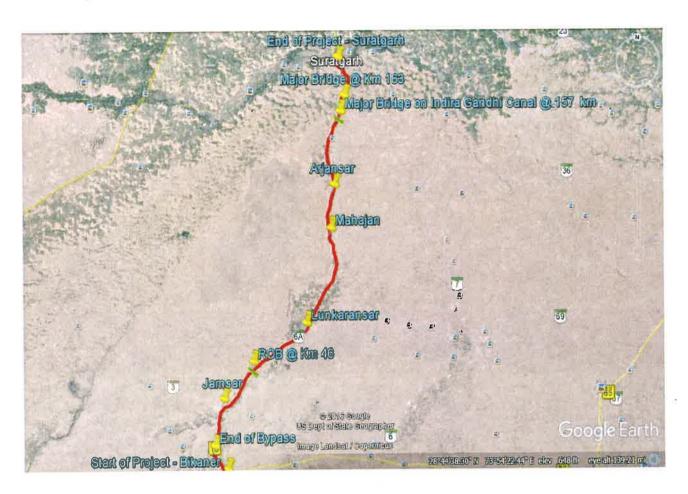
The length of the Project Highway is approximately 172.348 km. The Project Highway traverses through two Districts of Rajasthan State viz., Bikaner and Sriganganagar. NH-15 including the project section passes mostly through plain terrain. The road is a two lane, in the stretch. The black topped carriageway width measures 7.0 m (two lanes) with 1.0 in to 1.5 m gravel shoulders on either side of the road.



Map showing project road connecting Punjab, Haryana to Gujarat & Rajasthan and other major cities.

The project consists of the work of strengthening and widening to two lanes with paved shoulder along with 4 lanning from Km. 70.014 to Km 72.015 at Loonkaransar Town and from Km 170.048 to

Km 172.384 at Suratgarh. The project also involves improvement of Bikaner Bypass measuring 9.845 Km. in length.



The project road lies between at Bikaner-27.11' to 29.03', N Latitude and 71.54', to 74.22', N Longitude, Sriganganagar lies at 28.4', to 30.6', N Latitude and 72.2' to 75.3' E Longitude.

Project Influence Area

20	Hojechillik	once Alex	
Districts	Latitude	Longitude	Total Geographical Area (Million HA)
Bikaner	27.11' to 29.03' N	71.54' to 74.22' E	1092800
Sriganganagar	28.4' to 30.6' N	72.2' to 75.3' E	2724400

4.2 Villages and Urban Settlements

The section of NH-15 from Bikaner to Suratgarh passes through several towns, villages, settlements, market areas and roadside business areas which are located within/outside the ROW.

List of the villages on NH-15 (Bikaner to Suratgarh)

Sr. No.	Name	District	Chainage	Remarks
1	Bikaner	Bikaner	0/000	Bypass
2	Udasar	Bikaner	6/400	Bypass .
3	Khara	Bikaner	21/200	
4	Jamsar	Bikaner	27/800	
5	Kasturia	Bikaner	40/000	
6	Bamanwali	Bikaner	45/200	
7	Dharera	Bikaner	54/100	
8	Dulmera	Bikaner	57/200	
9	Hansera	Bikaner	59/600	
10	Lunkaransar	Bikaner	71/000	
11	Bhadhera	Bikaner	86/200	
12	Malkisar	Bikaner	93/020	
13	Mahajan	Bikaner	108/450	
14	Arjunsar	Bikaner	125/400	
15	Rajiasar	Sri Ganganagar	141/000	
16	Hindore	Sri Ganganagar	145/400	
17	Birdhwal	Sri Ganganagar	154/000	
18	Piperan	Sri Ganganagar	161/000	
19	Suratgarh	Sri Ganganagar	171/000	

4.3 Salient Features

Salient features of Bikaner-Suratgarh Section Km 0/0 to 171/0 NH-15 in the State of Rajasthan are as under:-

Location of Project	Bikaner – Suratgarh Section from Km 10/500 to 171/000 of NH-15,		
	Km 0/000 to Km 10/000 Jaipur Bypass		
Name of Distt.	Bikaner & Sri Ganganagar		
No. of Tehsils	3 Nos. Namely		
	Bikaner Distt 1. Bikaner, 2. Loonkaransar		
	Sri Ganganagar – 1. Suratgarh		
No. of Villages	19 Nos.		
3	1. Bikaner Distt – 14		
	2. Sri Ganganagar Distt – 5		
Latitude/Longitude	Distt. Latitude Longitude		
, 3	Bikaner, Bikaner 28°2' N 73°7' E		
	SGNR, Suratgarh 29°18' N 73°53' E		
Carriageway	Existing - 2 Lane (7m)		
,	Proposed - 2 Laning with paved shoulder 1.5 m		
ROW	Existing 45m		
	Proposed same		
Existing by pass	1		
No. of Proposed bypass	Nil		
No. of intersection	59 Nos.		
	T junction 26, X-5, Rly Crossing-1, Rotary-1, Y Junction-26		
Existing major bridges	2 Nos. consisting of:		
	1 No. (on IGNP Main Canal at Km. 157/600)		
	1 No. (on GDC at Km. 163/050)		
Existing minor bridges	6 Nos.		
Existing Culverts	84 Nos.		
Proposed under pass	NIL		
Proposed ROB	1 No. Km 45/957 LC No. C-132 E₃		
	TVU 1,21,287 (Oct 07)		
Proposed Cattle Pass	2 Nos. at Design chainage 48/158 Km & 142/858 Km		
Proposed way side	1 No.		
Amenities	Km 65/400		
.5	1 No. from Km 64.810 to 65.035 on Right side.		
Rest Area	3 Nos.		
Truck laybye	Design chainage 23.559-23.959 Km on Right side.		
	Design chainage 65.450-65.810 Km on Left side		
5.	Design chainage 141.196-141.596 Km on Right side		
Toll Plaza	3 No. at Design chainage 24.739Km , 84.025 Km & 144.400 Km		
Proposed Bus bays	11 Nos.		
	Khara, Jamsar, Bamanwali, Hansera, Dulmera, Loonkaransar,		
	Malkisar, Mahajan, Arjunsar, Rajaisar, Piperan		
Location of Service road	At the location of ROB, Cattlepass, & along 4-lane portions in		
	Urban areas.		

Project Highway has very vital importance from the view of connectivity. National Highway 15 (NH-15) is a major National Highway in Western and North Western India which connects Kandla in Gujarat with Pathankot in Punjab. This 1526 Km long highway passes through Pathankot, Amritsar, Bhatinda, Sri Ganganagar, Bikaner, Jaisalmer, Barmer, Radhanpur and Samakhiali. At Bikaner the

National Highway-11 terminates on this Highway. Of its total length, the National Highway 15 traverses 350 Km in Punjab, 906 Km in Rajasthan, 270 Km in Gujarat.

Salient Features NH – 15

Length	1,526 Kilometres (948 miles)
Terminal 1	Pathankot, Punjab
Major destinations	Pathankot – Amritsar – Bhatinda - Sri Ganganagar – Bikaner –
	Jaisalmer – Barmer- Samakhiali.
Terminal 2	Samakhiali, Gujarat
Major interchanges	NH 1A in Pathankot
,	NH 20 in Pathankot
	NH 1 in Amritsar
	NH 95 in Talwandi Bhai
	NH 64 in Bhatinda
	NH 10 in Malaut
	NH 11 in Bikaner
	NH 89 in Bikaner
	NH 114 in Pokaran
	NH 112 in Barmer
	NH 14 in Radhanpur
	NH 8A in Samakhiali
States	Punjab: 350 Km
	Rajasthan: 906 Km
	Gujarat: 270 Km
National Highways	East-West Corridor: 143 Km (Samakhiali – Radhanpur)
Development Project	

The Bikaner – Suratgarh section of National Highway 15 has been selected as one of highway to be developed under NHDP IV, this project is only for widening & strengthening of existing 2 lane roads to 2 lane paved shoulder & improvement of its geometry.

Accompanying the sudden growth in traffic volume in recent years, travel costs are rising as the roads level of serviceability decline due to increase traffic, accidents and traffic jams. In response to this state of affairs, the Government of India has taken up a massive program of up-gradation and development of National Highways.

The project will benefit the state in improving connectivity of the road network and facilitate traffic movement between rural areas to the state highways and national highways networks in a better way.

There are number of tourist attractions in the area. Most of the Foreign / Domestic traffic is generated due to these tourist places where this project highway is implemented.

4.4 Tourism and Pilgrimage Sites

Sri Ganganagar District:-

• Historical Gurudwara Buddha Johad:- A large amazing gurudwara, which is 85 Kms from Sri Ganganagar in South-West. This is a place where Bhai Sukha Singh and Mehtab Singh

brought head of Massa Rangarh (guilty of sacrilege of Amritsar Golden temple) and hung it on a tree in 1740

 Bror Village: - The ruins of Indus valley civilisation are found here. It is located on Anoopgarh-Ramsinghpur road.

 Dada Pamparam's Dera:- It is at Vijayanagar town, where Samadhi(tomb) of Baba Pamparam is present;

Laila-Manjnu ki Mazar(tomb), Binjaur village: - It is 11 kms far from Anoopgarh in western side.
 Here is so-called Mazar of Laila-Majnu, that's why a fair is organised in June month.

Chanana-Dham (Chanana shrine):- A great temple of Lord Hanuman ji is here, built in 1971.
 It is located 4 Kms far from village 17 BB on Ganganagar-Padampur road.

 Suratgarh Thermal power plant: - It has a thermal power plant of 1250 MW and a PLF of 93%, which has won an award for one of the best operated plants in India.

• Shri Jagadamba Andh-vidhyalaya: - One of the largest institutes of India for education of visually hearing and speech impaired people. It is situated within Ganganagar city.

• Anoopgarh fort: - It is in ruin form in city of Anoopgarh. It was built by Anoop Singh Rathore.

Suratgarh – Jaitsar State Agriculture Farm

Bikaner District:-

Junagarh Fort: The fort was built by Raja Rai Singh, the sixth ruler of Bikaner who reigned from 1571 to 1612. Rai Singh had conquered part of Marwar and had been granted territory in Gujarat and Burhanpur by the Mughal emperor Akbar as a reward for his services as military commander.

Laxmi Niwas Palace: The style of architecture is Indo-Saracenic. It is now a luxury hotel owned by golden Triangle Fort & Palace P. Ltd. The magnificent structure in red sandstone is one of the most popular destinations for tourists in Bikaner.

Lalgarh Palace: The building features magnificent pillars, elaborate fireplaces, Italian colonnades and intricate latticework and filigree work. The palace houses the Shri Sadul Museum as well as the fourth largest library in the world. Though the Bikaner Royal Family still lives in the palace, part of the building has been converted into a Heritage hotel operated by the Royal family of Bikaner.

Moolnayakji: Constructed in 1486, Moolnayakji was the first Vaishnav Temple built in Bikaner. It was the principal seat of the Vaishanv sect. The presiding deity is Lord Moolnayak Krishna.

Laxmi Nath Temple: Laxmi Nath Temple is one of the oldest temples in Bikaner. The Foundation of the city was laid here in 1488 by Rao Bikaji. The temple was erected during the reign of Rao Lunkaran and was added to by Maharaja Ganga Singh.

Bhandasar Jain Temple: Out of the 27 beautiful Jain Temples adorning the landscape of Bikaner city, this temple dedicated to 5th Tirthankar Lord Sumatinath is considered to be the most beautiful and also the highest. This temple was built by a Jain merchant Bhanda Shah. The foundation of this temple was filled by pure ghee and dry coconuts. This temple is mainly famous for wall paintings and usta

art. The temple is built of red sandstone and is divided in three floors. One can see the skyline of Bikaner by climbing to the topmost floor of this temple.

Other famous Jain Temples

There are total 27 Jain temples in Bikaner. Followings is the list of most revered and some of the oldest Jain temples of the city.

- 1. Sri Adishwar ji- dedicated to 1st Tirthankar Lord Rishabhdev
- 2. Sri Chintamani Ji- dedicated to 1st Tirthankar Lord Rishabhdev. Boasts of more than 1500 sacred jain idols which Maharaja of Bikaner secured from the hands of insane Muslim chiefs.
- 3. Sri Baido ka Mahavir ji dedicated to 24th and last Tirthankar Lord Mahavira
- 4. Sri Naminath Ji dedicated to 21st Trithankar Lord Naminath. It is situated inside the campus of Laxminath temple. Thus, it a testimony to the cordial relations between the two main communities of Bikaner Jains & Hindus. Consists of good wall paintings.

Kolayat: Kolayat is a famous pilgrimage spot with a temple dedicated to Kapil Muni who, according to his devotees, sat in meditation near the lake. One week before Pushkar Festival and till one week later this lake is more interesting if you like to see Sadhus. Pushkar will have some Sadhus but Kolayat will have many hundreds.

Karni Mata Temple: The world famous shrine of Karni Mata can found in the town of Deshnoke 30 Km south from Bikaner on the road to Jodhpur. Karni Mata is worshiped as an incarnation of Goddess Durga. This Temple is famous for rats which can be seen everywhere in the temple.

Shiv Bari Temple: Built from red sandstone by Dungar Singh in the late 19^{th} century, the temple is surrounded by a wall with battlements. It has a four faced black marble statue of Shiva and a bronze Nandi facing the Shiva Lingam. There are also two large reservoirs of water known as bawaris. The Temple attracts thousands of visitors during Shravan (August) especially on Mondays.

Other attractions

- Camel Farm
- Sur Sagar
- Public Park and Zoo
- Raj Ratan Bihariand Rasik Siromani Temple
- Lakshminath Temple
- Bhandasar Jain Temple
- Vaidehi Global Trust
- Vaishno Dham
- Ganga Golden Jubilee Museum
- Rajasthan State Archives
- Rampuria Havelis
- Ratan Bihari Temple
- Historical Gopi Nath Temple, Opp. Government Press
- Devi Kund Sagar.
- Gainer Wildlife Sanctuary.
- Kolavat
- MUKAM Nokha
- Deshnok Goddess Karni Temple.
- Doda thora

4.5 Road Inventory

An inventory of the project road has been carried out by visual observations supplemented with sample measurements using tape etc. Kilometer wise features like terrain, land-use, surfacing type and width, shoulder, subgrade, local soil type, curve details, inter sectional detail, retaining structures details, location of water bodies, height of embankment or depth of cut, ROW, CD structures,

roadside arboriculture, existing utility services, general drain conditions etc were recorded. The road inventory has been referred to the existing Km posts established along the road side.

1. Site

The Site of Two-Lanning the Project Highway comprises the section of National Highway 15 commencing from Km 553.869 of NH-11 to Km 173.000 of NH-15 via Km 10.630 of NH-15 i.e. Bikaner to

Suratgarh section in the State of Rajasthan. The land, carriageway and structures comprising the Site are described below.

2. Land

The Site of the Project Highway comprises the land described below:

SI No.	Existing Chainage		Length	Width	Remark
×	From	То			
1	553/869 (NH-11)	10/630 (NH-15)	9845	45	
2	10/630 (NH-15)	70/700 (NH-15)	60070	45	742
3	70/700 (NH-15)	71/300 (NH-15)	600	45	
4	71/300 (NH-15)	71/600 (NH-15)	300	22	Loonkaransar Urban Settlement
5	71/600 (NH-15)	71/800 (NH-15)	200	45	
6	71/800 (NH-15)	173/000 (NH-15)	101200	45	

3. Major Bridges

The Site includes the following Major Bridges:

S. No Existing		Type of structure		Span.	Width of
	Chainage	Super Structure	Sub-Structure	Arrangement (Nos. x Length of spans)	Carriageway Between Kerbs(m)
1	157 + 631	RCC T Beam	Brick Masonry	7 x 9.7	8.8
2	163 + 101	RCC T Beam	Brick Masonry	6 x 12.2	8.9

4. Railway Over Bridges/ Level crossing

One existing level crossing at km 45+957 (Bikaner - Suratgarh railway section)

5. Grade Separators

Nil

6. Minor Bridges

The Site includes the following Minor Bridges:

Type of structure

S. Existing		Type of s	tructure	Span.	Width of
No	Chainage	Super Structure	Sub- Structure	Arrangement (Nos. x Length of spans)	Carriageway Between Kerbs(m)
all a	0 +500 on Bikaner Bypass	RCC Solid Slab	RCC	1 x 6.7	8.5
2	60 + 308	RCC Solid Slab	Brick Masonry	3 x 5.35	9.0
3	80 + 265	RCC Solid Slab	Brick Masonry	3 x 7.8	8.7
4	92 + 661	RCC Solid Slab	Brick Masonry	3 x 11	8.5
5	107 + 050	RCC Solid Slab	Brick Masonry	3 x 5.4	8.5
6	109 + 500	RCC Solid Slab	Brick Masonry	3 x 5.0	8.5

7. Total number of structures

The total numbers of structures on the Site are noted below:

No. of Major Bridges (a)

2 Nil/1

(b) No. of Railway Over Bridges/Level crossing

No. of Grade Separators (c)

(d)	No of Minor Bridges	6 Nos.
(e)	No. of Vehicular and Non-Vehicular Underpasses	Nil
(f)	No. of Box Culverts	Nil
(g)	No. of Pipe Culverts	6 Nos.
(h)	Syphon pipe	55 Nos.
(i)	No. of RCC Slab Culverts	² 5 Nos.
(j)	No of sub minor irrigation Canal	18 Nos.
(k)	No of Brick Arch Culvert	Nil

8. Bus bays and Truck Lay byes

Nil

9. Permanent Bridge of Tunnel costing Rs. 50 crore or more

Nil

10. Existing Bypass

S.No.	Name of Township	Existing Cha	Existing Chainage (In Km)	
		From	То	
1	Bikaner	553.869 of NH-11	10/630 of NH-15	9.845

11. Existing and Proposed Chainage along the project is as follows:

Existing Chainage (In Km)	Design Chainage (In Km)	Remark
9.845=(553.869 of NH-11)	0.000 of NH-15	Bikaner Bypass
9.000	0.845	Bikaner Bypass
8.000	1.852	Bikaner Bypass
7.000	2.856	Bikaner Bypass
6.000	3.856	Bikaner Bypass
5.000	4.855	Bikaner Bypass
4.000	5.855	Bikaner Bypass
3.000	6.854	Bikaner Bypass
2.000	7.856	Bikaner Bypass
1.000	8.853	Bikaner Bypass
0=10.630	9.845	Bikaner Bypass
11.000	10.216	Bikaner
12.000	11.227	Bikaner
13.000	12.230	Bikaner
14.000	13.242	Bikaner
15.000	14.240	Bikaner
16.000	15.244	Bikaner
17.000	16.277	Bikaner
18.000	17.230	Khara
19.000	18.247	Khara
20.000	19.238	Khara
21.000	20.238	Khara
22.000	21.234	Khara
23.000	22.234	Khara
24.000	23.259	Khara
25.000	24.239	Khara
26.000	25.243	Khara
27.000	26.245	Jamsar
28.000	27.237	Jamsar

29.000	28.241	Jamsar
30.000	29.244	Jamsar
31.000	30.241	Jamsar
32.000	31.240	Jamsar
33.000	32.243	Jamsar
34.000	33.240	Jamsar
35.000	34.238	Jamsar
36.000	35.239	Kasturiya
37.000	36:239	Kasturiya
38.000	37.238	Kasturiya
39.000	38.238	Kasturiya
40.000	39.266	Kasturiya
41.000	40.240	Bamanwali
42.000	41.261	Bamanwali
43.000	42.236	Bamanwali
44.000	43.235	Bamanwali
45.000	44.224	Bamanwali
46.000	45.227	Bamanwali
47.000	46.226	Bamanwali
48.000	47.228	Bamanwali
49.000	48.226	Dherera
50.000	49.227	Dherera
	50.227	Dherera
51.000	51.182	Dherera
52.000	52.176	Dherera
53.000	53.180	Dherera
54.000	54.185	Dherera
55.000	55.176	Dulmera
56.000	56.512	Dulmera
57.000	57.519	Dulmera
58.000		Dulmera
59.000	58.516	Hansera
60.000	59.518	
61.000	60.597	Hansera
62.000	61.584	Hansera
63.000	62.676	Hansera
64.000	63.692	Hansera
65.000	64.522	Hansera
66.000	65.640	Loonkaransar
67.000	66.519	Loonkaransar
68.000	67.506	Loonkaransar
69.000	68.510	Loonkaransar
70.000	69.514	Loonkaransar
71.000	70.513	Loonkaransar
72.000	71.515	Loonkaransar
73.000	72.514	Loonkaransar
74.000	73.590	Loonkaransar
75.000	74.528	Loonkaransar
76.000	75.526	Loonkaransar
77.000	76.519	Loonkaransar
78.000	77.530	Loonkaransar
79.000	78.530	Loonkaransar
80.000	79.533	Loonkaransar

81.000	80.526	Loonkaransar
82.000	81.533	Bhadhera
83.000	82.497	Bhadhera
84.000	83.524	Bhadhera
85.000	84.537	Bhadhera
86.000	85.566	Bhadhera
87.000	86.565	Bhadhera
88.000	87.539	Bhadhera
89.000	88.539	Malkisar
90.000	89.572	Malkisar
91.000	90.618	Malkisar
92.000	91.567	Malkisar
93.000	92.543	Malkisar
94.000	93.549	Malkisar
95.000	94.546	Malkisar
96.000	95.576	Malkisar
97.000	96.559	Malkisar
98.000	97.556	Malkisar
99.000	98.559	Malkisar
100.000	99.610	Malkisar
101.000	100.599	Mahajan
102.000	101.580	Mahajan
103.000	102.608	Mahajan
104.000	103.604	Mahajan
105.000	103.564	Mahajan
106.000	105.660	Mahajan
107.000	106.478	Mahajan
	107.489	Mahajan
108.000	108.449	Mahajan
109.000	109.585	Mahajan
110.000	110.432	Mahajan
111.000	111.431	Mahajan
112.000	112.619	Mahajan
113.000		Mahajan
114.000	113.622 114.618	Mahajan
115.000		Mahajan
116.000	115.614	
117.000	116.564	Arjunsar
118.000	117.653	Arjunsar
119.000	118.635	Arjunsar
120.000	119.503	Arjunsar
121.000	120.410	Arjunsar
122.000	121.445	Arjunsar
123.000	122.403	Arjunsar
124.000	123.406	Arjunsar
125.000	124.417	Arjunsar
126.000	125.391	Rajiasar
127.000	126.412	Rajiasar
128.000	127.419	Rajiasar
129.000	128.410	Rajiasar
130.000	129.409	Rajiasar
131.000	130.408	Rajiasar
132.000	131.409	Rajiasar

133.000	132.407	Rajiasar ***
134.000	133.406	Rajiasar
135.000	134.404	Rajiasar
136.000	135.459	Rajiasar
137.000	136.402	Rajiasar
138.000	137.400	Rajiasar
139.000	138.398	Rajiasar
140.000	139.412	Rajiasar
141.000	140.395	Rajiasar
142.000	141.396	Rajiasar
143.000	142.396	Rajiasar
144.000	143.397	Hindore
145.000	144.400	Hindore
146.000	145.398	Hindore
147.000	146.399	Hindore
148.000	147.405	Hindore
149.000	148.403	Hindore
150.000	149.404	Hindore
151.000	150.402	Birdhwal
152.000	151.393	Birdhwal
153.000	152.406	Birdhwal
154.000	153.444	Birdhwal
155.000	154.392	Birdhwal
156.000	155.402	Birdhwal
157.000	156.403	Birdhwal
158.000	157.415	Piparan
159.000	158.400	Piparan
160.000	159.407	Piparan
161.000	160.399	Piparan
162.000	161.396	Piparan
163.000	162.390	Piparan
164.000	163.393	Piparan
165.000	164.395	Piparan
166.000	165.390	Piparan
167.000	166.339	Suratgarh
168.000	167.362	Suratgarh
169.000	168.387	Suratgarh
170.000	169.385	Suratgarh
171.000	170.408	Suratgarh
172.000	171.382	Suratgarh
173.000	172.384	Suratgarh

12. Width of Carriageway

The Width of Carriageway shall be provided as per IRC: SP: 73-2007 "Manual of Standards and Specifications for two-laning of highways on BOT basis. Therefore, different types of cross-section need to be developed in different segment of the project length provided that the following sections

of the project highway where carriageway width (excluding median width), shall be provided not less than as described below:

S.No	Name of	Design Cl	nain age	Carriageway Width (m)	
	Township	From (Km)	To (Km)		
1	Khara	19.638	21.138	12.00	
2	Jamsar	26.745	27.337	12.00	
3	Bamanwali	44.035	44.724	12.00	
4	Bamanwali	44.781	45.581	10.50	
5	Dulmera	56.512	57.062	12.00	
6	Hansera	58.716	59.718	12.00	
7	Loonkaransar	70.014	72.015	17.50 (Four Lane)	
8	Malkisar	92.317	92.793	12.00	
9	Mahajan	107.589	108.649	12.00	
10	Arjunsar	124.617	124.667	12.00	
11	Arjunsar	124.667	125.167	12.00 (Rigid pavement)	
12	Arj⊍nsar	125.167	125.391	12.00	
13	Rajiasar	139.912	140.895	12.00	
14	Piparan	160.207	160.899	12.00	
15	Suratgarh	170.048	172.384	17.50 (Four Lane)	

13. Project facilities

Project facilities shall be constructed in conformity with Concession Agreement.

14. Specifications and Standards

The Project Highway shall be constructed in conformity with the Specifications and Standards specified in Manual of Standards and specifications of Two lane Highway.

15. Other Features of Two-Laning

15.1 Sections requiring footpath and lined Drains

At following towns/built-up areas, footpath and lined drains shall be provided as per Manual

S. No.	Name of the Village / Town	Existing Chainage (In Km)	Design Chainage (In Km)	Length (In Km)
1	Loonkaransar	70.500 – 72.500	70.014 – 72.015	2.001
2	Suratgarh	171.000 - 173.000	170.408 – 172.384	1.976

15.2 Curves requiring improvement

Subject to provision of land by the Authority, all curves shall be improved by the Concessionaire for

achieving the Ruling design speed as per manual.

15.3 Sections requiring raising of embankment

The embankment in following sections shall be raised as per manual.

S. No.	Existing Cha	inage (In Km)	Design Chai	nage (In Km)
	From	То	From	То
1	70.500	. 72.500	70.014	72.015

15.4 Bypass

S.No.	Name of Township	Existing Chain	age (In Km)	Design Chainage (In Km)		Length (In Km)
		From	То	From	To	
1	Bikaner	553.869 of NH-11	10.630 of NH-15	0.000	9.845	9.845

15.5 Realignments

Nil

15.6 A. Reconstruction of existing major bridges as new Structure*

The following major bridge shall be constructed as per Manual

S.No.	Existing Chainage (In Km)	Design Chainage (In Km)	Type	Side	Proposed span arrangement (m)	Proposed overall Width (m)
1	163+101	162+491	Major bridge Ghagghar River	Right side	3 x 24.4	14.80

^{*}The required ROW was not available on approved location on RHS. Hence, realignment of the bridge on LHS was done. The IE vide letter no. ICT:687:TPV;1145 dated 03.02.2015 requested the Authority for according 'Approval in principle' for shifting the New bridge on LHS and reduction in overall deck width from 14.8 mtr to 12.00 mtr and accordingly the said construction is in progress.

B. Widening of Existing Major Bridges

NIL

C. Repair/strengthening of major bridges

The following major bridges shall be repaired or strengthened as per Manual

S/	Name of	ne of Existing Design Width Span		Type of Structure				
No '	Bridge	Chainage (In Km)	Chainage (In Km)	(m)	arrangement (nos x Length (m))	Found ation	Substructu re	Superstr ucture
1	Indra Gandhi Canal Bridge	157+631	157+067	8.8	7 × 9.7= 67.9	Open	Brick Masonry	RCC T Beam

^{*}The concessionaire noted the condition of existing bridge is poor and unsatisfactory and beyond repair/ rehabilitation. In view of above, the concessionaire found the reconstruction of the bridge as new structure imperative for providing safer services to the users and accordingly notified the Authhority vide letter no. SBTRCPL/2014/1123 dated 16.08.2014 for approving reconstruction of new bridge under change of scope as per Article 16 of the CA. The IE has recommended to the Authority

for reconstruction of this Bridge under change of scope. A change of scope order has been issued by the Authority in this regard

15.7 A. Re-construction of Existing Minor Bridges as new Structure*

The following minor bridges shall be constructed as per Manual

S.No.	Existing Chainage (In Km)	Design Chainage (In Km)	Type	Side	Proposed span arrangement (m)	Proposed overall Width (m)
1	107+050	106+530	Canal	Right	1 x 16.2(skew)	12.9

^{*}Considering delay and uncertainty in availability of canal closure which was essential for the purpose of carrying out reconstruction work and in view of the sound and satisfactory condition of the existing Minor Bridge, IE vide letter no ICT/687/TPV/2118 dated 05.03.2015 had recommended retention of minor bridge with repair and rehabilitation. However, MoRTH did not agree to the same

and the minor bridge construction is now being undertaken.

B. Widening & Rehabilitation of Existing Minor Bridges NIL

C. Repair/strengthening of minor bridges

The following minor bridges shall be repaired or strengthened as per Manual

S.No	Existing	Design	Widt	Span		Type of Structu	ure
	Chainag	Chainag e (In	h (m)	arrangemen t (nos x	Foundatio n	Substructur e	Superstructur e
	e (In Km)	e (In Km)		Length (m)]			C
1	0+500 on Bikaner Bypass	9+353	8.5	1 x 6.7	Open	RCC	RCC Solid Slab
2	60+308	59+859	9.0	3 x 5.35	Open	Brick Masonry	RCC Solid Slab
3	80+265	79+832	8.7	3 x 7.8	Open	Brick Masonry	RCC Solid Slab
4	92+661	92+261	8.5	3 x 11	Open	Brick Masonry	RCC Solid Slab
5	109+500	108+980	8.5	3 x 5.0	Open	Brick Masonry	RCC Solid Slab

15.8 (A) Reconstruction of Culverts

The following culverts shall be reconstructed as per Manual

Sr. No.	Existing Chainage (In Km)	Design Chainage (In Km)	Type of Culvert
1	141+500	140+896	Pipe

(B) Widening of Culverts

The following culverts shall be widened as per Manual

Sr. No.	Existing Chainage (In Km)	Design Chainage (In Km)	Type of Culvert	Remark
1	5+845 on Bikaner Bypass	3+994	Pipe	Syphon
2	4+000 on Bikaner Bypass	5+846	Pipe	Syphon
3	3+680 on Bikaner Bypass	6+174	Pipe	Syphon
4	3+350 on Bikaner Bypass	6+515	Pipe	Syphon
5	23+050	22+316	Slab	Canal crossing
6	31+800	31+062	Pipe	Syphon
7	71+937	71+486	Pipe	Culvert
8	72+272	71+821	Pipe	Culvert
9	86+250	85+910	Slab	Canal crossing
10	89+200	88+726	Slab	Canal crossing
11	107+100	106+646	Pipe	Syphon
12	123+480	122+886	Slab	Canal crossing
13	133+300	132+740	Pipe	Syphon
14	165+700	165+129	Slab	Culvert
15	166+150	165+574	Slab	Culvert

(C) Rehabilitation of Culverts

Sr. No.	Existing Chainage (In Km)	Design Chainage (In Km)	Type of structure	Remark
1	9+400 on Bikaner Bypass	0+445	Pipe	Syphon
2	8+850 on Bikaner Bypass	0+996	Pipe	Syphon
3	8+300 on Bikaner Bypass	1+550	Pipe	Syphon
4	8+100 on Bikaner Bypass	1+751	Pipe	Syphon
5	7+300 on Bikaner Bypass	2+555	Pipe	Syphon
6	7+200 on Bikaner Bypass	2+655	Pipe	Syphon
7	6+940 on Bikaner Bypass	2+916	Pipe	Syphon
8	6+350 on Bikaner Bypass	3+506	Pipe	Syphon
9	5+825 on Bikaner Bypass	4+031	Pipe	Syphon
10	5+250 on Bikaner Bypass	4+605	Pipe	Syphon
11	4+650 on Bikaner Bypass	5+205	Pipe	Syphon
12	2+750 on Bikaner Bypass	7+105	Pipe	Syphon
13	1+495 on Bikaner Bypass	8+359	Pipe	Syphon
14	1+300 on Bikaner Bypass	8+554	Pipe	Syphon
15	10+700	9+871	Pipe	Syphon
16	11+829	11+054	Pipe	Syphon
17	12+300	11+528	Pipe	Syphon
18	13+400	12+635	Pipe	Syphon
19	14+950	14+191	Pipe	Syphon
20	15+300	14+542	Pipe	Syphon
21	15+600	14+843	Pipe	Syphon
22	23+370	22+614	Pipe	Syphon
23	23+700	22+952	Slab	Sub minor
				irrigation canal
24	29+100	28+342	Pipe	Syphon
25	34+650	33+889	Pipe	Syphon
26	36+130	35+739	Pipe	Syphon
27	36+160	35+399	Slab	Sub minor irrigation canal
28	36+500	35+369	Pipe	Syphon
29	37+050	36+289	Pipe	Syphon
30	37+600	36+839	Pipe	Syphon
31	37+900	37+139	Slab	Sub minor irrigation canal
32	38+700	37+938	Slab	Sub minor irrigation canal
33	39+300	38+547	Pipe	Syphon
34	41+030	40+271	Pipe	Syphon
35	41+250	40+496	Pipe	Syphon
36	44+500	43+73	Slab	Culvert
37	54+380	53+562	Pipe	Culvert
38	75+100	74+628	Slab	Sub minor irrigation canal
39	76+550	76+073	Pipe	Syphon
40	77+200	76+722	Slab	Sub minor
40	// 7200	701722	JIGD	irrigation canal
41	771 720	77+257	Slab	Sub minor
41	77+730			irrigation canal
42	78+873	78+403	Slab	Sub minor irrigation canal
43	79+430	78+962	Pipe	Syphon

44	80+030	79+563	Slab	Sub minor irrigation canal
45	80+900	80+427	Slab	Sub minor irrigation canal
46	81+700	81+231	Slab	Sub minor irrigation canal
47	82+060	81+591	Pipe	Culvert
48	82+200	81+726	Pipe	Culvert
49	82+500	82+015	Slab	Sub minor irrigation canal
50	83+500	83+011	Pipe	Syphon
51	86+900	86+466	Slab	Sub minor irrigation canal
52	91+050	90+666	Pipe	Syphon
53	91+870	91+444	Slab	Sub minor irrigation canal
54	99+030	98+591	Pipe	Syphon
55	114+950	114+568	Pipe	Syphon
56	125+850	125+245	Pipe	Syphon
57	128+990	128+400	Pipe	Syphon
58	131+100	130+508	Pipe	Syphon
59	132+420	131+828	Pipe	Syphon
60	134+850	134+254	Pipe	Syphon
61	135+900	135+354	Pipe	Syphon
62	139+350	138+753	Pipe	Syphon
63	139+430	138+834	Pipe	Syphon
64	156+400	155+802	Pipe	Syphon
65	157+400	156+808	Pipe	Syphon
66	158+300	157+711	Pipe	Syphon
67	171+070	170+476	Slab	Culvert
68	171+950	171+333	Slab	Culvert

(D) New construction of Culverts

The following culverts shall be constructed as per Manual

Sr. No.	Existing Chainage (In Km)	Design Chainage (In Km)	Proposed Structure	Proposed span arrangement (nos. x dia (m))
1	0+328 on Bikaner	9+250	Pipe	1 x 1.2
	Bypass	- 8		
2	48+931	48+160	Pipe	1 x 1.2
3	56+865	56+040	Pipe	1 x 1.2
4	71+566	71+080	Pipe	1 x 1.2
5	71+742	71+257	Pipe	1 x 12
6	72+122	71+637	Pipe	1 x 1.2
7	102+284	101+860	Pipe	1 x 1.2
8	103+310	102+920	Pipe	1 x 1.2
9	106+564	106+240	Pipe	1 x 1.2
10	108+931	108+340	Pipe	1 x 1.2
11	125+460	124+880	Pipe	1 x 1.2
12	125+619	125+040	Pipe	1 x 1.2
13	138+000	137+400	Pipe	1 x 1.2
14	144+543	143+940	Pipe	1 x 1.2
15	163+392	162+780	Pipe	1 x 1.2
16	164+728	164+120	Pipe	1 x 1.2
17	169+970	169+380	Pipe	1 x 1.2

15.9 New ROB's

New ROB shall be constructed at following level crossings.

SI.	Existing	Design	Span Arro	ıngement	Length (m)	Total	
No.	Chainage (In Km)	Chainage (In Km)	No. of Spans	Length of Span		width with Footpaths	Solid Fill Approaches
			1	15			RE
1	45+957	45+181	1	30	43.2+Railway	14.8	Wall/RCC
			1	13.2	Span		Retaining
l)			1	15			Wall

^{*}GAD drawings have been approved. Now the work is in progress.

15.10 New Grade Separator

Nil

15.11 New VUP

Nil

15.12 New Cattle Passes

New Cattle under pass as per Manual shall be constructed at following locations.

S.No.	Existing Chainage (In Km)	Design Chainage (In Km)	Minimum Size (M)
1	48.931	48.158	7×5.5
2	143.464	142.858	7x5.5

15.13 Details of Service Roads

Service Road as per Manual shall be constructed at following locations.

S.No.	Existing Ch Km)	ainage (In	Design Ch (In Km)	ainage	Length (Km)	Width (m)	Side	C/s Type
	From	То	From	То				
1	70.500	72.500	70.014	72.015	2.001	7.0	Both	TCS-6
2	171.000	173.000	170.408	172.384	1.976	7.0	Both	TCS-6

15.14 Details of Proposed ROW

S.No.	Proposed Chainage		Proposed Chainage Length (In m)	
	From (Km)	To (Km)		m)
1	0+000	9+845	9.845	45
2	9+845	70+813	60.968	45
3	70+813	71+113	0.300	45
4	71+113	172+384	101.271	45

Appendix-I

	Existi	ng Km		oosed Km	Length (Km)	TCS Type
S.N	From	То	From	То	8	
0.	0.045 of Dilement	3.400 of Bikaner	0.000	6.454	6.454	TCS-1
1	9.845 of Bikaner	Bypass	0.000	0.454	0.454	1001
2	Bypass 3.400 of Bikaner	3.300 of Bikaner	6.454	6.554	0.100	TCS-2
2	Bypass	Bypass	0.404	0.004	0.100	1.002
3	3.300 of Bikaner	2.206 of Bikaner	6.554	7.650	1.096	TCS-1
3	Bypass	Bypass	0.00			
4	2.206 of Bikaner	2.000 of Bikaner	7.650	7.856	0.206	TCS-2
7	Bypass	Bypass				
5	2.000 of Bikaner	0.845 of Bikaner	7.856	9.000	1.144	TCS-1
•	Bypass	Bypass				
6	0.845 of Bikaner	0/10.630 of NH-15	9.000	9.845	0.845	TCS-2
	Bypass					
7	0/10.630 of NH-15	13.070 of NH-15	9.845	12.300	2.455	TCS-1
8	13.070 of NH-15	13.270 of NH-15	12.300	12.500	0.200	TCS-2
9	13.270 of NH-15	14.508 of NH-15	12.500	13.750	1.250	TCS-1
10	14.508 of NH-15	14.708 of NH-15	13.750	13.950	0.200	TCS-2
11	14.708 of NH-15	20.400 of NH-15	13.950	19.638	5.688	TCS-1
12	20.400 of NH-15	20.612 of NH-15	19.638	19.850	0.212	TCS-3
13	20.612 of NH-15	20.912 of NH-15	19.850	20.150	0.300	TCS-4
14	20.912 of NH-15	21.262 of NH-15	20.150	20.500	0.350	TCS-3
15	21.262 of NH-15	21.462 of NH-15	20.500	20.700	0.200	TCS-4
16	21.462 of NH-15	21.900 of NH-15	20.700	21.138	0.438	TCS-3
17	21.900 of NH-15	27.500 of NH-15	21.138	26.745	5.607	TCS-1
18	27.500 of NH-15	28.100 of NH-15	26.745	27.337	0.592	TCS-3
19	28.100 of NH-15	28.263 of NH-15	27.337	27.500	0.163	TCS-1
20	28.263 of NH-15	28.513 of NH-15	27.500	27.750	0.250	TCS-2
21	28.513 of NH-15	44.000 of NH-15	27.750	43.235	15.485	TCS-1
22	44.000 of NH-15	44.300 of NH-15	43.235	43.535	0.300	TCS-2
23	44.300 of NH-15	44.800 of NH-15	43.535	44.035	0.500	TCS-1
24	44.800 of NH-15	45.500 of NH-15	44.035	44.724	0.689	TCS-3
25	45.500 of NH-15	45.558 of NH-15	44.724	44.781	0.057	TCS-1
26	45.558 of NH-15	46.354 of NH-15	44.781	45.581	0.800	TCS-8
27	46.354 of NH-15	49.574 of NH-15	45.581	48.800	3.219	TCS-1
28	49.574 of NH-15	49.774 of NH-15	48.800	49.000	0.200	TCS-2
29	49.774 of NH-15	52.468 of NH-15	49.000	51.650	2.650	TCS-1
30	52.468 of NH-15	52.668 of NH-15	51.650	51.850	0.200	TCS-2
31	52.668 of NH-15	57.000 of NH-15	51.850	56.512	4.662	TCS-1
32	57.000 of NH-15	57.550 of NH-15	56.512	57.062	0.550	TCS-3
33	57.550 of NH-15	59.200 of NH-15	57.062	58.716	1.654	TCS-1
34	59.200 of NH-15	60.200 of NH-15	58.716	59.718	1.002	TCS-3

25	60.200 of NH-15	70.500 of NH-15	59.718	70.014	10.296	TCS-1
35	70.500 of NH-15	71.300 of NH-15	70.014	70.813	0.799	TCS-6
36 37		71.600 of NH-15	70.813	71.113	0.300	TCS-6
	71.300 of NH-15	72.500 of NH-15	71.113	72.015	0.902	TCS-6
38	71.600 of NH-15		72.015	72.650	0.635	TCS-1
39	72.500 of NH-15	73.136 of NH-15	72.650	72.900	0.250	TCS-2
40	73.136 of NH-15	73.386 of NH-15	72.830	73.200	0.300	TCS-1
41	73.386 of NH-15	73.686 of NH-15		73.200	0.150	TCS-2
42	73.686 of NH-15	73.836 of NH-15	73.200			TCS-1
43	73.836 of NH-15	92.283 of NH-15	73.350	91.850	18.500	TCS-2
44	92.283 of NH-15	92.483 of NH-15	91.850	92.050	0.200	
45	92.483 of NH-15	92.750 of NH-15	92.050	92.317	0.267	TCS-1
46	92.750 of NH-15	93.250 of NH-15	92.317	92.793	0.476	TCS-3
47	93.250 of NH-15	98.524 of NH-15	92.793	98.080	5.287	TCS-1
48	98.524 of NH-15	98.744 of NH-15	98.080	98.300	0.220	TCS-2
49	98.744 of NH-15	104.596 of NH-15	98.300	104.200	5.900	TCS-1
50	104.596 of NH-15	104.796 of NH-15	104.200	104.400	0.200	TCS-2
51	104.796 of NH-15	106.140 of NH-15	104.400	105.800	1.400	TCS-1
52	106.140 of NH-15	106.290 of NH-15	105.800	105.950	0.150	TCS-2
53	106.290 of NH-15	106.740 of NH-15	105.950	106.400	0.450	TCS-1
54	106.740 of NH-15	107.222 of NH-15	106.400	106.700	0.300	TCS-2
55	107.222 of NH-15	107.892 of NH-15	106.700	107.370	0.670	TCS-1
56	107.892 of NH-15	108.100 of NH-15	107.370	107.589	0.219	TCS-2
57	108.100 of NH-15	109.200 of NH-15	107.589	108.649	1.060	TCS-3
58	109.200 of NH-15	125.200 of NH-15	108.649	124.617	15.968	TCS-1
59	125.200 of NH-15	125.250 of NH-15	124.617	124.667	0.050	TCS-3
60	125.250 of NH-15	125.750 of NH-15	124.667	125.167	0.500	TCS-5
61	125.750 of NH-15	126.000 of NH-15	125.167	125.391	0.224	TCS-3
62	126.000 of NH-15	140.500 of NH-15	125.391	139.912	14.521	TCS-1
63	140.500 of NH-15	141.500 of NH-15	139,912	140.895	0.983	TCS-3
64	141.500 of NH-15	160.118 of NH-15	140.895	159.525	18.630	TCS-1
65	160.118 of NH-15	160.443 of NH-15	159.525	159.850	0.325	TCS-2
66	160.443 of NH-15	160.800 of NH-15	159.850	160.207	0.357	TCS-1
67	160.800 of NH-15	161.500 of NH-15	160.207	160.899	0.692	TCS-3
68	161.500 of NH-15	161.551 of NH-15	160.899	160.950	0.051	TCS-1
69	161.551 of NH-15	161.801 of NH-15	160.950	161.200	0.250	TCS-2
70	161.801 of NH-15	162.804 of NH-15	161.200	162.200	1.000	TCS-1
71	162.804 of NH-15	163.610 of NH-15	162.200	163.000	0.800	TCS-2
72	163.610 of NH-15	164.407 of NH-15	163.000	163.800	0.800	TCS-1
73	164.407 of NH-15	164.607 of NH-15	163.800	164.000	0.200	TCS-2
74	164.607 of NH-15	167.711 of NH-15	164.000	167.050	3.050	TCS-1
75	167.711 of NH-15	167.961 of NH-15	167.050	167.300	0.250	TCS-2
76	167.961 of NH-15	168.638 of NH-15	167.300	168.000	0.700	TCS-1
77	168.638 of NH-15	168.838 of NH-15	168.000	168.200	0.200	TCS-2
78	168.838 of NH-15	171.000 of NH-15	168.200	170.408	2.208	TCS-1
79	171.000 of NH-15	173.000 of NH-15	170.408	172.384	1.976	TCS-6

4.6 Project Facilities

The Concessionaire shall construct the following Project Facilities to form part of the Two-Lane Project Highway. The Project Facilities shall include:

- a) toll plazas;
- b) roadside furniture;
- c) street lighting;
- d) pedestrian facilities;
- e) landscaping and tree plantation
- f) rest areas;
- g) truck lay-bys;
- h) bus-bays and bus shelters;
- i) Cattle Crossing
- j) traffic aid posts;
- k) medical aid posts;
- vehicle rescue posts;
- m) telecom system

(a) Description of Project Facilities

Each of the Project Facilities shall be constructed in accordance with the Manual of Standards and Specifications for construction of the two-lane project highway.

The location of Toll plazas are as under:

S.No.	Location of Toll Plaza (Proposed Km)	
1	24.439 - 25.039	
2	83.725 – 84.325	
3	144.100 - 144.700	

(b) Road side Furniture

Road side furniture shall be provided in accordance with section-11 of the Two Lane Manual of Standards and Specifications.

(c) Street Lighting

Street lighting and lighting system shall be provided in accordance with clause 13.3 of section-13 of the Two Lane Manual of Standards and Specifications.

(d) Pedestrian Facilities

Pedestrian crossing Facilities shall; be provided in accordance with clause 13.2 of section-13 of the Two Lane Manual of Standards and Specifications.

(e) Landscaping and Tree Plantation

Highway landscaping and tree plantation shall be provided in accordance with section-12 of the Two Lane Manual of Standards and Specifications.

(f) Rest areas

Rest areas shall be provided in accordance with clause 13.4.3 of section-13 of the Manual of Standards and Specifications

S.No.	Proposed Chainage	Side
1	64.810 - 65.035	Right

(g) Truck Lay-bys;

3 truck lay-byes shall be provided as shown in Table

S.No.	Proposed Chainage	Side
1	23.559 – 23.959	Right
2	65.450 – 65.850	Left
3	141.196 – 141.596	Right

(h) Bus-bays and Bus Shelter

Bus-bays and Bus Shelter shall be provided at following locations conforming to clause 13.5 of the Two Lane Manual of Standards and Specifications.

S.No.	Location (km)	Side (Left/Right)
1	20.438	Left and Right
2	27.045	Left and Right
3	44.424	Left and Right
4	56.712	Left and Right
5	59.116	Left and Right
6	71.213	Left and Right
7	92.563	Left and Right
8	107.939	Left and Right
9	124.817	Left and Right
10	140.395	Left and Right
11	160.399	Left and Right

(i) Cattle and Pedestrian Crossings

New Cattle under Pass confirming to clause 2.14.3 of the Manual of Standards and specifications of two lane highways shall be constructed at following locations.

S. No	Existing Chain age (km)	Size(M)
11	48.931	7x5.5
2	143.464	7x5.5

(j) Traffic Aid Posts

Traffic Aid Posts shall be provided at the Toll Plazas in accordance with Clause 13.7 of Manual of Standards and Specifications of Two Lane highway.

(k) Medical Aid Posts

Medical aid posts shall be provided at the Toll Plazas in accordance with clause 13.8 of Manual of Standards and Specifications of Two Iane highway.

(I) Vehicle rescue post

NIL

(m) Telecom system

Telecom posts shall be provided at the Toll Plazas locations for convenience of the users of the Project Highway with necessary equipments.

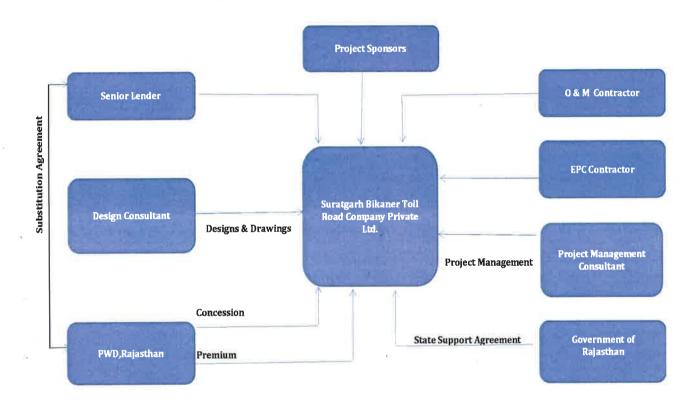
(n) Rainwater Harvesting

As per Ministry of Environment and Forests Notification, New Delhi dated 14.01.1997 (as amended on 13.01.1998, 05.01.1999 & 6.11.2000), the construction of Rain Water Harvesting Structure is mandatory in and around Water Crisis Area, notified by the Central Ground Water Board and the same shall be provided accordingly. – It is not applicable for this project.

Note: In case of any discrepancy in numbers or location of any of the project facilities mentioned above, the Independent Engineer shall finalize the number/location of these facilities as per site requirement.

5.1 Contractual Structure for Project Implementation

The Concessionaire ("SBTRCPL") would enter into contractual arrangements with various project parties to ensure smooth implementation and operation of the project. The contractual structure has been designed taking into account optimum risk allocation among various project parties and compliance with the applicable regulatory requirements. The proposed contractual arrangements for the project are presented below:



5.2 Project Consultants

SBTRCPL has enlisted services of different specialist agencies to provide their expertise on various

aspects of the project implementation and operations. The list of consultants is given below:

List of Parties/ Consultants involved in the Project

Consultant / Constructor	Agency
Concessionaire	Suratgarh Bikaner Toll Road Company Private Ltd
EPC Contractor	MBL Infrastructures Ltd.
Project Design, Engineering & PMC	STI Infrastructures Limited in association with Gifford
Consultant	India (P) Ltd. (Part of Ramboll, United Kingdom)

5.3 EPC Contract

The revised EPC cost of the project is Rs 668.79 crores (Rs 611.83 as per original scope, Rs 25.99 crores as Change of Scope and Rs. 30.97 crores as additional Change in Scope). The cost expended up to Provisional COD was Rs 541.88 crores, the balance cost estimated by the authority was Rs 69.95 crores and Change of Scope was Rs 25.99 crores and Rs. 30.97 crores (application pending with MoRTH) totaling to Rs 668.79 crores.

The additional change of scope works to the extent of Rs. 30.97 crores for which application is already made. This amount will be reimbursed by MoRTH. This work is to be done for the construction of proposed Indira Circle Flyover @ Km 171+100 along with LVUP @ Km 171+ 700 with provision of RE wall in approaches. This work is not going to affect the completion certificate of the Company. The change in scope work shall be funded by the promoters

As on 31st March 2021, the outstanding EPC work is Rs 30.36 crores excluding Change of Scope work.

5.4 Independent Engineer

ICT Private Limited has been appointed as an Independent Engineer (IE) by PWD, Rajasthan w.e.f 30.07.2013 to oversee the activities of the Concessionaire during design, construction, operation and maintenance of the project highway.

As per terms and conditions of CA, Independent Engineer is required to:

- Independently review activities associated with design, construction, operation and maintenance of the project on behalf of both PWD, Rajasthan and the Concessionaire so as to ensure compliance of requirements of CA;
- The Independent Engineer shall submit regular periodic reports to PWD, Rajasthan;
- Assist the parties to the CA in arriving at settlement of disputes, if any.

According to CA, the remuneration, cost and expenses of the I.E. shall be paid by PWD, Rajasthan and **one-half** of such remuneration, cost and expenses shall be reimbursed by the Concessionaire within 15 days of receiving a statement of expenditure from PWD, Rajasthan.

5.5 Permits & Approvals

The Concessionaire (SBTRCPL) has initiated appropriate steps for securing the approvals required to implement the proposed road project. A summary of the permits and approvals is tabulated below:

Status of Approvals

Sanction/Approval	Authority	State	US		Mil.	
Quarrying Permits for	Govt. of Rajasthan	The	EPC	contractor	has	supply

extraction of boulder	**	arrangements from local stone crushers and raw material suppliers. Accordingly no quarry permits for extraction of boulder is required			
Installation of Crusher	Village Panchayat and Pollution Control Board	Same as above			
Drawing water from river/reservoir					
Batching Plant	Inspector of factories and Pollution Control Board	The EPC contractor is using mini mobile batching plant. NOC from village panchayat available.			
Asphalt Plant	Village Panchayat and Pollution Control Board	Available			
Borrow Earth	Village Panchayat and State Government	Available			
Use of Explosives	Govt. of Rajasthan	Not Applicable. The EPC contractor is not undertaking any quarry operations.			
Cutting of Trees	Govt. of Rajasthan	Available			
Environmental protection and conservation	MOEF	Obtained by PWD, Rajasthan			

5.6 Project Insurance

Earlier the Concessionaire was having CAR policy. Since the Provisional COD, the Concessionaire is maintaining Standard FIRE & Special Perils Policy, Workmen Compensation Policy, Business Interruption Policy, Burglary Insurance Policy, Fidelity Guarantee Insurance, Money Insurance, Other Misc. Liability Policy (Third Party Liability).

5.7 Current Status

The project development work is in progress. Detailed monthly progress report is being submitted by the Lenders' Engineer – Credible Management Consultants (P) Ltd. appointed by the Lenders. As per the latest monthly progress report dated 6th July 2021, the balance work to be executed is Rs. 27.77 crores of the original scope and Rs. 15.19 crores of change of scope work.

6 Projected Financial Indications

6.1 Assumptions

Some of the key underlying assumptions are as follows:

Repayment Period & Installments – Project Term Loan	Principal Outstanding of the Project Term Loan as on 31st December 2021 shall be repaid in 93 staggered monthly installments starting from January 2022 to September 2029 to be paid each month
Interest on Project Term Loan	Interest from the date of irregularity with the banks up to 31st December 2021 to be charged as simple interest @ PNB 1-year MCLR + 0.25% spread. This is to be treated as Unsustainable Debt. January 2021 onwards, interest on Project Term Loan interest to be paid monthly @ PNB 1-year MCLR + 0.25% spread
Non-Convertible Debentures	Interest on the Project Term Loan, from the date of irregularity with the banks up to 31st December 2021 to be charged as simple interest @PNB 1-year MCLR + 0.25% spread amounting to Rs. 182.67 crores is to be treated as Unsustainable Debt and is to be converted to Non-Convertible Debentures carrying a coupon of 0.01% p.a.
Redemption of Non-Convertible Debentures	Staggered monthly installments starting from January 2021 to March 2031 to be paid
Non-Convertible Debenture Coupons	January 2022 onwards, coupon payments on NCDs to be paid monthly @ 0.01% p.a.
Inflation Rate	5%
Traffic Growth (from FY 2023 onwards on traffic of FY 2020)	5%
Overload penalty	For FY 21-22 - 2.25 times April, 2022 onwards – 3 times
Assumed Implementation Date	1st January 2022

Average Actual Traffic from 1st April 2019 to 25th March, 2020 (nationwide lockdown imposed from 26th March, 2020):

Tollable Traffic (nos)										
	Km 25	Km 85	Km 145							
Car	1786	1247	1213							
LCV Tractor	83	114	109							
LCV/Minibus	645	417	357							
Bus	176	161	158							
Truck (2 Axle)	301	286	279							
Truck (3 Axle)	428	395	396							
MAV	2001	1855	1746							
Oversized Vehicles	1	1	2							
Total vehicles	5421	4476	4260							
PCUs	14602	12922	12277							

Traffic has been considered as per the average traffic from 1st April, 2019 upto 25th March, 2020 (nationwide lockdown was imposed 26th March onwards). The growth rate of traffic has been considered as 5% from FY 2023 onwards on traffic of FY 2020. Since FY 2021 and FY 2022 have been exceptional years due to various reasons such as 1st wave of Covid-19, Kisan Andolan and 2nd wave of Covid-19. It is also anticipated that there may be a 3rd wave of Covid-19 in FY 2021-22.

Toll collection was suspended from 26^{th} March, 2020 to 19^{th} April, 2020 leading to zero collection during this period. Lockdown was implemented in the state of Rajasthan from 22^{nd} March, 2020 leading to significantly lower toll collection up to 26^{th} March, 2020. A nation-wide lockdown was implemented from 25^{th} March 2020 up to 3^{rd} May, 2020.

There was extraordinary reduction in toll collection in January 2021 due to non-operation of toll Plazas of the Project Highway on account of protests against the farm laws ('Kisan Andolan'). It has impacted the toll collections for the average period of 29 days on all the 3 toll plazas.

The second wave of covid has impacted the revenues of the Concessionaire. The state government of Rajasthan has issued circulars from time to time imposing several restrictions including lockdown/restriction/curfew since April. Apart from Rajasthan, several other states in India have imposed lockdowns. The traffic started falling down since the mid of April and is down by about 30% in the month of May as the lockdown became very strict. This is expected to continue till the mid of June month. However, it is bit uncertain as to when things will be normalised.

A third wave of Covid is also expected in the next few months which may lead to further lockdowns & restrictions leading to a fall in revenue in the peak months of toll collection (November to June are peak months of toll collection). Therefore, it is expected that toll collection for FY 21-22 will be lower than expected.

Projected traffic volume:

Average Traffic Projections for Km.25

Year	Car	LCV Tractor	LCV/ Minibus	BUS	Truck (2 axle)	Truck (3 axle)	MAV (4-6 axle), HCM	Oversized Vehicles	Total Vehicle Nos	PCUs
Mar-22	1661	77	600	164	280	398	1861	11	5042	13582
Mar-23	1969	92	711	194	332	472	2206	11	5977	16099
Mar-24	2067	97	747	204	349	496	2316	1	6277	16907
Mar-25	2170	102	784	214	366	521	2432	11	6590	1 <i>775</i> 1

Mar-26	2279	107	823	225	384	547	2554	1	6920	18640
Mar-27	2393	112	864	236	403	574	2682	1	7265	19570
Mar-28	2513	118	907	248	423	603	2816	1	7629	20549
Mar-29	2639	124	952	260	444	633	2957	1	8010	21575
Mar-30	2771	130	1000	273	466	665	3105	1	8411	22655
Mar-31	2910	137	1050	287	489	698	3260	-1	8832	23787

Average Traffic Projections for Km.85

Year	Car	LCV Tractor	LCV/ Minibus	BUS	Truck (2 axle)	Truck (3 axle)	MAV (4-6 axle), HCM	Oversized Vehicles	Total Vehicle Nos	PCUs
Mar-22	1160	106	388	150	266	367	1725	1	4163	12017
Mar-23	1375	126	460	1 <i>7</i> 8	315	435	2045	1	4935	14245
Mar-24	1444	132	483	187	331	457	2147	1	5182	14958
Mar-25	1516	139	507	196	348	480	2254	1	5441	15705
Mar-26	1592	146	532	206	365	504	2367	1	5713	16490
Mar-27	1672	153	559	216	383	529	2485	1	5998	17311
Mar-28	1756	161	587	227	402	555	2609	1	6298	181 <i>75</i>
Mar-29	1844	169	616	238	422	583	2739	1	6612	19081
Mar-30	1936	177	647	250	443	612	2876	1	6942	20034
Mar-31	2033	186	679	263	465	643	3020	_1	7290	21038

Average Traffic Projections for Km.145

Year	Car	LCV Tractor	LCV/ Minibus	BUS	Truck (2 axle)	Truck (3 axle)	MAV (4-6 axle), HCM	Oversized Vehicles	Total Vehicle Nos	PCUs
Mar-22	1128	101	332	147	259	368	1624	2	3961	11417
Mar-23	1337	120	394	174	308	437	1925	2	4697	13537
Mar-24	1404	126	414	183	323	459	2021	2	4932	14213
Mar-25	1474	132	435	192	339	482	2122	2	5178	14922
Mar-26	1548	139	457	202	356	506	2228	2	5438	15669
Mar-27	1625	146	480	212	374	531	2339	2	5709	16450
Mar-28	1706	153	504	223	393	558	2456	2	5995	17275
Mar-29	1791	161	529	234	413	586	2579	2	6295	18140
Mar-30	1881	169	555	246	434	615	2708	2	6610	19047
Mar-31	1975	177	583	258	456	646	2843	2	6940	19998

Toll Rates¹

The rate of fee for use of a section of National highway, for the base year 2007-08 will be the product of length of section multiplied by the following:

Type of vehicle	Base rate of fee per vehicle per km (in rupees)
Car, jeep, Van or Light Motor Vehicle	0.65
Light Commercial Vehicle (LCV) or Mini Bus	1.05
Bus or Truck (2 Axle)	2.20
Truck (Three Axle)	2.40
Multi Axle Truck (4 – 6 Axle)	3.45
Over sized vehicle (7 or more Axle)	4.20

The rate of fee for use of a section of National Highway having 2 lanes and on which average investment for up gradation has exceeded Rs 2.5 crores per km shall be 60% of the rate specified.

The rates specified under rule 4 shall be increased without compounding by three percent each year with effect from 1st day of April, 2008 and such increased rate shall be deemed to be the base rate for the subsequent years.

The base rates will increase on every toll plaza every year on the basis of Wholesale Price Index and will be rounded off to the nearest five rupees. The increase will be made effective from 1st April every year, based on the wholesale price index for the year ending 31st December. The basic toll rates will be as per the rates notified effective as on 01-09-2007. The calculation of toll increase every year will be done as per the formula given below: -

Basic Wholesale Price Index for the - WPI (A)

Month of December of the preceding year

Wholesale Price Index - WPI (B)

Of the week ending on 6th Jan, 2007

Formula for Calculation: -

Applicable rate of fee = Base rate + Base rate * [WPI (A) - WPI (B) / WPI (B)] * 0.4

Local traffic will remain exempted from payment of toll. Such vehicles will be issued monthly passes by the concessionaire. Such passes will be issued to the eligible vehicle owners by the concessionaire on production of necessary documents and after payment of a monthly fee of Rs.150 to be revised annually to reflect the variation in WPI as compared to the WPI of the year ended March 31, 2007. Local traffic means Private Car/Jeep or equivalent vehicle which is owned by a person who resides within 20 km from the Toll Plaza.

The Whole Sale Price Index has been assumed to be escalated @ 5% every year from FY 2023 onwards for calculating the projected toll fees.

¹ Toll Rates shall be as per National Highways Fee (Determination of Rates and Collection) Rules, 2008; Amendment Rules 2010, and Amendment Rules 2011

The current fee table (valid upto 31st March, 2022) is as follows:

Khara Toll Plaza (Km 25)	Single Journey	Return Journey	Monthly pass	50% Discount
PCJ	45	70	1565	25
Minibus/LCV	75	115	2530	40
BUS	160	240	5305	80
Truck (2 axle)	160	240	5305	80
Truck (3 axle)	175	260	5785	85
MAV (4-6 axle), Heavy Construction Machinery	250	375	8315	125
Oversized Vehicles (7 or more axles)	305	455	10125	150

Bhadera Toll Plaza (Km 85)	Single Journey	Return Journey	Monthly pass	50% Discount
PCJ	45	65	1475	20
Minibus/LCV	70	105	2385	35
BUS	150	225	4995	75
Truck (2 axle)	150	225	4995	75
Truck (3 axle)	165	245	5445	80
MAV (4-6 axle), Heavy Construction Machinery	235	350	7830	115
Oversized Vehicles (7 or more axles)	285	430	9535	145

Hindore Toll Plaza (Km 145)	Single Journey	Return Journey	Monthly pass	50% Discount
PCJ	35	55	1190	20
Minibus/LCV	60	85	1925	30
BUS	120	180	4035	60
Truck (2 axle)	120	180	4035	60
Truck (3 axle)	130	200	4400	65
MAV (4-6 axle), Heavy Construction Machinery	190	285	6325	95
Oversized Vehicles (7 or more axles)	230	345	7700	115

Operating Expenses (Base for projections)

Particular	Details
Routine Maintenance Cost (2018-19)	Rs 6.03 Crores
Toll Plaza Operational Cost (2020-21)	Rs 3.16 crores
SPV Expenses (2020-21)	Rs 0.45 crores
Employee Benefit Expense (2020-21)	Rs 6.15 crores
Other expense (2020-21)	Rs 1.42 crores
Annual escalation on above expenses	5.00%
Independent Engineers Fee Cost	1% of Toll receipts
Major Maintenance (MM)	
MM Base Year Cost (2021-22)	Rs 84.65 Crores
MM Frequency	Every year from FY 21-22 @ 14.28% of
' '	the highway (i.e., every 7 years)
Annual escalation	5.00%
Insurance	
Insurance during O&M Phase (% of total project cost)	0.025%

Tax and Depreciation

Tax Structure	
Income Tax Rate	29.12%
MAT Rate	17.47%
Tax Exemption Period (u/s 80 IA)	10 years out of last 15 years operation

Depreciation

Toll Collection Rights are amortized over the concession period. The rights are amortized based on the projected toll revenue which reflects the pattern in which the assets' economic benefits are consumed.

6.2 Key Financial Indicators

The key financial indicators of the project are as follows:

Key Financial Indicators

The key financial indicators of the project during the period of repayment of debt are as under:

Financial Indicator	Results
Average DSCR	1.31
Average Cash DSCR	1.32

The debt servicing ability of SBTRCPL would be comfortable with an average DSCR of 1.31. The projections are based on actual traffic from 1^{st} April 2019 to 25^{th} March 2020 (nationwide lockdown was imposed 26^{th} March onwards).

	21 02 2020	21 03 2021	31,03,2022	31-03-2023	31-03-2024	31-03-2025	31-03-2026	31-03-2027	31-03-2028	31-03-2029	31-03-2030	31-03-2031
Year Ended	Audited	Audited	Estimated	Projected								
Financial Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Tollable Year	2	60	4	2	9	7	8	6	10	11	12	13
months (for toll renenue)	12	12	12	12	12	12	12	12	12	12	12	12
Povenie												
Toll Receipts	56.05	53.68	59.45	76.48	84.24	93.08	102.33	112.83	124.13	137.31	151.11	166.81
Overload Revenile	4.09	11.78	12.38	25.51	27.94	31.01	34.02	37.60	41.28	45.64	50.35	55.49
Interest on Cash & Bank Balance	-0	86	0.61		0.98	1.56	2.35	3.07	3.81	4.73	5.74	6.94
Other Revenue (MoRTH change of	79.7	2.53	à	26	Ť	36	8	¥0	20	<u> </u>	((0))	(0)
scope work)								4	000	70170	00 100	20.000
Total Revenue	67.81	62.99	72.44	102.86	113.16	125.66	138.70	153.49	109.23	187.08	207.20	77.677
Expenditure	2 54	316		3.48	3.66	3.84	4.03	4.23	4.44	4.67	4.90	5.14
CDV Evanços	0.48	0,45	0.47				0.57	09.0	69.0	99:0	0.70	0.73
Employee Renefit Fynenses	5.94	6.15			7.12	7.48	7.85	8.24	99.8	60'6	9.54	10.02
Positing Maintenance Cost	08.9			7.33		8.09	8.49	8.91	9:36	6.83	10.32	10.84
Premium to Public Works Deptt,	2.64					3.36	3.53	3.71	3.89	4.09	4.29	4.51
Govt of Rajasthan												C
Periodic/Major Maintenance Cost	*	2.27	12.09	12.70	1		1					18.76
Independent Engineer Fee	1	101	0.72	1.02	1.12							2.22
Operational Insurance	0.22	0.37	0.29	0.31	0.32	0.34	0.35	0.37	0.39	0.41	0.43	0.45
Sub Contract Expenses (COS)	60.6	2.53		3	3	y	ï	Ĭ	E			ii i
Other Expenses	0.34	1.42	1.49	1.57	1.64	1.73	1.81	1.90	2.00			2.31
Total Expenditure	29.04	24.32		36.73	38.62	40.61	42.71	44.91	47.23	49.69	52.27	54.99
PBDIT	38.77	43.66					96,00					174.25
Less: Depreciation	38.35	41.18	27.56		43.04							85.29
EBIT	0.41	2.48		26.99								88.96
Less: Interest	58.44	34.49		31.64	29.33	26.97		19.99				0.01
PBT	(58.03)	(32.01)		(4.64)	2.17	10.46	19.54	30.88	43.99	2		88.95
Less: Income Tax	(0.14)	0.09		œ	¥	£	E	9)	U.			15.54
PAT	(57.89)	(32.10)	(23.67)	(4.64)	2.17	10.46	19.54	30.88	43.99	5205	6296	73.41

Projected Balance Sheet

(In Rs. Crores)

	31-03-2020	31-03-2020 31-03-2021	31-03-2022	31-03-2023	31-03-2024	31-03-2025	31-03-2026	31-03-2027	31-03-2023 31-03-2024 31-03-2025 31-03-2026 31-03-2027 31-03-2028 31-03-2029 31-03-2030 31-03-2031	31-03-2029	31-03-2030	31-03-2031
For the year ending	Audited	Audited	Estimated	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
LIABILITIES												
Equity Shares	170.07	170.07	170.07	170.07	170.07	170.07	170.07	170.07	170.07	170.07	170.07	170.07
Promoter Contribution	0.00	1.78	20.00	50.00	20.00	50.00	50.00	20.00	50.00	50.00	20.00	50.00
Reserves & Surplus	-62.18	-94.28	-93.15	-97.79	-95.63	-85.16	-65.62	-34.74	9.25	61.30	124.26	197.67
Senior Debt	450.00	448.22	429.62	399.99	368.88	337.77	293.33	226.66	148.89	00:09	00:00	0.00
Current Liabilities	14.65	8.26	0.00	00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unpaid Interest	210.96	245.16										
NCD			176.58	164.40	163.49	162.57	161.66	160.75	159.83	158.92	113.25	0.00
Total Liabilities	783.50	779.21	733.12	29.989	656.81	635.25	609.44	572.74	538.04	500.29	457.58	417.74
ASSETS												
Gross Block	803.80	826.52	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42
Depreciation	41.81	82.99	110.55	149.69	192.73	240.34	292.66	350.37	413.84	484.03	561.33	646.62
Net Block	761.99	743.53	28.669	660.73	617.69	570.07	517.76	460.04	396.58	326.38	249.09	163.79
Capital WIP	817.46	843.40	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42
Less: Capitalized	803.80	826.52	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42	810.42
Closing Capital WIP	13.66	16.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Fixed Assets	775.65	760.41	699.87	660.73	617.69	570.07	517.76	460.04	396.58	326.38	249.09	163.79
Other Current Assets	6.84	9.41	1.71	0.00	00:00	00.00	00.00	00.00	0.00	0.00	0.00	0.00
DSRA	00.00	0.00	18.57	18.57	18.57	18.57	22.37	23.86	25.14	27.37	28.32	0.00
Cash & Bank Balances	1.02	9.40	12.97	7.37	20.55	46.61	69.31	88.83	116.32	146.53	180.18	253,94
Total Assets	783.50	779.21	733.12	686.67	656.81	635.25	609.44	572.74	538.04	500.29	457.58	417.74

6.5

	31-03-2021	31-03-2022	31-03-2023	31-03-2024	31-03-2025	31-03-2025 31-03-2026 31-03-2027	31-03-2027	31-03-2028	31-03-2029	31-03-2028 31-03-2029 31-03-2030 31-03-2031	31-03-2031
Particulars	Audited	Estimated	Projected	Projected	Projected Projected	Projected	Projected	Projected	Projected	Projected Projected	Projected
Sources:											
EBITDA	43.66	37.90	66.13	74.54	85.05	96.00	108.58	121.99	137.99	154.93	174.25
Promoters Infusion	1.78	48.22	0.00	00.00	00.00	0.00	0.00	00:00	0.00	0.00	0.00
Increase in Current Liabilities	-6.39	-8.26	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	39.05	77.86	66.13	74.54	85.05	00'96	108.58	121.99	137.99	154.93	174.25
Applications:											
Capital Costs	25.94	30.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00
Other Current Assets	2.57	-7.70	-1.71	00.00	0.00	0.00	0.00	0.00	00.00	00.00	0.00
Taxes Paid	0.09	00:00	0.00	0.00	00.00	0.00	0.00	0.00	7.51	13.33	15.54
Interest Paid	0.29	8.35	31.64	29.33	26.97	24.14	19.99	14.53	8.24	1.34	0.01
Repayment of Senior Debt (Project Loan)	1.78	18.60	29.63	31.11	31.11	44.44	29.99	77.78	88.89	60.00	0.00
Repayment of NCD	0.00	60.9	12.18	0.91	0.91	0.91	0.91	0.91	0.91	45.67	113.25
DSRA	0.00	18.57	0.00	00.00	0.00	3.79	1.49	1.28	2.23	0.95	-28.32
Total	30.67	74.28	71.73	61.36	58.99	73.29	89.06	94.50	107.78	121.29	100.49
Surplus/Deficit	8:38	3.58	-5.61	13.19	26.05	22.71	19.52	27.49	30.21	33.65	73.77
Opening Cash & Bank Balance	1.02	9.40	12.97	7.37	20.55	46.61	69.31	88.83	116.32	146.53	180.18
Closing Cash & Bank Balance	9.40	12.97	7.37	20.55	46.61	69.31	88.83	116,32	146.53	180.18	253.94

Particulars	Jan 22 to Mar 23*	2023-24	2024-25	2024-25 2025-26 2026-27	2026-27	2027-28	2028-29	2029-30 2030-31	2030-31	Total
Mouths	15	12	12	12	12	12	12	12	12	
EBITDA - Tax	75.60	74.54	85.05	00'96	108.58	121.99	130.47	141.60	158.71	992.54
Add: Promoter Contribution**	44.43	1	1	•	•	-	-	-	1	44.43
Total Cash Inflows (A)	120.04	74.54	85.05	96.00	108.58	121.99	130.47	141.60	158.71	1,036.98
Interest	39.99	29.33	26.97	24.14	19.99	14.53	8.24	1.34	0.01	164.54
Add: Debt Repayment (Project Ioan)	44.44	31.11	31.11	44.44	29'99	77.78	88.89	00:00	1	444.43
Add: Repayment of NCD	18.27	0.91	0.91	0.91	0.91	0.91	0.91	45.67	113.25	182.67
Total Debt Servicing (B)	102.70	61.36	58.99	69.50	87.57	93.22	98.04	107.01	113.26	791.64
DSCR (A/B)	1.17	1.21	1.44	1.38	1.24	1.31	1.33	1.32	1.40	
Avg. DSCR (Jan 2022 upto Sep 2029)	1.28									
Avg. DSCR (Jan 2022 upto Mar 2031)	1.31									

*Account Upgradation period

** Promoter Contribution of Rs. 50 crores minus Rs. 5.57 crores equivalent to the 10% retention money/cutback which shall be refunded to MBL. Out of the Rs. 50 crores promoter contribution, Rs. 25 crores shall be brought in before implementation of the plan.

Cash Debt Service Coverage Ratio (Cash DSCR)

7 Cash Debt Service Coverage Katto (Cash DSCK)	(Cash DSC	,K)						3	(In Rs. Crores)	(se.
Particulars	Jan 22 to	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
	Mar 23*					100				
Months	15	12	12	12	12	12	12	12	12	
Opening Cash Balance	06.9	,		•		٠	-	-	1	6.90
Cash Flow before servicing	120.04	74.54	85.05	96.00	108.58	121.99	130.47	141.60	158.71	1,036.98
Total Cash Inflows (A)	126.93	74.54	85.05	96.00	108.58	121.99	130.47	141.60	158.71	1,043.87
Interest	39.99	29.33	26.97	24.14	19.99	14.53	8.24	1.34	0.01	164.54
Add: Debt Repayment (Project loan)	44.44	31.11	31.11	44.44	29.99	77.78	88.89	90.09	r	444.43
Add: Repayment of NCD	18.27	0.91	0.91	0.91	0.91	0.91	0.91	45.67	113.25	182.67
Total Debt Servicing (B)	102.70	61.36	58.99	69.50	87.57	93.22	98.04	107.01	113.26	791.64
DSCR (A/B)	1.24	1.21	1.44	1.38	1.24	1.31	1.33	1.32	1.40	
Avg. DSCR (Jan 2022 upto Sep 2029)	1.29									
Avg. DSCR (Jan 2022 upto Mar 2031)	1.32									

*Account Upgradation period

7 Summary & Conclusion

Suratgarh Bikaner Toll Road Company Private Limited ("SBTRCPL") is the Concessionaire for development and operation of Bikaner-Suratgarh section of NH-15² (km 553/869 of NH-11 to km 173/000 of NH-15 via km 10/630 of NH-15). SBTRCPL shall develop the project on BOT basis and the concession period is for 16 years including construction period of two years. The appointed date of the project is 16th September 2013. The concessionaire achieved Provisional COD (90.86%) on 15th February 2019 and the tolling operations started from 17th February, 2019. The concessionaire further achieved PCOD for additional length of 9.78 km (5.68%) and started tolling operations for 96.54% of the highway on 1st April, 2021. IE has recommended the completion of project by 31st December 2021 vide letter dated 15th April 2021 and concessionaire expects to complete the project by 31st December 2021 without any additional funding with the help of toll collections. During this period balance Change of Scope works shall also be completed.

The timely achievement of Completion of the project is of utmost importance and in the interest of all stakeholders including the consortium lenders, otherwise the Provisional COD is liable for cancellation and concession agreement is liable for termination and entire investment of all stake holders including the lenders is unsecured and liable for loss.

Date of Commencement of Commercial Operations has been delayed for reasons beyond the control of the concessionaire. The delay in the project has increased the cost of the project. Since the Provisional COD & Full project completion are revised from the original schedule, the repayment schedule has been prepared according to the revised cash flows.

The Loan repayment of Project term loan of Rs 450 crores and NCD of Rs. 182.67 crores to existing consortium bankers is proposed to start from January 2021. By 31st March 2023, 10% of the Project term loan and NCD will be repaid. The revised repayment schedule has been shown earlier in the plan under section 1.10; present proposal and indicative terms.

The EPC contractor for the project is MBL, which is also the sponsor of the Concessionaire. As per the Joint Lenders Meeting dated 3rd December 2020, it was decided that 10% of cutback from each EPC billing of MBL shall be payable to the lenders. This shall be remitted to MBL at the time of implementation of the plan.

Accordingly, the Concessionaire will retain 10% of all the amounts due and payable to MBL, on account of EPC billings and while making the balance payment to MBL (i.e. 90%). Total cutback amount is expected to be Rs 5.57crs (FY 2020-21: Rs. 1.78 crores and April to December 21: Rs 3.79 crs). The amount of Rs. 5.57 crores shall be adjusted against the Project Term Loan, thereby reducing the Principal Outstanding Balance to Rs. 444.43 crores. Due to the delays in the project, increase in cost as well as lesser than estimated toll collections, it is proposed that from the date of irregularity of accounts of various banks (from end of 2016 onwards), interest be charged up to 31st December 2021 @ simple interest of PNB 1-year MCLR rate + 0.25% spread amounting to Rs. 182.67 crores. This amount shall be considered as unsustainable debt. This amount of Rs. 182.67 crores shall be converted into Non-Convertible Debentures carrying 0.01% p.a. coupon. From January 2021, the Concessionaire will start paying interest @ PNB 1-year MCLR + 0.25% spread, on the principal amount of the Project term loan i.e., Rs 444.43 crores. The repayment schedule of the principal amount of Rs 444.43 crores and the Non-Convertible Debentures of Rs. 182.67 crores as on 31st December 2021 has been drawn up in this plan as per the cash flows estimated. Concessionaire is paying 10% of the project term loan and NCD by 31st March 2023, ensuring upgradation of the account by March 2023 (within 15 months from the implementation date).

The original concession period is up to 15th September 2029. This is expected to be extended to November 2032 (i.e. by 3.20 years) on account of actual traffic being less than the target traffic as demonstrated in section 1.6 above.

² Now NH-62

Promoters will infuse funds totaling to Rs. 50 crores to ensure accelerated repayment for lenders and thereby reinforcing their confidence in the company. This amount may be arranged in the form of equity/unsecured loan/sub-ordinated debt as the case may be.

Promoter Contribution shall be made in the following manner:

- Total promoters' contribution shall be Rs 50 crores. Of this, Rs 25crores shall be contributed prior to implementation of the plan (this amount shall be utilized towards funding change of scope/payment of cut back/ creating cash balance for operations and maintenance). The balance amount of Rs 25crores shall be contributed in the first quarter of Implementation.
- Change of scope works shall be funded by the promoters through a separate account. This amount shall be reimbursed by MoRTH to the promoters. The outstanding credit balance of the promoter (against change of scope funding) in the books of the company at the time of implementation shall form part of promoter contribution of Rs. 25 Crs to be infused before implementation.

The company has also requested that any pre-payment penalties be waived off from all the loans.

There are various reasons for resolution of the account which is beneficial for all the stakeholders. After the completion of the balance construction work of the project, there will be a significant reduction in risk profile of the project which is beneficial for the lenders as well as a significant increase in toll due to increase in fee, possible diversion of traffic on the route as well as better administrative support. The lenders will also be assured of termination payments by the authority as per the Concession Agreement.

The revised date of end of concession period is expected to be 30th November, 2032 because the actual traffic is less than target traffic due to which concession is expected to increase by 3.2 years. Upon completion of the concession period, SBTRCPL would hand over the project highway to PWD, Rajasthan. State Support Agreement has been executed between PWD, Rajasthan and Government of India through MORTH which is integral part of the Concession Agreement. The Concession Agreement between SBTRCPL and PWD, Rajasthan has been signed on 9th May, 2012.

The Project Road for widening and upgrading of existing road traverses from Km. 553.869 of NH-11 to Km. 173.000 of NH-15 via. Km. 10.630 of NH-15 and terminates at Suratgarh. The stretch has been renamed to NH-62. Total length of Project road is 172.384 Km. including Bikaner Bypass of 9.845 Km.

Project road majorly passes through plain terrain. Land use in agricultural purpose has mainly been noticed at plain terrain. The major settlements developed alongside the corridor and are centers of various commercial and industrial activities.

The traffic projections have been made based on actual traffic of FY 2019-20 and assuming a growth of 5% every year (except FY 20-21 and FY 21-22, being extraordinary years). Also, the key dates and parameters have significantly changed post sanctions by the banks. In view of the aforesaid, the projections have been modified/updated.

NH-15 (now NH-62) is an important and major National Highway in Western & North Western India which connects Kandla to Pathankot in Punjab having 270 Km length in Gujarat, 906 Km. length in Rajasthan and 350 Km. length in Punjab connecting Samakhiali, Radhanpur, Jaisalmer, Bikaner, Sri Ganaganagar, Bhatinda and Amritsar etc.

The Concession Agreement for the project provides for an escrow mechanism, State Support by the Government of Rajasthan and payments adequate to meet the Lenders' dues under various events of termination.

As per the financial projections and sensitivity analysis, DSCR for the project has been found to be comfortable at 1.31 despite a very conservative traffic assumption. There are provisions in the Concession Agreement to mitigate the traffic risk which provide for an increase in concession period up to 20% of the original period in case the actual traffic is less than target traffic on target date. Force Majeure clauses are also there in the Concession Agreement.

There is a provision of penal toll fee in the toll fee notification for overloaded vehicles. Given the propensity of such vehicles on the route, this is expected to be a major source of toll revenue.

The project structure is capable of adequate debt servicing capabilities and reasonable returns to the stakeholders. The project is techno - commercially viable as per the resolution plan proposed.









