



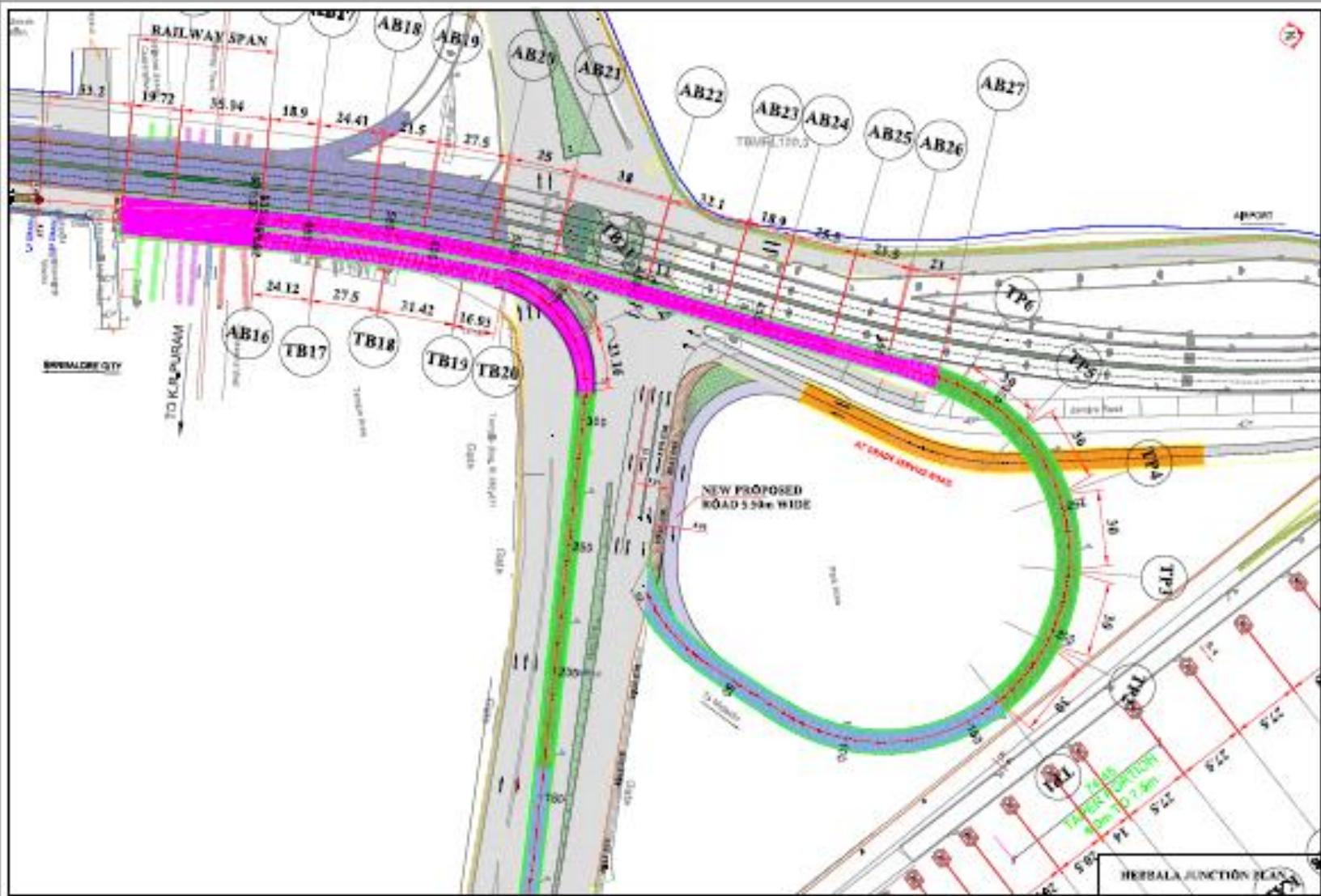
Bangalore Development Authority (BDA)

Construction of unidirectional Underpass along ORR and widening of existing Flyover with new Flyover along NH7 at Hebbal junction

PROJECT DETAILS

Project Name	Construction of unidirectional Underpass along ORR and widening of existing Flyover with new Flyover along NH7 at Hebbal junction
Client	Bangalore Development Authority
Contractor	M/s PJB Engineers Pvt Ltd
Project Management Consultant	M/s Infra Support Engineering Consultants Pvt Ltd
Date of Work Start (As per Work Order)	16-01-2016
Date of Work Completion (As per Work Order)	15-01-2018
Date of Recommencement Work	01-01-2023
Extension of Time	31-12-2025

Flyover General Alignment Drawing



PROJECT SALIENT FEATURES

A	Two Span railway bridge	
1	Length of Viaduct	54.76 mts
2	Length of Approach Ramp towards Bengaluru City	63.30 mts
3	Carriage way width	15.90mts
4	No. of spans	2 no's
B	Railway bridge to Baptist Hospital	
1	Length of Viaduct	441.80 mts
2	Length of Approach Ramp towards Bangalore city	63.30 mts
3	Carriage way width	10.50 mts (3 lane)
4	No. of spans	16 no's
C	Existing KR Puram loop to railway bridge	
1	Length of Approach Ramp towards Airport side	154.00 mts
2	No. of span	7 Nos
3	Carriage way width	5.50 mts-7.5mts (2 lane)
D	Existing Tumkur loop to railway bridge	
1	Length of Viaduct	230.00 mts
2	Carriage way width	10.50 mts (3 lane)
3	No. of spans	9no's

- **Construction of a Uni-directional underpass on the outer ring road of Hebbal Junction and the widening of the existing flyover on National Highway-7 to the second level has been awarded to P.J.B. Engineers Pvt. Ltd. for Rs.87,01,66,965.00 vide Authority No.:135/15 dated: 23.09.2015.**

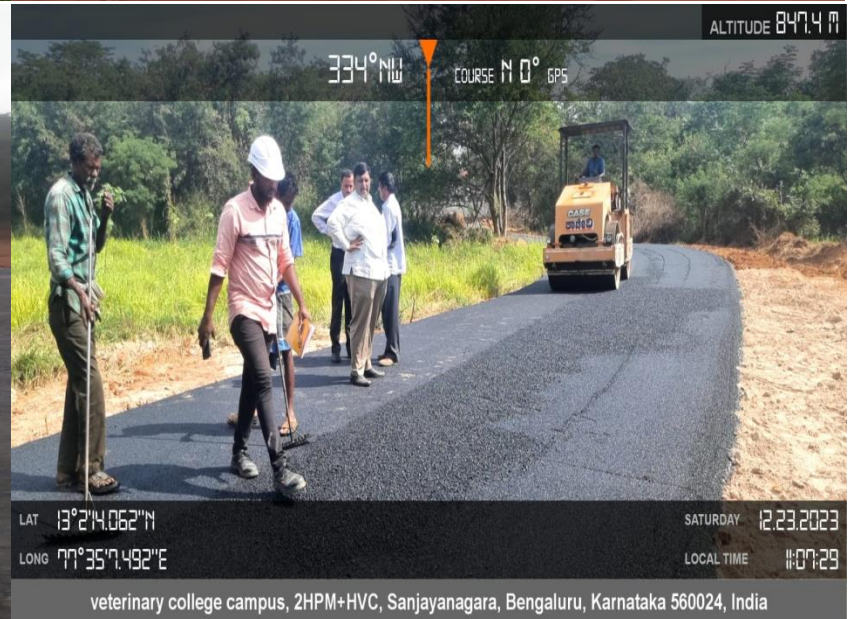
- **The work order was issued on 06.01.2016 for a period of 24 months (Date: 05.01.2018). The said contractor started the work on 06.01.2016**
- **Subsequently, as decided in the meeting of the Authority under the chairmanship of the Hon'ble Chief Minister on 27.08.2016, to make certain changes for the steel flyover, the 1st extension of the period has been extended from 06.01.2018 to 06.06.2019 as per the decision of the Bangalore Development Authority Board meeting No. 185/17 dated 09.11.2017**

- **Bangalore Metro Rail Corporation Limited (BMRCL) has written a letter to the authority dated 29.05.2019, requesting it to stop the said work “To study the capacity augmentation of Hebbal junction”. Accordingly, the contractor has been instructed to stop the work temporarily for a period of 2 months**

- **On 28.04.2022, in the High Power Committee meeting held under the chairmanship of the Chief Secretary to the Government, subject No.: 05/43, it was decided to carry out the work of Hebbal Junction at the first level (1st Level) and the Metro Flyover at the second level (2nd Level).**
- **Accordingly, in order to carry out the flyover widening work at the first level (1st Level), The one-way underpass towards Tumkur and the partial two or three-lane road widening of the road towards the first level Bangalore International Airport was adopted and the same was approved in the authority meeting vide subject No.: 201/2022, dated: 20.10.2022**

- **The work could not progress at the required pace due to traffic movement on the service road. The said road should be closed to carry out piling works, as it is causing a significant hurdle for the movement of the vehicles**
- **The work progressed only after obtaining permission for the movement of vehicles through the Veterinary College premises, starting from January 2024.**

Formation of New alternate road for vehicle movement



- **Due to a change in the metro alignment, several meetings were held. It was eventually decided to retain the KR Puram loop, contrary to the earlier plan for its demolition**

- **Hon'ble Deputy Chief Minister inspected Hebbal flyover on 06th Feb 2025 and instructed to directly connect the Tumkur loop to the flyover after all the changes in the design and drawings at the first stage of connecting the KR Puram loop towards Baptist most of the works have been completed and the flyover will be allowed for vehicular movement by 15th Aug 2025.**



Correspondences/Communication with Railways regarding ROB

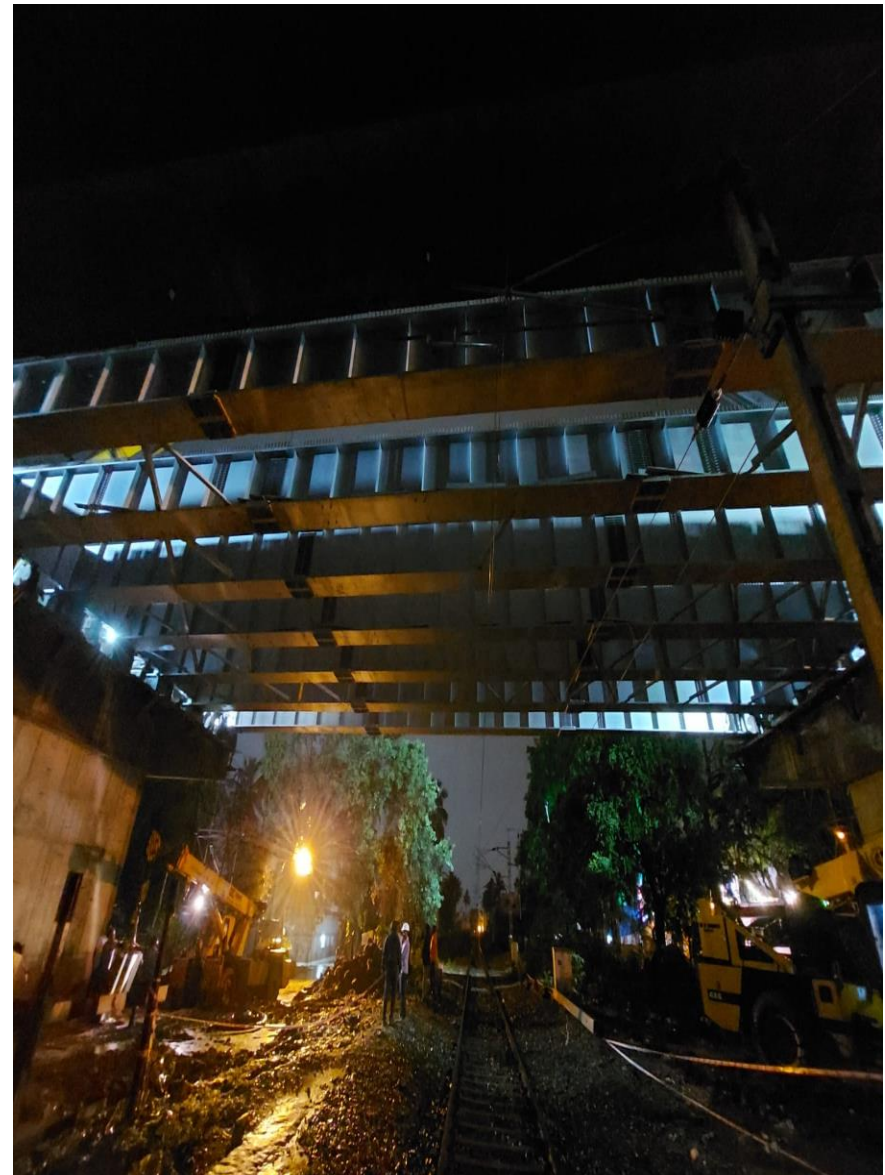
13-11-2023	Invited Railway officials to the board meeting , and requested their co-operation for early completion of the project
15-11-2023	As per the instruction of Sr DEN , South , SBC, SWR approached their construction wing engineers Sri Sunny Romanna and requested his consent for the proposal
06-12-2023	Obtained the signature from Sri Sunny Romanna SR DEN , construction
07-12-2023	As discussed with SEN DEN, south submitted the proposal for self execution along with GAD
20-12-2023	After scrutiny ,proposal was forwarded to Hubballi head office by SEN DEN
05-01-2024	Proposal was sent back with quarries, most of the quarries are technical in nature and need to be addressed with railway internal team. Further instructed BDA to revise the propasal considering 2 ROB instead of 1, taking into future expansion tracks also into account
09-01-2024	Site inspection has been arranged along with railway team , BDA, structural consultants and K Ride
12-01-2024	Obtained required track section and alignment with K RIDE , modified the proposal as per the railway requirement, Number of ROB has been increased to 2.
16-01-2024	Proposal resent to SEN DEN , duly enclosing the joint inspection report and L section obtained from the K Ride and also in- corporating 2 ROB keeping future tracks also in account
18-01-2024	After scrutiny , Proposal was forwarded to Hubballi head office by SEN DEN
22-01-2024	Meeting with Bridge Engineer of SWR , Hubballi and BDA Team. SWR suggested to revise the span 18.648m to 24m of Std RDSO dwgs and 33.760m to 36m of standard RDSO dwgs.
22-01-2024	on the same day a letter has been issued to SWR, stating reasons for not adopting the standard spans in the dwg and also assured for lesser span width than Railway standard , will execute the works as per the standard bigger span dwgs.
31-01-2024	Approval received from CBE/UBL for Self execution by BDA as deposit work under railway supervision
06-02-2024	letter from EE BDA for Detailed estimate of proposed ROB and Codal charges of railway for deposition of amount
27-02-2024	Letter from Sr. Den for Deposit railway codal charges and submission of GAD
01-03-2024	Submission of GAD, check list & GTI Report to SEN DEN SWR BNGALORE
06-03-2024	Received a letter for correction of GAD, Check list & Borelog details

07-03-2024	Resubmission of check list and soil investigation report as per the requirement of SEN DEN
19-03-2024	Submission of GAD,check list & Soil Investigation report to CBE/UBL Hubballi
22-03-2024	Recived a observation letter from CBE/SWR Hubballi
15-04-2024	Depositted the amount of 75,11,432/- for railway as Codal charges and forward the deposit copy to the SEN DEN Bangalore
16-04-2024	GAD, Compliace by BDA for all the observations and K Ride working section are Resubmitted to SEN DEN SWR Bangalore
22-04-2024	GAD, Compliace by BDA for all the observations and K Ride working section are Forwarded to CBE/SWR/Head Quarters,Hubballi
24-04-2024	Received a observation letter from CBE/SWR Hubballi about asking clarification of ROB's SV loading and Submission of structural design & drawing for Super structure (Draft Copy)
25-04-2024	Clearfied the doubts about SV loading to CBE/SWR Hubballi
29-04-2024	The submitted GAD with bearing Drg No. SWR/2024/ GAD-100/ROB No.567A has been approved by Competent authority (CBE SWR/UBL Hubballi)
06-05-2024	Submission of structural design & drawing for Sub- Structure (Draft Copy)
07-05-2024	Submission of TAD (Draft Copy) to SEN DEN/South SWR Bangalore
10-05-2024	Recived a observation letter from CBE/SWR Hubballi about structural design & drawing for Super structure (Draft Copy)
13-05-2024	Recived a letter from SEN DEN South SWR Bangalore for correction and r-submission of TAD (Draft Copy)
20-05-2024	Submitted the corrected copy of TAD (Draft Copy)
23-05-2024	TAD has been checked & further Forwarded to CBE/SWR/Head Quarters,Hubballi for approval (draft copy)
05-06-2024	Recived a observation letter from CBE/SWR Hubballi about structural design & drawing for Sub structure (Draft Copy)
11-06-2024	Resubmitted the structural design & drawing for Sub structure & Super structure with compliance letter reply for the observations of letter dated:10-05-2024 & 05-06-2024
12-06-2024	Structural Engineers from ATS Consultants have been attended the meeting with Sr, Engineer Design Hubballi and discussed the doubts and observations from DCBE/SWR Hubballi about Sub structure
13-06-2024	Structural Engineers from ATS Consultants have been attended the meeting with Sr, Engineer Design Hubballi and discussed the doubts and oservations from DCBE/SWR Hubballi
14-06-2024	Received the further observation about sub structure and super structure
28-06-2024	Submission of substructure drawings by structural consultant M/s ATS Engineering consultancy services pvt ltd
04-07-2024	Recived a observation letter from CBE/SWR Hubballi about structural design & drawing for Sub structure (Draft Copy)
09-07-2024	Submission of compliances for substructure drawings by structural consultant M/s ATS Engineering consultancy services pvt ltd
13-07-2024	Received an observation letter from CBE/SWR Hubballi about compliances submitted by structural consultant M/s ATS Engineering consultancy services pvt ltd structural
15-07-2024	Structural Engineers from ATS Consultants have been attended the meeting with Sr, Engineer Design Hubballi and discussed the doubts and observations from DCBE/SWR Hubballi Super structure

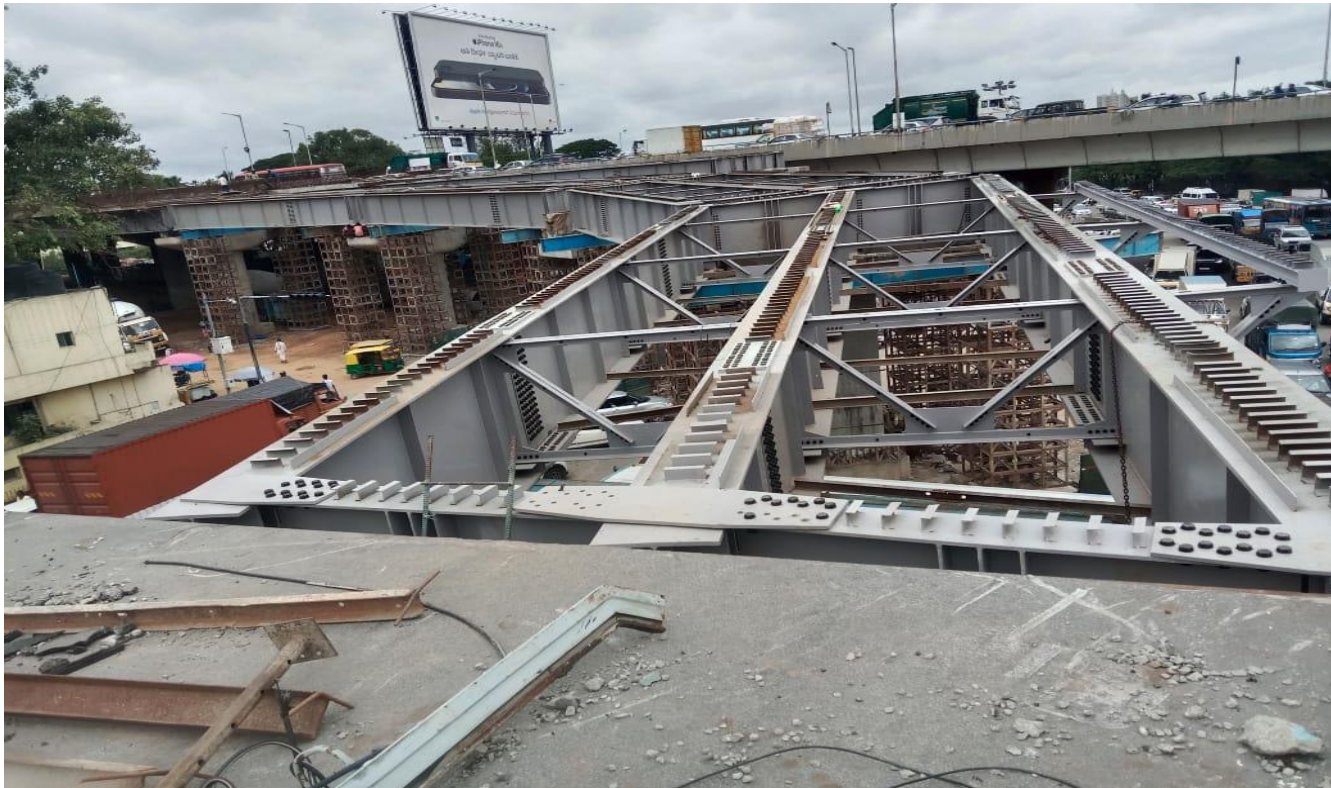
16-07-2024	Reply made for observations in the letter dated:14-06-2024 & 04-07-2024 resubmitted
19-07-2024	Reply made for observation of non adopting congetion factor for super structure is given for the letter dated:16-07-2024
03-08-2024	Submission of design & drawing for sub structure -For Approval (Final Copy) and Submission of design & drawing for super structure- for scrutiny (Draft copy)
13-08-2024	The structural drawings and design calculations of substructure and foundation for piers AB14,AB15 & AB16 with drawing No. SWR/2024/STE-21/ROB NO.567A (widening/LOGH-BYPL/BDA/SHEET 1 TO 3 has been approved by competent authority
23-08-2024	Resubmitted the structural design & drawing for Super structure with compliance letter reply for the observations (Draft copy)
27-08-2024	Resubmitted the structural design & drawing for Super structure with compliance letter reply for the observations & Checklist (Draft copy)
09-09-2024	Structural Engineers from ATS Consultants have been attended the meeting with Sr, Engineer Design Hubballi and discussed the doubts and oservations from DCBE/SWR Hubballi Super structure and check list
10-09-2024	Observation letter from DCE/SWR/UBL Hubballi
10-09-2024	Resubmitted the structural design & drawing for Super structure with compliance letter reply for the observations & Checklist (Draft copy)
18-09-2024	Resubmitted the super structure drawings and designs and POT PTFE bearings with tracing sheets for final approval
23-09-2024	superstructure drawings and designs are approved from railways and sent an observation letter for POT PTFE bearings layout
30-09-2024	Submitted the draft copy of QAP and WPSS for Scrutiny and correction
07-10-2024	Received observation letter from Railways for QAP and WPSS designs
18-10-2024	Resubmitted the designs of QAP and WPSS along with compliance for approval
25-10-2024	QAP and WPSS designs are approved by Hubballi Railways head office and forwarded the same to RDSO Lucknow
16-11-2024	Submitted POT PTFE bearings designs and drawings draft copy for approval
22-11-2024	Received Approval letter for QAP and WPSS designs from RDSO Lucknow
26-11-2024	Recived observation for POT PTFE bearings design and drawings
05-12-2024	Written a letter to Railway officials for Raw material inspection
09-12-2024	Submitted compliance letter for observations through Mail
13-12-2024	Raw materials inspection has been done from railway officials at Gowribidanuru
20-12-2024	Received observation for POT PTFE bearings design and drawings
26-12-2024	Written a letter to Railway officials for inspection of Welder qualifications test
17-01-2025	Pot PTFE Bearings approved and TAD observations letter
27-01-2025	Resubmission of QAP for bearings to railways
28-01-2025	Request letter for inspection of mater and layout for fabrication of 18.648m span and 33.760m span non-standard composite girder (ROB)
03-02-2025	Got Approval of QAP for POT-PTFE bearing from RDSO and Railways
21-02-2025	Wrote a letter requesting bearing material inspection to railways
21-02-2025	Railways Wrote a letter requesting bearing material inspection from RDSO

10-03-2025	Request for correction in drawing no HQDRG No- SWR/2024/STR-30/ROB.No567A(widening)/LOGH-BYPL/BDA/Sheet-2 of 10
19-03-2025	Wrote a letter to Railways asking for GST invoice to deposit RDSO inspection charges
20-03-2025	Received a letter and GST form from railways for deposition charges
25-03-2025	Filled the GST form of RDSO and made payment for RDSO inspection charges
26-03-2025	Railways wrote a letter to RDSO noting that inspection charges has been paid by BDA
01-04-2025	Requested for final testing of bearings and trail Trial assembly for the fabrication 33.76m span non-standard composite girder (ROB)
02-04-2025	Resubmission of Final TAD drawings
04-04-2025	Railways wrote a letter to RDSO for trail assembly for the fabrication 33.76m span non-standard composite girder (ROB)
15-04-2025	Wrote a letter for Inspection of Trial assembly for the fabrication 33.76m & 18.64m span non-standard composite girder (ROB)
16-04-2025	RDSO asked for deflection clarification for Trial assembly for the fabrication 33.76 span
17-04-2025	RDSO Deflection clarification done
21-04-2025	TAD approved
23-04-2025	Trial assembly for the fabrication 18.64m span non-standard composite girder (ROB) has been done and approved
05-05-2025	Wrote a letter to Sr.DEN regarding Traffic block and power block for execution of work
06-05-2025	Welding inspection and Trial assembly for the fabrication 33.76m span non-standard composite girder (ROB) has been done and approved
15-05-2025	Got Approval for Power block and traffic block
16-05-2025	Got Approval from PCE for Execution of Railways spans
(17-20)-05-2025	Execution work has been done
04-06-2025	Wrote a letter for power block for further execution of work

- **The two-span non-standard bridge was also constructed over the existing railway lines, following an elaborate and lengthy procedure to obtain permissions from both South Western Railway and the Railway Design and Standards Organization (RDSO), Lucknow. All fabrication works were carried out through an RDSO-approved vendor, with inspections at each stage of the work, which has caused delays in the project.**



- It is planned to open the KR Puram side traffic towards Baptist Hospital, which is expected to reduce overall traffic congestion. Once traffic begins to flow through the k r Puram loop, the connection of the existing Tumkur loop to the newly constructed loop will be taken up.



PROGRESS PHOTOS

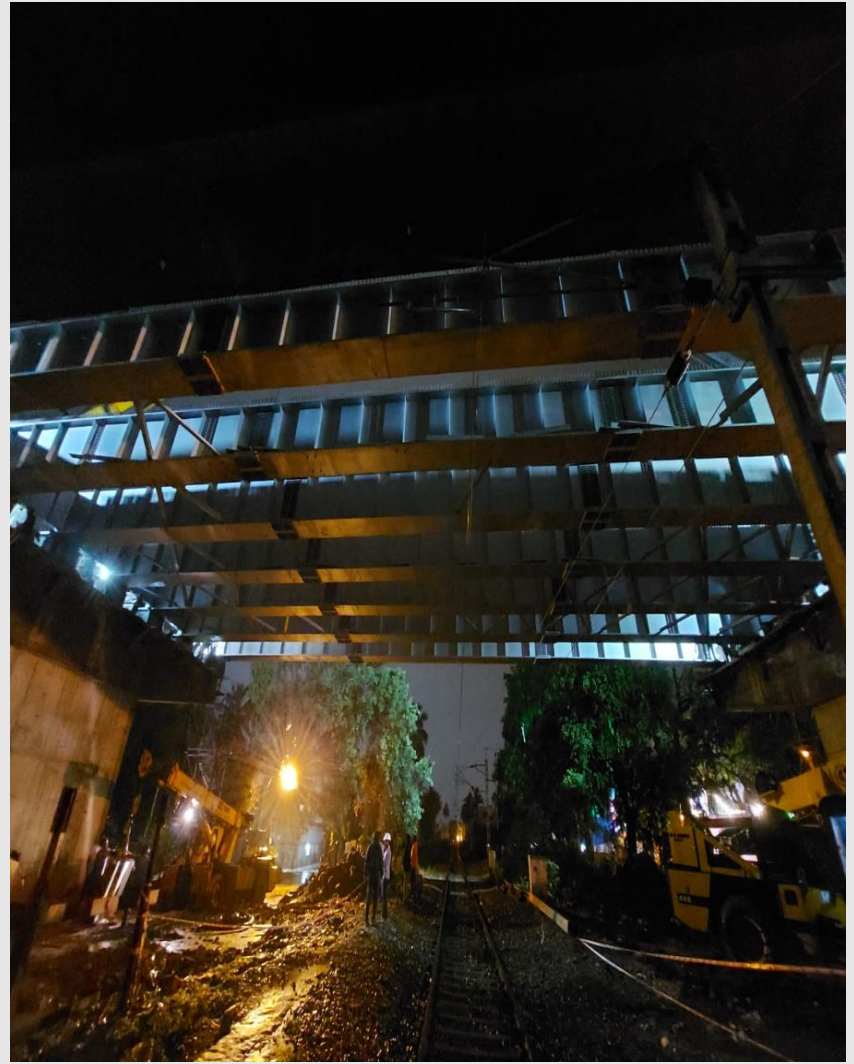


TB21-TB22 & TB22-KP6 Deck Slab Shuttering Work

PROGRESS PHOTOS



AB16-TB17 Span Bracing Fixing Work



AB14-AB15 Span Erection Work

PROGRESS PHOTOS



Crash Barrier Primer Painting Work



AB14-AB15 Span Erection Work

PROGRESS PHOTOS



TB19-TB20, TB20-TB21, TB21-TB22 Spans Bracing Fixing Work

THANK YOU