

आषाढ - श्रावण विक्रम संवत् 2080  
जुलाई 2023 | JULY 2023



# रलहरी

# Ralharee



## अनंत अवसरों का रेल संपर्क



Haryana Rail Infrastructure Development Corporation Limited  
वर्ष 2, अंक 2, अर्धवार्षिक पत्रिका | Year 2, Issue 2, Half Yearly Magazine

# FROM THE DESK OF



**SANJEEV KAUSHAL, IAS**  
Chief Secretary, Govt. of Haryana &  
Chairman, HRIDC

हरियाणा रेल अवसंरचना विकास निगम लिमिटेड, हरियाणा राज्य में रेल परिवहन के ढांचागत विकास के लिए अहम कार्य कर रही है। हरियाणा रेल अवसंरचना विकास निगम लिमिटेड के हरियाणा ओर्बिटल रेल कोरिडोर परियोजना से पलवल, नूह, गुरुग्राम, झज्जर एवं सोनीपत जिले लाभान्वित होंगे। हरियाणा ओर्बिटल रेल कोरिडोर परियोजना के लिए भूमि अधिग्रहण का कार्य रेलवे अधिनियम के तहत किया जा रहा है और पाँचों जिलों में कुल ₹1287 करोड़ राशि के अवार्ड घोषित किए जा चुके हैं। माह जून, 2023 तक ₹805 करोड़ राशि का वितरण भूमिधारकों को किया जा चुका है। एचओआरसी प्रोजेक्ट को पीएम गतिशक्ति राष्ट्रीय मास्टर प्लान में शामिल किया गया है। हरियाणा ओर्बिटल रेल कोरिडोर के मानेसर से पातली खंड के निर्माण कार्य को चालू वित्त वर्ष में पूर्ण करने का प्रयास है।

कुरुक्षेत्र शहर में हरियाणा रेल अवसंरचना विकास निगम लिमिटेड द्वारा बनाई जा रही ऐलिवेटेड रेलवे लाइन के निर्माण कार्य को चालू वित्त वर्ष में पूर्ण करने का प्रयास है। ऐलिवेटेड रेल लाइन के चालू होने पर शहर में 05 लेवल क्रॉसिंग खत्म हो जाएंगी और शहर के अन्दर रेल एवं सड़क यातायात के संचालन एवं सुरक्षा में सुधार होगा।

HORCL, Project SPV was incorporated with an objective of constructing HORC from Palwal to Sonipat via Sohna, Manesar & Kharkhoda. HORC project will provide efficient rail connectivity to the proposed cities of Panchgram Yojna of Govt. of Haryana and industrial hubs of IMT Sohna, IMT Manesar & IMT Kharkhoda. To fulfill this objective, the State Government has been providing continuous support to HRIDC & HORCL in the financing & execution of HORC Project. Sovereign backed loan amounting to ₹ 1040 Cr. for Part-A of HORC Project has been arranged by State Government from AIIB. I am delighted to share that Financial Closure for Part-A of the HORC Project has been achieved with the signing of Loan Agreement by AIIB & DEA on 08.06.2023.



**ANURAG RASTOGI, IAS**  
Addl. Chief Secretary, PW (B&R) &  
Chairman, HORCL

एचआरआईडीसी ने एनसीआरटीसी द्वारा प्रोजेक्ट की कुशल निगरानी के लिए विकसित सॉफ्टवेयर Systematic Program Evaluation for Efficient Delivery of Project (SPEED) को अपनी परियोजनाओं में उपयोग करने के लिए करार किया है।

SPEED will facilitate efficient Project Monitoring and Human Resource, Finance & Contract Management. The dashboard and reports generated from SPEED will facilitate the higher management the better view of project from different aspects. The Implementation of SPEED signifies HRIDC's commitment for employing innovative technology for improved project delivery.

With the support of Chief Secretary GOH and ACS/Finance GOH, Special Assistance of ₹ 550 Cr. for HORC and 90.83 Cr. for KET has been granted from the funds provided during the current Financial Year under the Scheme for Special Assistance under PM GatiShakti NMP/SMP.



**RAJESH AGARWAL, IRSE**  
Managing Director  
HRIDC & HORCL

# HORC Project at a Glance

## LAND ACQUISITION FOR HORC

- 20-A & 20-E notifications for the entire route length covering all the five districts namely Palwal, Nuh, Gurugram, Jhajjar & Sonipat have been published. Land awards amounting to Rs.1287 Cr. declared for all the five districts by the respective CALAs.
- Land compensation amounting to Rs. 805 Cr. disbursed to the land owners up to 30.06.2023.
- Arbitration Proceedings are in progress in the cases of disputes raised by the Land Owners.

## Utility Shifting

55 Nos. of LT/HT/EHT crossings shifted in HORC Part-A.



Utility Shifting in Progress

## Geotech Investigation

Geotech Investigation work for entire HORC alignment completed.

## Civil Works of HORC Part-A

Contracts for all the Civil works of HORC Part-A (i.e. Dhulawat to Badsa - 29.5 route km) awarded and works are in progress.

### (i) C-1 Package

- Substructure of Major Bridge No. 134 (on NH-352 W) completed.
- 7 minor bridges out of 16 completed.
- Earth work & retaining walls for Railway formation of Manesar- Patli connectivity line are in progress.



Minor Bridge No 133



Formation work

### (ii) BR-1 Package

- Launching of 76.2 m span Open Web Girder on Br No 134 (On NH-352W Pataudi Road) on Manesar-Patli connectivity line completed.



Launching of 76.2 m Open Web Girder on Bridge 134

### (iii) C23- Package

- Contract for C-23 Package (29.58 km to 49.7 km and 55.6 km to 61.5 km) awarded on 06.04.2023 and work commenced by the Contractor.

## TENDERS UNDER PROCESS

- Tender for C-4 Package - Design and Construction of Twin tunnel (2x4.7 km) between IMT Sohna & Dhulawat Stations opened on 17.03.2023 and under consideration.
- Tender for Sys-1 Package - Design, Supply, Installation, Testing & Commissioning of 2 x 25 kV OHE for HORC project invited. The pre-bid meeting was conducted on 17.06.2023. The tender is due for opening on 25.08.2023.
- Tender for C-5 Package (km 0.00 to km 12 and km 18.00 to km 24.843 including 3.9 km long viaduct) is likely to be invited in August 2023.

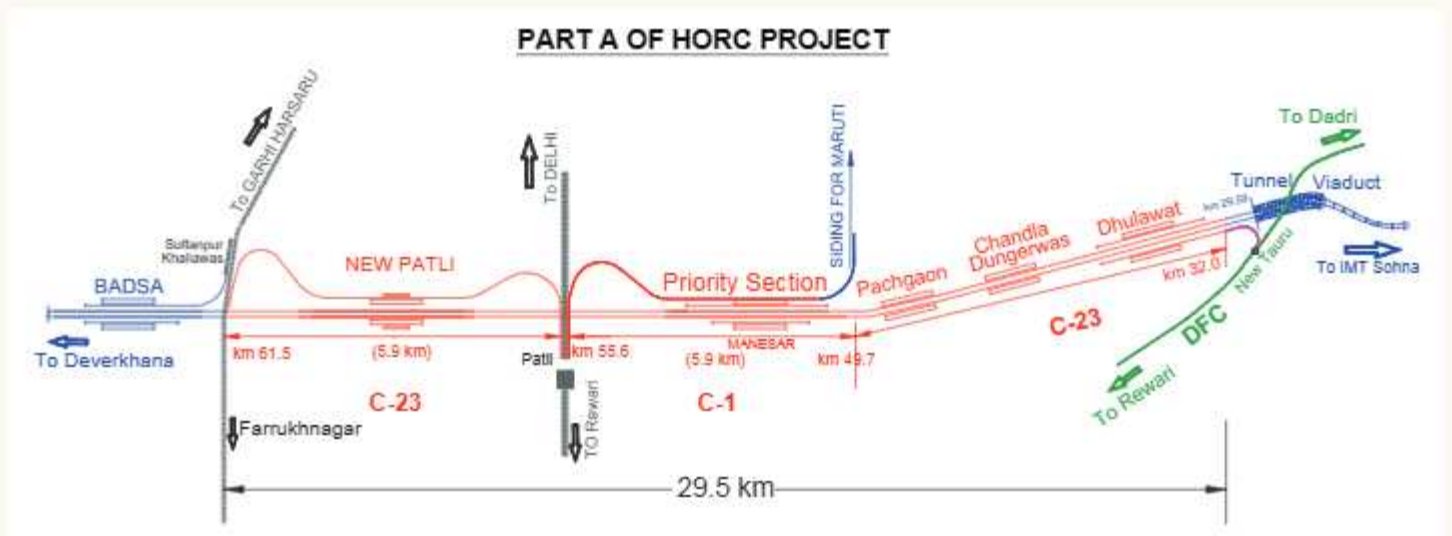
## Equity Infusion

Out of total Equity of Rs. 1500 Cr., Equity of Rs. 1200 Cr. infused by the shareholders (HRIDC, HSIIDC, GMDA, MSIL & ACL) in Haryana Orbital Rail Corporation Limited for HORC Project.

## Bifurcation of Project as Part-A & Part-B

HORC project has been bifurcated in two parts as Part A and Part B for ease of planning, financial funding, construction and commissioning. Part A comprises 29.50 km route length electrified double railway line with five new Railway Stations (Dhulawat, Chandla Dungerwas, Pachgaon, Manesar and New Patli), 11.4 Km of connectivity lines to the Railway network at Patli & Sultanpur.

Part B comprises 96.48 km route length with 9.4 km tunnelling, 3.9 km long viaduct (max height-25 m), 12 new Railway Stations and 8.81 km of connectivity lines to the Railway network at Asaudah & New Harsana Kalan and DFC network at New Prithala.



## Loan for HARC Part-A

60 % of HARC project cost is proposed to be funded through debt route. All the prerequisites of AIIB & DEA (50 % land acquisition, 30 % procurement and publication of ESIA report etc.) were complied with & "Pre Appraisal Mission" for Part A of the project (Dhulawat to Badsa, 30 route km) with AIIB was completed in March-2022 and Aide-Memoire signed. Negotiation for Loan for Part-A was held on 11.10.2022 by DEA. After successful loan negotiation, Loan for Part-A amounting to Rs.1040 Cr. was approved by the Council of Ministers, Haryana on 01.12.2022 and President AIIB on 04.01.2023.

Financial Closure for Part-A of the HARC Project achieved with the signing of Loan Agreement by AIIB & DEA on 08.06.2023.

## Loan for HARC Part-B

Efforts are being made for Debt funding of Part-B of the Project from Multilateral funding agencies/ Domestic Financial Institutions.

## Recognition in National Railway & Transport Innovation Summit

On the occasion of National Railway & Transport Innovation Summit held in Kochi on 17.03.2023, HRIDC was bestowed Excellence in "Outstanding Partnership and Collaboration Initiative/Project" for HARC Project.



# HORC Tunnel

4.7 km long twin tunnel has been planned to cross 80m high vertical cliff of Aravalli Range between proposed IMT Sohna & Dhulawat stations. The HORC alignment will cross underneath the existing WDFC through Br No. 87 (4 x 26.10 m).

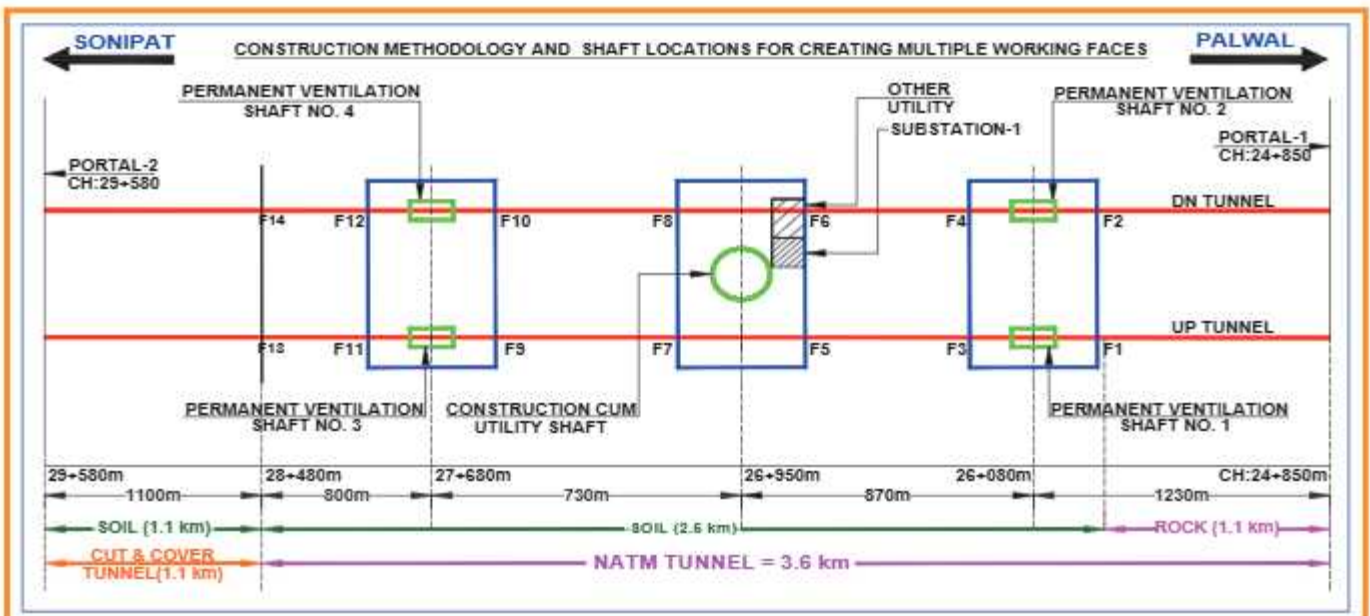


## Salient features of HORC Twin Tunnel

- Length of each tunnel - 4.7 km
- Tunnel to cater for high rise OHE suitable for double stack container movement.
- Finished cross sectional area of each tunnel - 71 sq.m
- Type of Track - Ballastless Track (BLT) with LWR
- Type of OHE - Rigid Overhead Conductor System (ROCS)
- Maximum overburden over tunnel - 60 m
- No. of Shafts - 5
- Working Faces for NATM - 14



Artistic view of proposed Twin Tunnel



# Kurukshetra Elevated Track

The construction work for the Kurukshetra Elevated Track (5.8 km), aimed to decongest the Kurukshetra city by eliminating five manned level crossings on the existing Kurukshetra-Narwana Railway Line, is progressing at a rapid pace. Overall Physical progress of Work is 68%. The work of launching of PSC Girders and Deck Slab casting is in progress. The elevated track will provide a much-needed solution to the traffic congestion caused by these level crossings, enhance the overall flow of traffic in Kurukshetra and improve safety for both rail users and road users.



Launching of PSC Girder in Progress



Deck Slab Casting in Progress



Launching of 228 PSC Girders completed

## The progress of important activities up to June 2023

S.NO.	ACTIVITY	SCOPE (Nos.)	PROGRESS (Nos.)
i.	Construction of Piles	1296	1250
ii.	Pile Caps	214	191
iii.	Pier shafts	214	190
iv.	Pier Caps	214	165
v.	Casting of Girders	452	452
vi.	Launching of PSC Girders	452	228
vii.	Deck Slabs	200	27
viii.	Laying of Track, OHE & S&T works	5.8 km	Tender for electrical work awarded on 13.06.2023

# Implementation of SPEED

## Features of SPEED

Systematic Program Evaluation for Efficient Delivery of Project (SPEED) is an advance IT software developed by NCRTC's in-house IT team. It is hosted on a MeitY approved cloud service. It is a robust and reliable platform with following inbuilt capabilities:

- User friendly real-time bottom-up data entry from field officers with jurisdiction control
- Complete audit trail of actions performed
- Provision for maintaining different packages and corridors in SPEED
- Configurable report formats
- Annual Security Audited

## Modules of SPEED

The SPEED software has the following major modules:

### 1. Project Management

- Pre-construction Progress Monitoring
- Construction Progress Monitoring
- Interactive Real-time Management Dashboard
- Illustrative pictorial representation of Progress
- Letter of Award Generation & Bill Processing
- Detailed Cost Monitoring
- Meetings Control Module
- Administrative Asset Register
- Feature to share files in a secure manner i.e. through encryption using digital signature

### 3. Power BI dashboard

- Microsoft Power BI enable to analyse for better strategic analysis of data streams, improve accessibility, gain smarter insights for Creating Reports and Dashboards for Administrators & Management for taking prompt decision.

## Progress of Implementation

- Gati App for attendance of employees started on SPEED Portal.
- Meeting Module & Leave Module Implemented.
- Monitoring of Preconstruction Activities started on SPEED Portal.
- Modules for QC APP for Construction Activities and Pay Roll Module under customisation and testing.



## 2. QC Module

- Paperless CRFI/MRFI generation from contractor end and approval process from Engineer/Employer.
- NCN (Non-Conformance Notice) and NCR (Non-Conformance Report) generation, reporting & compliance.
- QC module also features Quality Walk Reports to record and maintain the observations that are made during a quality walk.
- QUIC Dashboard: Users can view package wise consolidated data of all the construction activities being performed.

## 4. Employee Self Service

- Employee Data & Organisation Structure Management
- Leave Application & Team Attendance
- Bills & Claims
- APAR Generation and Management
- Requisition for General Items
- Tour Program & Training
- Annual Property Return

## 5. Pay Roll

- Payroll generation of all employees from basic data of leave, grade, increment, allowances, various types of deductions etc. in the SPEED itself.
- Manage salary slip, income tax projections & income tax declarations on the SPEED portal itself.
- Generation and Management of various types of Arrears, PF & EPF, Form 16 statements.



HRIDC Board Meeting on April 12, 2023



Meeting with Principal Accountant General (Audit) Haryana, Chandigarh



C-23 package contract signing on May 05, 2023



Technical Seminar on HORC Viaduct on April 26, 2023



Celebration of Vikram Samvat 2080 on March 22, 2023



Birthday celebration of Employees during Dy.HODs Monthly Meeting