**Achievement of Construction Department**

**during year 2016-17**

**Highlights**

* Suratpura-Hanumangarh section (174.07 km) Gauge conversion commissioned and passenger train service started on 24.05.16 by Hon’ble MOSR.
* Standard II (R) works at Badwasi and Chilo stations of Jodhpur division commissioned on 18.09.2016 & 28.09.2016 respectively.
* Standard II R work at Palana & Alai station of Jodhpur division commissioned during October, 2016.
* Standard-IIR interlocking at Mathania station of Rai ka Bagh-Phalodi section was commissioned on 04.12.2016.

**Achievements**

* **NI work has been completed on 28.10.2016 at Ratangarh Cabin between Ratangarh Jn. & Rajaldesar in connection with Ratangarh-Sardarsahar (46.75 km) GC project.**
* **CRS inspection of Sojat-Marwar (21 km) part of Guriya-Marwar (43.50 km) doubling project has been done on 03.01.2017. CRS has authorised the opening of section for the public carriage of passengers at a maximum permissible speed of 110 kmph.**
* **Track linking** on **Sikar-Churu** GC section has been **completed** during December, 2016.
* **Track linking** of Ratangarh-Sardar Shahar GC section completed **1.25 km** out of total **target 4.75 km**.
* **Track linking** of Guriya-Marwar (Doubling) section completed **16.50 km** out of total **target of 18.50 km.**
* Cumulative progress of LHSs during 2016-17 is **31** against Board’s **target of 124.**
* **Bridge portion of 07 ROBs** completed against Board’s **target of 10 ROBs.**
* **04 Unmanned LCs closed** during December, 16 after commissioning of LHSs. Cumulative progress of closure of Unmanned LCs during 2016-17 is **25 nos.** against Board’s **target of 61 nos.**
* **18 Manned LC closed** during December, 16. Cumulative progress of closure of manned LC during 2016-17 is **39 against RB target 11.**
* **7,72,200 cum of earthwork** done during December, 16. A total of **43,51400** cum of earthwork has been done during 2016-17.
* **41 minor bridges** have been completed during December, 16. Cumulative progress of completion of minor bridges during 2016-17 is **140.**
* **10 Major bridges** completed during 2016-17**.**
* A total of **5,602 MT** of scrap has been offered up to December, 2016, against Board’s **target of 13,910 MT.**

**Contracts awarded**

* **Alwar-Bandikui doubling (60.37 km) project :-** Contract amounting to Rs. 118.24 cr awarded on 18.05.16
* **Mavli Jn.-Bari Sadri MM (82.01 km) :-** Contract amounting to Rs. 137.40 crore awarded on 16.06.2016.
* **Ajmer-Bangurgram (48.43 km) Doubling project :-** Composite contract costing Rs. 113.38 cr. awarded on 24.06.2016.
* **Ringus detour alignment (7.44 km) :-** Composite contract costing Rs. 108.91 cr. awarded on 24.06.2016.
* **Deedwana-Gangapur city section (57.23 km) of Dausa-Gangapur City (92.67 km) New Line :-** Contract costing Rs. 54.46 cr. for Tunnel awarded on 23.09.2016.

**Achievement of Construction Department**

**during year 2015-16**

**Highlights**

* Construction Organisation of NWR has commissioned 331 Km of section during 2015-16, which is the highest in last 04 years.
* Financial targets have also been surpassed by booking an expenditure of Rs. 841 Cr. against RG of 816 Cr.

**Achievements**

* CRS Inspection of Suratpura-Gogameri (75.86 km) section part of Suratpur-Hanumangarh-Sriganganagar (240.95 km) GC done on 13.02.2016 & 14.02.2016. **Trial run conducted at a speed of 143 kmph and authorised its opening for public carriage of passenger at maximum speed of 100 kmph on 19.02.16.** Suratpura-Gogameri (75.86 km) section handed over to Open Line on 16.02.2016.
* CRS Inspection of Hanumangarh-Gogameri (98.21 km) was done on 14.03.2016 to 16.03.2016. CRS has authorised its opening for carriage of passenger at maximum speed of 80 kmph on 23.03.16.
* The long pending work of Makrana-Parabatsar (GC) is completed and the section is opened for traffic by Hon’ble MOSR on 19.01.2016.
* CRS inspection of Keshav Ganj-Mori Bera Doubling (21.38 Km) section (RVNL) is completed on 25.01.2016 and CRS authorisation for running of passenger train at 110 Kmph is received. Section commissioned on 15.03.2016.
* Doubling of Keshav Ganj- Swarupganj section (26.48 km) of Ajmer division commissioned on 16th April-2015.
* CRS inspection of Sikar-Loharu (122.13 km) section Part of Jaipur-Ringus-Churu & Sikar-Loharu (320 km) Gauge conversion project was conducted on 16.6.2015 to 18.6.15. Authorisation letter for opening of section for public Carriage of passengers at maximum Speed of 90 kmph was received on 26.6.2015. Passenger train service started on 01.9.2015.
* Sikar-Loharu GC section (122.13 km) part of Jaipur-Ringus-Churu & Sikar-Loharu (320.04 km) Gauge Conversion commissioned and passenger train service started on 1.09.2015 by Hon’ble Minister of Railways.
* CRS inspection of Makrana-Bidiyad (9.0 Km) section completed on 26.12.2015 and CRS authorised for running of passenger train at 50 Kmph.
* Track linking of Sikar-Churu (GC work) section 41 Km. completed out of target of 40 Km.
* Track linking of Guriya-Marwar (Doubling) section 25 km completed out of target of 20.0 km.
* Cumulative progress of ROBs during 2015-16 is 10 nos. against Board’s target of 11 nos. The work ROB at Ringus in lieu of LC No. 108 could not be completed due to not handing over the land by Govt. of Rajasthan.
* Cumulative progress of LHSs during 2015-16 is 30 nos. against Board’s target of 30 nos.
* Cumulative progress of closure of LCs during 2015-16 is 40 nos. (34 nos. Unmanned and 06 nos. manned) against Board’s target of 40 nos.
* **04 nos. minor bridges** completed during March,16. Cumulative during year- 52 nos.
* **01 no. major bridges** completed during March,16. Cumulative during year- 11 nos.
* **Udaipur - Addl. pit line** **and development of carriage & wagon facilities** commissioned on 30.05.15.
* 11676 MT scrap offered against Board’s target of 5,000 MT.
* **After enhanced delegation of power of tendering**
1. Tender for Rani-Marwar Junction doubling project amounting to Rs. 152 crore has been accepted.
2. Tender for Thiyat-Hamira new line amounting to Rs. 117.34 Cr. has been accepted on 23.03.2016.
3. Tender for Mavli-Barisadri (82.01 km) GC project of amounting to Rs. 177.43 crore opened on 20.04.2016.

**Achievement of Construction Department**

**during year 2014-15**

* Bangurgram-Ras (28.50 km) new line project commissioned on 31.01.2015.
* CRS inspection of Keshav Ganj-Swarupganj (26.48 KM) - Patch doubling was conducted on 26/08/2014. CRS has authorised to open the section at 100 kmph to be raised to 110 kmph after passage of certain traffic. Section will be opened after NI which has been planned from 06.04.2015 to 15.04.2015.
* CRS inspection of Bhagat Ki Kothi-Luni (28.12 km) doubling was conducted on 25.9.14.
* The work of linking of track on Hanumangarh-Ellenabad section (42.83km) completed. **Engine rolling done** on 17.10.14 between Suratpura-Ellenabad-Hanumangarh section.
* The work of launching of **1x76.20 m Open Web Girder** on major Br. No. 21(A) and **1x61.00 m Open Web Girder** on major Br. No.2A & 14B on Hanumangarh-Ellenabad section completed.
* **Suratgarh - Yard remodelling :-** The work of RRI at Suratgarh and its yard remodelling completed and commissioned on 1.10.14 in a NI period of **08 hrs. duration only**.

**ROB/RUB Works: -**

* **12 nos. of ROBs** (05 nos. on cost sharing, 03 nos. on NHAI/BOT basis and 04 nos. on deposit basic) completed during 2014-15 against Board’s target of 10 nos.

**LHS Works: -**

* 52 nos. LHSs (MD-PNU - 01 Br. Portion, SIKR-LHU - 28 Br. Portion, SURP-HMH - 05 - Full, UDZ-HMT - 13 Br. Portion & DO-GGC - 05 Full) completed during 2014-15 against Board’s target of 40 nos.

**Closure of LCs**

* **LC Closure - Unmanned (34 nos.) :-** 34 nos. LCs (SIKR-LHU - 16, SURP-HMH - 01, UDZ-HMT - 17) closed during 2014-15 by providing LHSs against Board’s target of 25 nos.
* **LC Closure - Manned (30 nos.) :-** 25 nos. by providing LHSs (MD-PNU - 02, SIKR-LHU - 13, UDZ-HMT - 05, HMH-SURP - 05) & 05 nos. by ROB-RUBs (LC - 208A-JU, 31B-JP/SWM, 110-Chomu, 65B-JP/SWM, 36C-MKN) closed during 2014-15 against Board’s target of 15 nos.

**Bridge works**

* 8 nos. major bridges constructed.
* 117 nos. minor bridges constructed.

**Traffic facility works**

* Suratgarh – Bhatinda Std. II-R work completed (142.33 Km having 11 stations).

**Workshop works**

* Modernisation of Loco &Carriage workshop completed and inaugurated by GM NWR on 07.11.2014. A cash award of Rs. 15,000/- was given for good quality of work.

**Scrap:-**

* **829** MT scrap offered during March-15. Cumulative 12,320 MT scrap offered out of total targeted of 9,000 MT.

**North Western Railway**

**Achievement of Construction Department during year 2013-14**

Major achievements of NWR Construction during the year 2013-14 are as under –

1. **Commissioning of new sections**

**Hanumangarh-Sriganganagar section (66.01 km)** part of Suratpura-Hanumangarh-Sriganganagar (240.95 km) Gauge conversion project opened for passenger services on 29.1.14.

1. **Targetted works**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of work** | **Type of work** | **Target** | **Achievement** |
| Bangurgram-Ras (28.5 km)  | New line | 28.50 km | 28.50 km |
| Dausa-Deedwana  | New line | 20.44 km | 20.44 km |
| Suratpura-Ellenabad  | Gauge Conversion | 131.24 km | * 1. m
 |

1. **Utilisation of Budget in 2013-14**

(Fig in Crores of Rs.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Plan Head** | **Allocation** | **FG**  | **Expenditure** | **% utilization**  |
| New line | Cap | 111.10 | 112.15 | 100.95% |
| Gauge Conversion | Cap | 224.26 | 227.42 | 101.41% |
| Doubling  | Cap | 27.25 | 27.25 | 100% |
| **Total** | **362.61** | **366.82** | **101.16%** |

1. **ROB/RUB/LHS WORKS**

|  |  |  |
| --- | --- | --- |
| **Name of work** | **Target** | **Achievement** |
| Construction of ROBs | 10 Nos | 11 Nos |
| Construction of RUBs | 04 Nos | 04 Nos |
| Construction of LHSs | 55 Nos | 47 Nos |

26 Nos. Level Crossing closed during the year by construction of ROB/RUB/LHS.

1. **Bridge works**
* 10 Nos Major bridges constructed.
* 134 Nos minor bridges constructed.
1. **Scrap Disposal**

|  |  |
| --- | --- |
| **Target** | **Achievement** |
| 15,000 MT | 26,537 MT |

In addition 1,386 MT P.Way material (including 1,049 MT scrap of MG) of Agra fort-Bandikui section handed over to open line of Agra division (NCR). This material was lying since 2004-05 after commissioning of GC of AF-BKI. With this there is no released material in this section in the books of NWR.

1. **Traffic facility works (PH-16)**
2. High priority work of Rewari-Hissar Std.-II R interlocking completed.
3. Sriganganagar yard remodeling & RRI work commissioned along with washing line and sick line complex.
4. **Workshop works (PH-42)**
5. Loco workshop Ajmer- Wheel shop, Bogie shop completed.
6. C&W workshop Ajmer - Coach lifting shop and spring shed completed.
7. Diesel shed BGKT - Construction of new additional shed, new washing pit, new load box and inspection pit with shed completed.
8. **System improvements**
9. E- tendering for procurement of P-way items started.
10. Standard Tender Documents prepared and being updated regularly.
11. **On front of Important Legal battle**

NWR won the Court case (8 SLPs) in Supreme Court against land acquired for construction of quarters in connection with establishing new zone.

1. **Staff quarters in connection with setting up NWR Zone**

216 nos. (36 nos Type-IV, 108 nos Type-III and 72 nos Type-II) new staff quarters at Jagatpura commissioned during the year in connection with setting up of NWR zone.

1. **Human Resource Development**

99 posts of technical categories were created. Against these posts all the 99 persons have been recruited out of which 42 persons are undergoing training.

|  |  |  |  |
| --- | --- | --- | --- |
| **Category**  | **No. of Post Sanctioned** |  **No. of Persons Joined** |  **No. of Persons under Training** |
| SSE/Works | 09 | 09 | 09 |
| JE/Works | 51 | 21 | 21 |
| SSE/Design & Drawing | 09 | 02 | 02 |
| JE/Design & Drawing | 20 | 10 | 10 |
| SSE/Bridge | 02 | Nil | Nil |
| JE/Bridge | 08 | Nil | Nil |
| **Total** | **99** | **42** | **42** |

1. **Important Inaugurations**
2. Foundation stone of setting up of Greenfield MEMU manufacturing facility at Bhilwara laid by Hon’ble Smt. Sonia Gandhi, Chairperson, UPA and Hon’ble MR Sh. Mallikarjun Kharge on 22.09.2013 at Rupaheli station near Bhilwara
3. Foundation stone of gauge conversion work of Mavli-Bari Sadri laid by Hon’ble Minister for Housing & Urban Poverty Alleviation, Dr. Girija Vyas at Mavli on 16.02.2014.
4. **Quality Assurance**
5. 02 Officers & 13 nos. Supervisors trained in RDSO for Earthwork (FRQC).
6. 1 officer & 1-Design Asstt. trained in RDSO for Design of POT-PTFE bearings.
7. 15 Officers trained in IRICEN.
8. 04 officers & 02 supervisors trained for testing of POT-PTFE bearings in RDSO.

(v) 71 nos. officers & inspectors of Construction Organisation along with engineers of contractors trained in concrete mix design & good construction practices.

1. No defective weld being left in newly laid track while commissioning GC, doubling and new line projects.
2. All welds are being done by mobile flush welding plants except in scattered locations like distressing and T/out locations.
3. **Innovations**
4. Use of 500 MT capacity road crane, Robotic type (first time perhaps in IR) for launching of Pre cast RCC segments (5.5 x8.05x1.52m) each segment weighing about 67 MT for RUB in lieu of LC-110 near Chomu in single block of 9 hours by cut & cover method.
5. HSFG bolts used for fabrication of composite girders of ROB near Barmer for the first time in NWR.

1. **Efforts on achieving economy**

Substructures of 18 nos major bridges retained after NDT testing in Udaipur-Himmatnagar GC project. Earlier they were planned to be reconstructed thus saving of Rs. 13.00 crore approximately.

**Achievement of Construction Department during year 2012-13**

**Gauge Conversion :-**

* Sriganganagar-Suratgarh passenger train was flagged off on 08.06.2012 by Hon’ble Chief Minister of Rajasthan and Hon’ble Minister of State for Railways (M).Hon’ble MOSR (M) was pleased to announce a group cash award of Rs. 3 lakh for successful organisation of the function.
* Track linking of Sikar-Loharu (122.13 km) section of Jaipur-Ringus-Churu & Sikar-Loharu (320Km) Gauge Conversion completed and engine rolled on 25.2.2013.
* Track linking of Hanumangarg-Sriganganagar (66.88 km) section of Suratpura-Hanumangarh-Sriganganagar (240.95Km) Gauge Conversion completed and engine rolled.

**Doubling :-**

* CRS Inspection between Bawal-Anajmandisection of Harsauli-Rewari doubling project has been done on 25.3.12. CRS issued authorization for running of passenger trains with a speed of 80 kmph. Section commissioned on 7.4.12.
* CRS Inspection of Harsauli-Bawal section of Harsauli-Rewari (39.35kms) Doubling conducted successfully on 11.6.2012. This section has been opened to traffic at a speed of 90 kmph on 16.6.12. With this complete Rewari-Alwar doubling has been commissioned.
* Track linking of Keshavganj-Swarupganj (26.48 km) doubling project completed and engine rolled and engine rolled in December 2012.

**Traffic Facility Work :-**

* Bhagwansar station of Suratgarh-Sarupsar-Sriganganagar GC work commissioned on 29.9.12.
* Jharli station of Rewari-Hissar Std.-II interlocking work commissioned on 30.9.12.
* Charkhi-Dadri station of Rewari-Hissar Std.-II interlocking work commissioned on 31.1.13.

**ROB/RUB Works :-**

* Jaipur-Ajmer ROB in lieu of LC No. 28 near Kishangarh completed and commissioned in July, 12.
* Rewari-Hissar - ROB in lieu of LC No. 53-C in Bhiwani Yard commissioned in Oct., 12.
* Ajmer-Saradhana - ROB in lieu of LC No. 5-A/2 near Saradhana has been completed and commissioned in Oct., 12.
* Nagaur-Basani Road - ROB in lieu of LC No. 63-C (2 lane) near Nagaur commissioned in January,13.
* Jaipur-Bandikui - Railway portion of ROB in lieu of LC No. 181 near Dausa commissioned in March,13.

Railway portion of ROB in lieu of LC No. 325 near Barmer and 111-C near Alwar completed during March, 13.

**LHS Works :-**

* Bangurgram-Ras New Line Project 12 nos. Limited height subway at Br. No. 5, 6, 8, 15, 26, 31, 33, 43, 48, 51, 56, 57-A Completed.
* Dausa-Gangapur city New Line Project 6 nos. Limited height subway at Br. No.30A, 48, 56, 63, 65 and 66 completed.
* Makrana-Bidyad Realignment NL Deposit Work 4 nos. LHS at LC No. 2, 3, 4 & 5 Completed.
* Sriganganagar-Hanumangarh GC Project 5 nos. Limited height subway at LC No.122, 135, 142, 169 & 178 completed.
* Suratpura-Hanumangarh GC Project 1 no. Limited height subway at LC No. 33 completed.

**Other specified work :-**

* Six multi-storied towers near GetorJagatpura Railway station, Jaipur in connection with setting up of new NWR Zonal HQ at Jaipur commissioned.

**Scrap:-**

* 28915.816 MT scrap offered out of total targeted of 27,000 MT.

**Achievement of Construction Department**

**during year 2011-12**

 **New Line :-**

* CRS inspected Madar-Pushkar (25.70 Km) New line on 24.05.2011 and issued authorization for running of passenger trains with speed of 90 Kmph on 25.05.2011.
* Ajmer-Pushkar (31.40 km.) New Line has been opened for train operation on 23/01/2012. Train Operation Function Inaugurated by Hon'ble MR, CM & MOS-CIT.

**Gauge Conversion :-**

* CRS inspected Mavli-Nathdwara (16 Km) GC on 14.04.11 and issued authorization for running of passenger trains with speed of 100 Kmph on 15.04.11.

**Doubling :-**

* CRS inspected Alwar-Harsauli (34.86 Km) Doubling on 27.04.11 and issued authorization for running of passenger trains with speed of 90 Kmph on 28.04.11.

**Traffic Facility Work :-**

* Work of “Lalgarh-Suratgarh – Std.-III Interlocking Central Panel, MACLS and block providing by axle counters etc.” (PB-32) for all 13 stations completed and commissioned on 26.5.11.
* Bikaner Yard remodelling (Phase-II) commissioned on 8/8/11
* CRS Inspection of Phalodi By-pass done on 24.8.11. Work completed & commissioned.
* Bikaner yard handed over to division on 26.12.2011.

**ROB/RUB Works :-**

* ROB in lieu of LC No. 138 at Bikaner; LC No.57 at Rewari, LC No.134 at Abu-Road, LC No. 63 near Mandal and LC No. 19-C Rewari-Hissar : - Completed & commissioned in 2011-12.
* ROB in Railway portion at LC No.28 - Kishangarh ; LC No. 36-C Kuchaman City- Makarana ; LC No. 117 (Deposit work) at Alwar and ROB at Dausa By-pass:- Railway Portion work completed
* RUB between Jaipur-Kanakpura section (km 242/7-8) completed and opened for traffic on 23.9.2011.
* Rewari-Hissar-Bhatinda - ROB in lieu of LC No. 19-C (2 lane) completed and opened for traffic in Jan 2012.
* 13 No’s RUB accommodation work in Dausa-Gangapur City NL completed

**Other Works :-**

* Training in concrete technology with special emphasis on concrete mix design was conducted at Jaipur from 14.10.11 to 16.10.11. Total 35 officers (including 4 CE/C s) and inspectors attended the training. Practical demonstration of mix design was given. After the training 8 nos. of officers and inspectors have carried out mix design at site themselves. It is expected to improve quality of concrete work substantially in a systemic way.