SAMPARKA

The BSRP Newsletter...

House Journal of K-RIDE

Issue: 06 October-2024

Union Minister of Railways & Minister of State for Railways Review BSRP and other Railway Projects





Shri Ashwini Vaishnav, Union Minister for Railways, Information & Broadcasting, Electronics & Information Technology, Government of India and Shri V. Somanna, Union Minister of State for Railways and Jal Shakti, reviewed Bengaluru Suburban Railway Project (BSRP) and other Railway Projects on 6.10.2024 at Bengaluru. Regarding the BSRP, Union minister said that both the corridors are coming up very fast. With BSRP and Metro Rail, commuters will have different options of travel which will significantly increase the mass transport capacity in Bengaluru, and decongest vehiculer traffic on roads. Shri Arvind Srivastava, General Manager, South Western Railway, Dr. Manjula. N, MD, K-RIDE, senior officers from Railways were present.

Union Minister of State Shobha Karandlaje Inspects Doubling and other Railway Projects





Union Minister of State for Micro, Small & Medium Enterprises and Labour & Employment also Member of Parliament, Bengaluru North Shoba Karndlaje inspected KRIDE's Doubling Project and other Railway works at Hebbal, on 20.09.2024. Shri. R.K Singh, Director Project & Planning, senior officials from Railway & BBMP were present.

MD KRIDE Inspects BSRP at RUB 477A



Dr. Manjula N, MD, KRIDE inspected Bengaluru Suburban Rail Project work progress at Hellalige (RUB 477A) and discused additional land issues on October 14, 2024. Shri. Rajesh Kumar Singh, Director Project & Planning, K-RIDE, L&T and K-RIDE Officials were present.

Greetings...

With frequent review meetings by dignitaries of both the Center and the State, K-RIDE has made significant progress on BSRP and Doubling projects. These meetings have been highly fruitful in resolving Inter-department/ Inter-agency/ Inter-government issues and bottlenecks, facilitating progress of the projects on ground.

With respect to the work progress of the Corridor 2, physical work has picked up pace. Despite festive season hampering workmen availability on ground, 30% physical work progress and 24% financial progress has been achieved. Pier cap erections have started at Yeshvanthpur. With already more than 72 pre-cast U girders stacked at the casting yard, trial run for transporting and launching of U girders is underway.

With respect to the work progress of the Corridor 4, 53% S&T utility shifting has been completed and other utility shifting is in progress. Earthwork, 980 cum in cutting and 350 cum in filling has been completed at various locations along the alignment. Final notification for land Acquisition at various places along the alignment of corridor-4 has already been published.

It is encouraging to note that the major civil work and station tenders invited recently, has garnered very good market/industry response.

Subsequently, following few other important tenders have been invited in the months of September & October.

- C1A Part work Tender
- Corridor-1A Utility shifting Tender for Corridor-1A
- Tender for Consultancy Services & Support for the development and implementation of Resettlement Action
- Tender for Consultancy Services & Support for the External Environmental & Social Monitoring
- Tender for Construction of Soladevanahalli Depot invited on 24.09.2024 and opening on 02.12.2024.
- Tender for Design, Manufacture, Supply, Installation, Testing and Commissioning of Signalling and Train Control System and Telecommunication Systems for all corridors.

With respect to the doubling of tracks project, physical work on the Baiyappanahalli- Hosur section and Yeshvantpur-Channasandra section have been completed by 76% and 40% respectively. The stretch between Bellandur road to Carmeleram is planned for commissioning in February 2025.

All-out efforts are being put-in to ensure the project completion deadlines. K-RIDE is committed for the timely completion of BSRP.

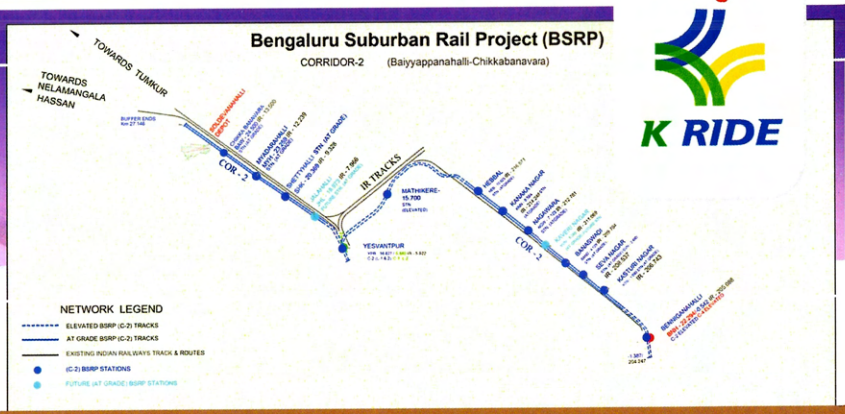
MD Corner



Dr. Manjula N, IAS
MD, K-RIDE & Secretary, IDD and Kannada & Culture, GoK

Corridor -2
Mallige Line
Progress updates :
As on: 25.10.2024





- Corridor -2 Baiyyappanahalli-Chikkabanavara civil works tender was awarded to L&T Limited on 26.08.2022. The 25 Km Corridor -2 consists of 8.027 km of elevated sections and 17.551 km of at grade section.
- Construction work has commenced at multiple locations along the project alignment of Corridor -2

Key Milestones Achieved

1. A total of 413 nos. piles have been completed at various locations of alignment (Benniganahalli-144 nos., Hebbal-124 nos. & Yeshwantpur- 145 nos.)
2. At-grade embankment work (filling and cutting) is in progress for the length of 3240 m and 1370 m length completed up to the formation top level. (Sec 2 – 800m in progress; Sec 4 – 1370 completed and 2440 in progress;)
3. Electrical utilities shifting completed for 22 km (between Benniganahalli to Chikkbanavara location).
4. For shifting/diverting & protecting BWSSB water & sewer lines, the amount deposited to BWSSB for the various locations work is in progress. LOA issued by BWSSB for 37 locations (32 for sewer lines and 5 for BWSSB water lines).
5. Other utilities like gas lines (GAIL) and pipeline protection works are in progress in Section 4.

Civil works in At-grade Sections of length 17.551 Kms.

* Total length of Earth Retaining Structure (ERS) work of 4442m is in progress (710m at Benniganahalli to Banaswadi, 2802m at Banaswadi to Hebbal and 930m at Yeshwantpur to Chikkbanavara), out of which 2498m (300m at Benniganahalli to Banaswadi, 1368m at Banaswadi to Hebbal and 830m at Yeshwantpur to Chikkbanavara) final lift work is completed and at various locations foundation for ERS construction is in progress.
* Out of a total of 44 minor bridges (MIB), 5 nos. minor bridges have been completed, 18 nos. of minor bridges are partially completed (4 nos. between Yeshwantpur to Chikkbanavara and 14 nos. between Benniganahalli to Hebbal), and 3 nos. of minor bridge under construction.
* 2 nos. of ROB (410A & 408B) to be reconstructed between Yeshwantpur and Chikkbanavara sections. Initial pile load test (vertical & lateral) completed for both the ROBs. Further, the designing of Substructures & Superstructures is in progress.
* At the major bridge no. 560, the initial pile load test was completed between the Banaswadi and Hebbal sections. Further, the designing (L&T scope) is in progress for Piles, Substructures & Superstructures.
* Out of 20 nos. RUBs, 4 nos. are partially completed (Addl. 5+411, Addl. 6+512, LC 141 and LC 143) up to the top slab between Banaswadi to Hebbal section and for 1 no. of RUB (LC 140) precast RCC box segments casting is in progress (10 nos. of segments are cast).
* A 533 m long boundary wall at Jalahalli for the Indian Air Force already completed and handed o to the Indian Air Force.
* An IR boundary wall measuring 310 m in length has been completed, out of a total scope of 565m.
* The layout plan for relocation and reconstruction of assets in defence land that infringes BSRP corridor-2 at Jalahalli (CQAE) has been approved.
* The layout plan for boundary wall construction has been approved at Garrison Banaswadi (ARMY) of BSRP corridor-2.
* Permission for gate closure at the LC elimination location has been received from the Commissioner, Bengaluru. Presently LC-141 gate is temporarily closed.
* For BSRP construction in BBMP land, permission is accorded by the Commissioner of BBMP.

Elevated Viaduct Work of total length 8.027 km from Hebbal to Yeshwantpur & Benniganahalli

* At Gollahalli, a 21-acre precast yard is functioning well to ensure quality.
* The casting yard includes 2 fully functional Batching plants and a laboratory.
* Additional 2 nos. of batching plants have been set up & commissioned by the contracting agency near the corridor alignment (1no. at Yeshwantpur & 1no. at Hebbal).

Structure Description	Total nos. Casted	Location
U-Girder	72	Pre-cast yard at Gollahalli
I-Girders	9	
RCC Pier Cap (Single track)	15	

* The casting of U-Girders and I-Girders will be done at the casting yard and these precast components will be transported to raising locations along the corridor.

II. Foundation & Substructure

* Initial pile load tests: Total 8no.s Initial pile load tests completed and concluded between Benniganahalli and Chikkabanavara. 1 no. at Benniganahalli, 1 no. at Major Bridge 560, 4 nos. between Hebbal and Yeshwantpur, and 2 no. at ROB 410A & 408B.

Substructure progress details:

Section Details	Total nos. Pile Casted	Total nos. Pile cap Casted	Total nos. Pier Casted	Location
Sec 1	144	0	0	Benniganahalli
Sec 3	124	13	11	Hebbal
Sec 4	145	13	9	Yashwanthpur Yard
Total	413	26	20	

* The relocation of railway buildings such as Sub-Station Electrical (SSE) (80% work completed), Transaction Distribution Department (TRD) and Parcel Office work are in progress.

III. Erection Details

* Pier Cap: 3 no. of Pier Cap erection completed at YPR location.

Other miscellaneous works:

* Necessary permissions for tree felling of 2098 nos. and transplantation of 178 nos. have been obtained from the Tree Authority (OM1 to OM3) and the work is in progress in accordance with due norms. 65% of tree felling work was completed and 45% of tree translocation was completed in Corridor 2.
* OM-4: On May 29, 2024, permission was obtained for removal of 699 trees and the transplantation of 89 trees. PIL (Public Interest Litigation) was filed against the tree permission, and the Karnataka High Court has ordered that 438 of the 699 trees (recommended for felling) to be reinspected and the remaining 350 trees (including transplantation) to be removed as per the instructions given in the OM.
* The reinspection was held on 21.10.2024. The inspection report will subsequently be submitted by BBMP/TEC.
* 10 times Compensatory Plantation in the ration 1:10 is being carried out by BBMP from the cost deposited by K-RIDE.
* The design & drawings for various structures have been approved by the proof consultant (IIT Madras)

Corridor -1 -SBC to Devanahalli Incl. Airport Link.



*** Corridor-1 SBC to Devanahalli is divided into two parts i.e 1A(SBC-YNK) and 1B (YNK to DHL Incl. Airport Link)**

* Latest alignment for the Corridor-1 of SBC-YPR has been submitted for the Review to Railway construction on 26.06.2024, and is under approval
* Latest alignment for the Corridor-1 of YPR-YNK has been partly approved only CH: 8/0 to 10/0 by Division on 04/10/2024.
* Latest alignment for the Corridor-1 of YNK-DHL section has been approved by DRM/SBC and under review by HQ/CTE.
* Tender for C-1A was floated on 27.07.2024 in CPP-Portal and the tender has been opened on 30/10/2024, technical evaluation is in progress
* Lc 09 closure has been approved by DC Bengaluru/Urban on 03/11/2024
* Consent letter for LC-02 elimination has been submitted to DC/Bengaluru Urban.

Corridor - 3 Kengeri to Whitefield.

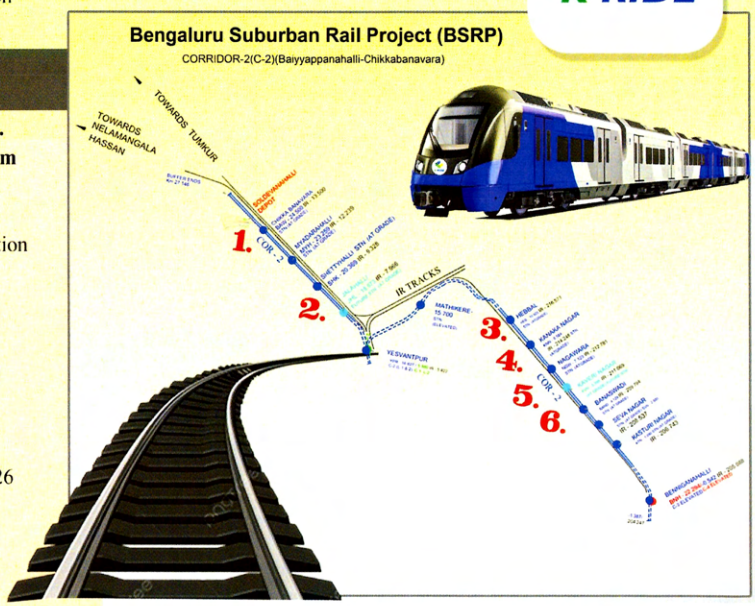
Utilization of quadrupling lines from BNC to Whitefield

The alignment drawing was submitted to the Bangalore Division for approval on 2.5.24. Awaiting SWR's further observations and approval.

Corridor - 4 Heelalige to Rajankunte.

Corridor - 4 Heelalige to Rajankunte: The civil works tender was awarded. The 46.88Km corridor 4 consists of elevated section of 8.96Km and 37.92Km at - grade level section.

- Tender awarded to M/s L&T on 30/12/2023 at a cost of Rs. 1040.50. Completion period 30 months.
- Private Land acquisitions is in progress.
- Preliminary works are in progress
- The alignment Plan was approved by SWR on 23.01.2024
- Railway land handed over to K-RIDE on 02.04.2024
- Subsequently, the pre-construction activities like geo-technical, Tree felling, utility shifting, and Design and structure works are under progress.
- The date of comission of Corridor -4 (Kanaka line) of BSRP is December 2026
- 15 minor bridges completed and ERS work is in progress.
- ile load tests are under progress.
- Land acquistion is in progress.
- Tree cutting permission awaited from DCF/BBMP.



Corridor -2 : Mallige Line Work Progress

1. CHIKKABANAVARA

U- trough retaning wall construction under progress at Chikkabanavara Station.



Earth work formation under progress between Mydrahalli- Shettyhalli stations.



2. JALAHALLI

Earth Retaining Structure construction under progress between Shettyhalli-Yeswanthapur stations.



BWSSB water pipelin diversion and laying works progress near Shettyhalli station (HMT-Area)



3. HEBBAL

4. KANAKANAGAR

Earth work and formation in progress at Hebbal and Kanakanagar



5. NAGAWARA

Pre-cast Sacrificial Wall work in progress



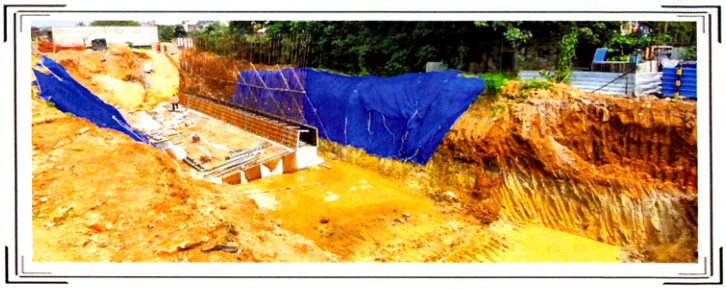
6. KAVERI NAGAR

First lift ERS wall completed



First lift raft wall completed between Kaveri nagar and Banswadi





Doubling of Track Project :

Work Progress *Updates*



Yesvantapur- Channasandra (21.7 Km)

Physical progress : 40%

Year of Sanction	Nov-2018 (Transferred to KRIDE in June'2020)
Sanctioned Cost	Rs. 314.10 Cr.
Expenditure during 2023-24	Rs. 42.23 Cr.
Expenditure up to 31.03.24	Rs.73.79 Cr.
Expenditure during 2024-25 (up to Sep'24)	Rs. 24.44 Cr.
Cumulative Expenditure (up to Sept'24)	Rs.98.23 Cr

Yesvantpur – Channasandra doubling is running almost parallel to Corridor -2 of BSRP and the progress of doubling works are affected due to BSRP works at YPR, Lottegolahalli, Hebbal station yard, Hebbal - Banaswadi. Moreover, 4th line between Yesvantpur Bypass to Lottegolahalli is parallel to C-4 of BSRP which is elevated and formation work of 4th line work as a part of Doubling project in this stretch can be taken up after completion of BSRP C-4 elevated pier foundation works.

Sl No.	Item	Unit	Total scope	Physical Progress	TDC
1	Earth work:	Cum	191000	65%	Mar'25
2	Blanketing	Cum	62500	9%	April'25
3	Retaining walls				
4	Minor Bridge	No.	37	57%	Mar'25
5	Major Bridge	No.	2	5%	Aug'25
6	RUBs	No.	1	0	Mar'25
7	Station Building:	No.	2	5%	June'25
8	Platforms:	No.	1	30%	May'25
9	S&T works	No.	6	15%	June'25
10	TRD works	Km	21.9	15%	May'25
11	Track Linking	Km	21.9	0	July'25
12	Commissioning	Km	21.9	0	Aug'25







Baiyyappanahalli – Hosur (48 Km)

Physical progress : 76%

Year of Sanction	2018 -19 (Transferred to KRIDE in June'2020)
Sanctioned Cost	Rs. 498.73 Cr.
Expenditure during 2023-24	Rs. 134.49 Cr.
Expenditure 2024-25 up to Sept'24	Rs.79.36 Cr
Total expenditure till 30.09.24	Rs.379.64 Cr.

The progress of Major components of works are as follows

Sl No.	Activity	Unit	Scope	Physical progress	TDC
1	Earthwork	Cum	1115000	92%	Works are in progress. TDC: 03/25.
2	Blanketing	Cum	154000	57%	Works are in progress. TDC: 04/25
3	Minor Bridges	No.	101	84%	Works are in progress. TDC: 02/25,
4	RUBs	No	15	73%	Works are in progress. TDC: 02/25
5	Major Bridge	No.	7	60%	Works are in progress. TDC: 08/25
6	ROB	No	1	0	01/25
7	Station Building	No.	4	90%	TDC: 12/24
8	Ballast Supply	Cum	140500	46%	08/25
9	Track Linking	Km	48	45%	08/25
10	S&T work	No.	6	50%	07/25
11	OHE Work	Km	48	50%	
12	Commissioning	Km	48	21.5%	08/25

Status of Major Bridges in Baiyyappanahalli – Hosur Doubling :

* Construction of Major Bridges is one of the most important activities in any project. As per Indian Railway Bridge Manual, a Major Bridge is one which has a total water way of 18 linear metres or more or which has a clear opening of 12 linear metres or more in any one span.
* The status of progress of Major Bridges (Waterway as well as Road Bridges) in Baiyyappanahalli – Hosur Doubling is given as under.
* Critical works:

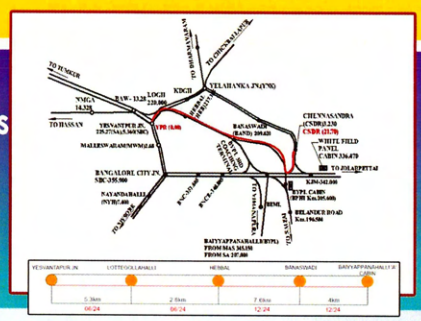
Sl. No.	Bridge No.	Span	Block Section	Overall Progress	Remarks
1	531 (RUB)	1 x 18.3 m Steel composite Girder + 2 x 7.5 x 5.65 RCC Box	Baiyyappanahalli - Bellandur Road	80%	Fabrication of Girders Completed.
2	519A (RUB)	2 X 27.206 m Composite girder		0%	GAD under finalisation
3	513 (WW)	2 X 12.2 m PSC slab	Bellandur road yard	100%	Completed
4	474 (WW)	2 X 12.2 m PSC slab	Heelallige - Anekal Road	100%	Completed
5	470 (RUB)	1 X 61.0 m Open Web Girder		30%	Fabrication of Girder in progress, substructure work in progress
6	456 (WW)	2 X 12.2 m PSC slab		85%	PSC slab casting for both spans completed.
7	420 (ROB)	1 X 6.00 X 7.439 m RCC Box	Maranyakanahalli - Hosur	0%	GAD yet to be approved from CBE/SWR
8	412 (WW)	2 X 9.15 m PSC slab		80%	PSC slab casting for both spans completed.



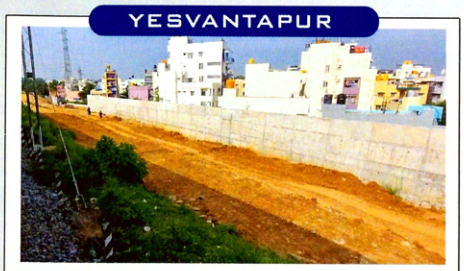


1 'Doubling of track' project progress updates

YESVANTAPUR TO CHANNSANDRA (21.70 KMS)



YESVANTAPUR



YESVANTPUR BYPASS



HEBBAL



Earth Retaining Structure (ERS) & Formation works in progress

BANASWADI



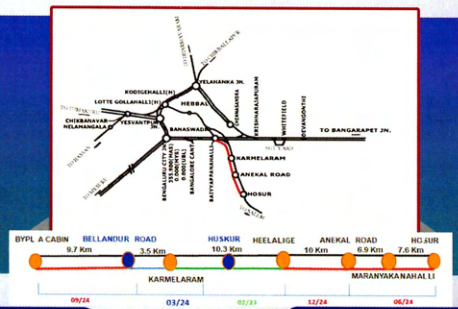
BAIYYAPANAHALLI A CABIN



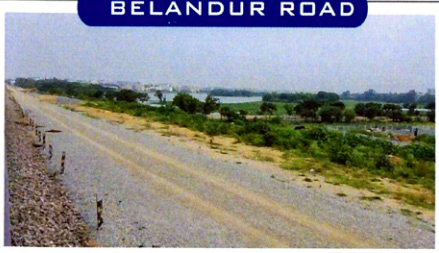
Blanketing & Formation works in progress

2 'Doubling of track' project progress updates

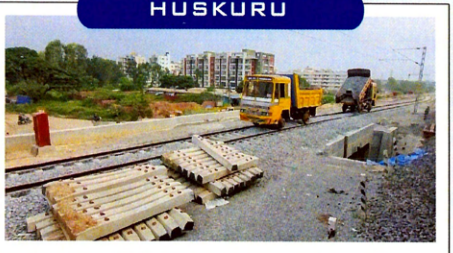
BAIYYAPANAHALLI TO HOSUR (48.00 KMS)



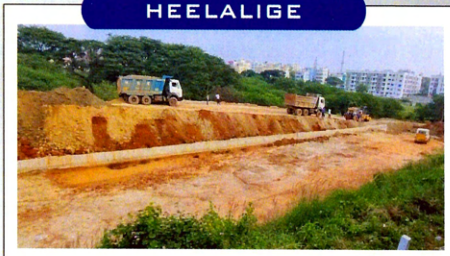
BELANDUR ROAD



HUSKURU

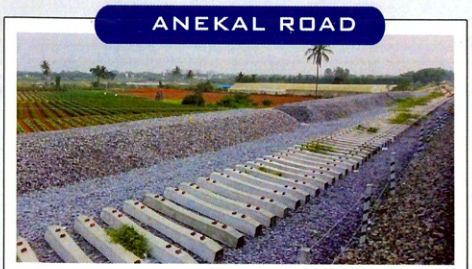


HEELALIGE



Formation, Blanketing, P-way Linking works in progress

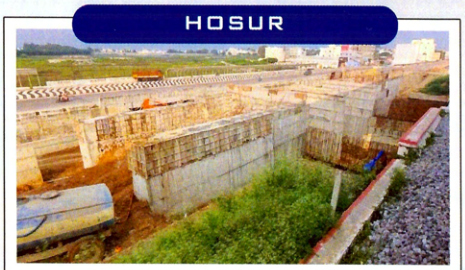
ANEKAL ROAD



MARANAYAKNAHALLI



HOSUR



P-way- Sleeper Laying, ERS and Bridge works in progress

Know Your BSRP

Signiling and Telecommunication (S&T) utilities



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K RIDE

One Suburban Train to Connect all

KRIDE is implementing BSRP whose alignment is next to existing South Western Railway track. Before initiation of BSRP civil works, all S&T utilities available along BSRP alignment have to be cleared to avoid any cable cuts during execution which may affect the train operations and safety.

What are S&T utilities?

S&T utilities consists of S&T cables (signalling, telecommunication and OFC cables), location box, track lead junction box, point machine cable termination box & signals etc.

Procedure for shifting S&T utilities

1. After obtaining approved BSRP alignment, a detailed survey is conducted to ascertain the S&T utilities available in the said alignment along with Railways.
2. During survey ,utilising the existing Cable route and Cable core plans from Railways, presence of cable route markers, cross trenches, the existing S&T utilities infringing the alignment will be charted down in correspondence with the IR, along with chainage and station section.
3. After identifying the S&T utilities, estimate will be prepared and tender will be invited.
4. Before initiation of S&T utilities shifting, as per Railway Board guidelines Joint Procedure Order will be prepared with concerned Railway field officials. Proposed cable route plan and other S&T documents will be prepared and submitted to Railway for approval.
5. After obtaining approved cable route plan and other documents, information will be provided to all concerned Railway officials (civil engineering and S&T) before commence ment of the work.
6. The following are the brief steps for executing S&T utilities after approval of cable route plan and other documents:
   a. Initially cable trench as per Railway guidelines will be carried out at Railway boundary on Non-BSRP side. At certain locations at LC gates road and track crossing , cable laying will be carried out by HDD method and at bridges and culverts GI pipes will be used.
   b. After completion of cable trench, same will be checked to ensure proper depth, placing of polyolefin channels and in addition to this, adequate safety measures are taken to avoid theft/damages.
   c. As a standard practice, ducts are being used by KRIDE for laying of cables to safeguard as well as to facilitate future works. All cables will be laid inside these ducts and an orange warning tape will be placed at a depth of 300mm as an additional precaution to warn the excavator operator about the presence of cables at that location.
   d. After completion of cable trenching and laying of cables, all cables will be terminated in location box as per site requirement. Further, Railway officials will be informed to check and test the cables for proper insulation, continuity, recording of cable techincial parame ters with proper correspondence test of S&T functions .
   e. After testing of cables, new cable particulars will be painted or any additional cables in existing location boxes, painting particulars will be updated accordingly.
   f. Finally, Railways will be advised to plan for disconnection/traffic block in divisional rolling block programme for carrying out shifting of the utilities.
   g. During disconnection/traffic block, the S&T functions will be switched over to newly laid cables and S&T gears. The same will be jointly checked with Railway officials before reconnection of S&T functions for normal train operations.
   h. After shifting of cables, all As Made/As Build drawings including cable route plan, cable core plans and other S&T documents will be submitted to Railways for final approval. Once approved, all the documents will be submitted in proper booklets and files as a final record and further operations.

BSRP S&T *Utility Shifiting Works:*

Corridor -1 - (1a) - Tender evaluation under progress
(1b) - Work under progress

Corridor -2 - 100% S&T utilities cleared

Corridor -3 - Tender yet to be invited

Corridor -4 - 55% S&T utilities cleared, 45% S&T ultilities Shifiting under progress & will be completed by Feb- 2025

















German Delegates Visit to KRIDE







German Delegates visited KRIDE on 23.09.2024 to review Benglauru Suburban Rail Project. The team visited K-RIDE corportae office and held formal meeting with KRIDE team after which the BSRP network was showcased. Mr. Christoph Krieger, Ms. Barbara Berkel, Mr. Philipp Wyrsch, Ms. Patricia Immler, Dr. Sebastian Ebert, Ms. Swati Khanna, Mr. Anudeep Koniki from KfW, Ms. Pamela Bajal, German Govt., Mr. Christian Kapfensteiner, Mr. Manjunath Sekhar from GIZ and Dr. Manjula N, MD, K-RIDE, Shri. R. K. Singh, Director, P&P, Shri Awadhesh Mehta, Director Finance, officials from KRIDE were present in the meeting







Later, the Delegation was taken on a site visit and the team walked BSRP proposed station at Yeswantpur: Project briefing on the Multi Modal Integration efforts between BSRP, BMRCL, and Indian railways was highlighted. Key features and benefits of the future multimodal transport network – including physical integration was explained.



Milestone Achived



First Pier Cap launched at Yeswantpur, Corridor-2 (UP P208)

Details of Pier cap

Steel qty- 2.14 Mt
Concrete qty- 16.06 cum
Length- 4.650 mtrs
Height - 1.500 mtrs
Width- 2.700 mtrs

Chief Secretary, Government of Karnataka Inspects ongoing construction works of Bengaluru Suburban Rail Project at Kanakanagar



The Kanakanagar construction site along corridor 2 or (Mallige line) of Bengaluru Suburban Rail Project (BSRP) has been hailed as a 'poster example' of innovative and efficient infrastructure development, showcasing the project's commitment to safety, sustainability and connectivity. In a first, Dr. Shalini Rajneesh, Chief Secretary, Government of Karnataka and Chairperson, K-RIDE Board along with Dr. Manjula. N, Managing Director, K-RIDE and other senior officers of K-RIDE inspected the ongoing construction works along Kanakanagar of Corridor 2, BSRP. During the inspection the Chief Secretary remarked, "This construction exemplifies a strategic infrastructure advancement for high-traffic urban areas where space constraints make traditional options like RoB's impractical.the entire section is a 'Poster example' of BSRP and what can be achieved through efficient planning, innovation and commitment to serve the society. We are committed to delivering a world-class transportation system that enhances the lives of Bengaluru's residents and commuters".

The entire section along corridor 2 from Kanakanagar to Hebbal involves an innovative solution to eliminate level crossings in a densely populated area where constructing a Road Over Bridge (RoB) is not feasible due to the high urban density. Instead, the entire section of rail will be elevated, allowing the elimination of level crossings without impacting the surrounding community. This strategy is a first in the country and promises to further revolutionize the effectiveness of rail transport.

'Kride Talent Hunt'

HAND MADE EMBROIDERY WORK





-Smt. Gagana J R
Procurement Dept.





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