#### **REVIEW**

OF

#### **STAFF STRENGTH**

OF

# Trackman IV of Engineering Department of Danapur Division

#### **WORKING**

**AT** 

#### DANAPUR DIVISION

(ECR/Effi/WSR/SEE/19-20/11)

GUIDANCE BY STUDY

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**WORK-STUDY CELL** 

**East Central Railway** 

**HAJIPUR** 

# **EXECUTIVE SUMMARY**

Study No.	(ECR/Effi/WSR/DNR/19 -20/11)
Subject	REVIEW OF STAFF STRENGTH OF TRACK MAN -IV OF ENGINEERING DEPARTMENT OF DANAPU DIVISION.
Area	DANAPUR DIVISION
Division	DNR
Department	ENGINEERING
Terms of Reference	Assessment of Man Power requirement
Total No. of Recommendations	01
No. of posts recommended for	18
surrender	
Financial Implication	90.59 Lakh
Month of Circulation	JUNE - JULY 2019

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# **TERMS OF REFERENCE**

The study has been conducted under the following terms of references:

To review staff strength vis-à-vis workload of Trackman IV of Engineering Department of Danapur Division

- a) To review of staff vis-à-vis workload of Trackman-IV Staff of Engineering Department of Danapur Division with a view to identify the surplus manpower in different section.
- b) To assess the effective utilization of Trackman –IV staff working in Engineering Department of Danapur Division.
- c) To suggest ways and means to improve working of Trackman –IV Staff in Engineering Department of Danapur Division.

#### METHODOLOGY ADOPTED

The following techniques of method study as well as work measurement have been applied to conduct the study:-

- Data collection and its critical analysis to arrive on factual status of present working.
- ii) Reassessment of manpower requirement by applying on need base.
- iii) Discussion with Sr.DEN(Co-ord)/DNR.
- iv) Discussion with SSE/ P.WAY/ DNR, ARA, BXR, PNBE , MKA, KIUL, JHD BKP.DLN
- v) Discussion with P.Way staff.

#### **SYNOPSIS**

1. In Railways, the process of absorption of modernization has been started and still in progress in every sphere of system. These technological up

- gradations have shown considerable improvement in the efficiency and manpower productivity in Railways.
- 2. Keeping in view, all these constraints, the Work Study Cell was assigned to conduct work study of staff strength of Trackman IV of Engineering Department of Danapur Division with a view to assess the staff requirement as per the existing workload.
- 3. Engineering Department also plays a vital role in Indian Railways and leads in performance of any Zonal Railway. At present 1800 Track man -IV are working against Sanction Strength 2213 in Engineering Department of Danapur Division .

# **Chapter-I**

#### **INTRODUCTION**

Benchmarking is a continuous process of comparing different units and identifying which one is the best in the business and then learning how this excellence was achieved and setting out to improve the efficiency of those units, which were behind. If this concept is implemented it will result large reduction in the cost and make significant contribution in improving the efficiency of various divisions of Railways, but Danapur Division has not infrastructure developed than other Division of Indian railway. Hence, reassessments of man power on need base is done.

P.WAY staff in divisions are controlled by Sr.DEN(Co- ord) and assisted by XEN, AEN and other staff.

At present 1800 Trackman –IV Staff are working against Sanction Strength 2213 in Engineering Department of Danapur Division.

With the improvement of information technology and rationalization of working pattern due to modernize and computerized the machine as well as change in working hours have created enough scope of improving efficiency of staff. The working culture are different, the bench marking norm is difficult to calculation of staff. The work study team observed that need base is best option for calculation of staff. Competent Authority has approved a Work Study on "Review of staff strength of Trackman –IV Staff in Engineering Department of Danapur Division with a view to assess the staff requirement as per the existing workload and best utilization.

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## **CHAPTER-II**

**2.1 Work Load**: - Trackman -IV of Engineering Department of Danapur Division are divided into the following sections with the job entrusted to:-

Sl.No.	P.Way Section
01	SSE/ P.Way /DNR
02	SSE/ P.Way /ARA
03	SSE/ P.Way /BXR
04	SSE/ P.Way /MKA
05	SSE/ P.Way /KIUL
06	SSE/P.Way/JHD
07	SSE/P.Way/JAJ
08	SSE/P.Way/NWD
09	SSE/P.Way/PNBE
10	SSE/P.Way/BKP
11	SSE/P.Way/SHK
12	SSE/P.Way/BEHS
13	SSE/P.Way/DLN

**2.2 Duties of Trackman-IV -:** The duties of included lying , repairing maintenance , cleaning of tracks, checking on track ballast , un keep of safety equipment ensure , tracked are not blocked, checking of crackness and looking for damage in fish plate ,

#### Trackman IV are also utilized in following work as given below;-

Dressing boxing, post cross patching, patching, rail changing, sleeper changing, greasing, crossing chaser, group joint chaser, line fixing, switch and crossing changing, replace of L.C gate, pre temping, post temping, cold weather patrolling, slack packing, repair of trolley, carry of trolley, painting of rail, painting of

welding, replace of L.C. boom, providing joggle fish plate, AT weld, clearance of track circuit, monsoon patrolling, fish plate greasing etc

Deployment of track man in following section/unit in DNR Division are following as given below.

Sl.No.	P.Way Section	Deployment of staff
01	SSE/ P.Way /DNR	144
02	SSE/ P.Way /ARA	133
03	SSE/ P.Way /BXR	149
04	SSE/ P.Way /MKA	173
05	SSE/ P.Way /KIUL	88
06	SSE/P.Way/JHD	144
07	SSE/P.Way/JAJ	159
08	SSE/P.Way/NWD	106
09	SSE/P.Way/PNBE	213
10	SSE/P.Way/BKP	216
11	SSE/P.Way/SHK	74
12	SSE/P.Way/BEHS	67
13	SSE/P.Way/DLN	134

#### CHAPTER III

# CRITICAL ANALYSIS, REQUIREMENT OF STAFF VIS-À-VIS WORK LOAD AND RECOMMENDATIONS:

Track route kilometer of Danapur Division is 868.136 and ITKM is 2172.811. work study team observed that time to time, variation of work of p, way of Engineering department. A large critical and various type of work are done, day to day no. of trains are increased and speed of trains are also increased. Hence present sanctioned strength are sufficient for smooth work of P.WAY.But work study team observed and discussed with concerning authority that some excess vacant posts of trackman in different section such as SSE/P.WAY /DNR, BXR, BKP, MKA, KEU, NWD, DLN, SHK, JHD due to large number of track machines are used.

# SECTION/UNIT WISE Trackman-IV IN P.WAY.OF ENGINEERING DEPARTMENT OF DANAPUR DIVISION:-

Sl.No.	P.Way Section	S/S	MOR
01	SSE/ P.Way /DNR	187	144
02	SSE/ P.Way /ARA	167	133
03	SSE/ P.Way /BXR	178	149
04	SSE/ P.Way /MKA	209	173
05	SSE/ P.Way /KIUL	95	88
06	SSE/P.Way/JHD	245	144
07	SSE/P.Way/JAJ	167	159
08	SSE/P.Way/NWD	187	106
09	SSE/P.Way/PNBE	246	213
10	SSE/P.Way/BKP	227	216
11	SSE/P.Way/SHK	78	74
12	SSE/P.Way/BEHS	56	67
13	SSE/P.Way/DLN	171	134
	Total	2213	1800

# Unit wise jurisdiction and present staff of Some important section of SSE/P.WAY of Danapur Division are given as below. :-

## 1. SSE/ P.Way /DNR:-

Unit	Jurisdiction	Present staff	
01	543/3-5 to 551/25 km	11	
02	551/25 to 558/00 km	15	
03	558/00 to 564/15-17	09	
04	564/15-17 to 571/5-7	16	
05	571/5-7 to 577/15-17	15	
06	577/15-17 to 584/00	10	
07	584/00 to 590/00	17	
08	Danapur yard	6	
09	KWR. Special	6	
10	DNR Special unit	23	
11	Patna unit	21	
12	Total	149	

# **2.** SSE/ P.Way /BKP:-

Unit	Jurisdiction	Present staff	
01	483/5- 489/0 km		
02	489/0 to 495/00 km	106	
03	405/0 0 to 500/00km	106	
04	500/00 to 506/00		
05	506/00 to 512/3km		
06	577/15-17 to 584/00		

# 3. SSE/ P.Way /JHD

Unit	Jurisdiction	Present staff	
01	544/17A to9/27 km		
02	6/27 to 13/11		
03	13/11 to 19/25 km		
04	19/25 to 26/27km		
05	26/27 to 32 /23 km		

06	32/23 to 39/5 km		
07	39/5 to45/21 km	144	
08	45/21 to 52/1 km	-	
09	52/1 to 58/17km	-	
10	64/29 to 71/25km		
11	71/17 to 77/25 km		
12	77/25 to 84/ 9km		
13	84/ 9 to 90/23		
14	544/17 to 90/23		

# 4. SSE/ P.Way /KIUL:-

Unit	Jurisdiction	Present staff
01	406/0 to 412/3km	13
02	412/3 to 418/17 km	13
03	418/17 to 424/3km	19
04	424/3 to 429/27km	14
05	429/27 to 435/15km	15
06	Kiul yard & JMP/L	11

# 5.SSE/ P.Way /MKA

Unit	Jurisdiction	Present
		staff
01		20
02		19
03		18
04	483/5 to 483/5	19
05		17
06		19
07		22
08		21
09		21
10		13
11		14
12		14
		219

# 6.SSE/ P.Way /NWD

Unit	Jurisdiction	Present staff	
09	53/0 TO 59/0 km	106	
10	59/0 to 66/0km	-	
11	66/0 to 72/0 km	-	
12	72/0 to 79/0 km	-	
13	79/0 to 85/0 km	-	
14	85/0 to 92/0 km	-	
15	92/0 to 98/0 km		
16	98/0 to 105/0 km		
17	105/0 to 111/0		
	km		
18	111/0 to 117/0 km		
19	117/0 to 124/0		
RGO-TIA -1	0/0 to 13/0 km		
RGO-TIA -2	13/0 to 25/0 km		
RGO-TIA -3	25/0 to 37/0 km		
RGO-TIA -4	37/0 to 46/0 km		

# 6. SSE/ P.Way /DLN:-

Unit	Jurisdiction	Present staff	
01	695/0 to 700/0km	15	
02	702/0 to 708/17km	13	
03	708/17 to 715/7 km	19	
04	715/7 to 722/0 km	14	
05	722/0 to 728/19 km	15	
06	728/19 to 735/7 km	11	
07	735/7 to 741/21 km	12	
08	741/21 to 748/0	05	
09( TRG-01)	0/0 to 6/0 km	04	
10( TRG-02)	6/0 to 13/0	05	
11( TRG-03)	13/0 to 19/4	07	

#### 7. SSE/ P.Way /BXR:-

Unit	Jurisdiction	Present staff	
01	643/0 to 649/5 km	17	
02	649/5 to 656/0 km	10	
03	656/0 to 662/0 km	20	
04	662/0 to 668/13 km	13	
05	668/13 to 675/0 km	10	
06	675/0 to 680/17 km	12	
07	680/17 to 688/0 km	16	
08	688/0 to 695/0 km	14	
09(SPL.)		16	
Trolley		05	

#### 8. SSE/ P.Way /PNBE:-

Unit	Jurisdiction	Present staff	
01	512/3 to 519/0 km	16	
02	519/0 to 525/0 km	12	
03	525/23 to 532/1-3 km	08	
04	532/1-3 to 538/23 km	27	
05	538/23 to 545/5 km	22	
06	PNBE yard	14	
07	PNBE yard gang 10	03	
08	RJPB yard	06	
08	Special Misc. work staff	69	

Section wise requirement on need base. Work study team observe that track man IV are required in unit wise work in each section and miscellaneous work such as trolley inspection, USFD, welding patching, assistance with black smith, line block, material carrying etc on need base.

Si.No. P.way Section S/S Requirement Excess	Sl.No.	P.Way Section	S/S	Requirement Excess
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01	SSE/ P.Way /DNR	187	185	02
02	SSE/ P.Way /ARA	167	167	00
03	SSE/ P.Way /BXR	178	176	02
04	SSE/ P.Way /MKA	209	207	02
05	SSE/ P.Way /KIUL	95	93	02
06	SSE/P.Way/JHD	245	243	02
07	SSE/P.Way/JAJ	167	167	00
08	SSE/P.Way/NWD	187	187	00
09	SSE/P.Way/PNBE	246	246	00
10	SSE/P.Way/BKP	227	225	02
11	SSE/P.Way/SHK	78	76	02
12	SSE/P.Way/BEHS	56	56	00
13	SSE/P.Way/DLN	171	169	02
		2213	2195	18

Work study team observed and discussion with concerning authority that A large number of track machine are utilized , Hence 02 posts of track man-IV in each unit of SSE/P.WAY /DNR, BXR, BKP, MKA ,Kiul, NWD ,DLN, SHK,JHD may be excess than requirement . Total 02x09=18 posts excess than requirement.

Hence work study team are observed that 18 posts of Trackman -IV may be recommended for surrender.

# **CHAPTER IV**

#### **Recommendation -**

Work study team has recommended, 18 vacant posts of trackman IV may be surrendered.

Total Sanction Strength of carpenter khalasi =2213

Total Men on Roll =1800

Total Vacant post =413

Total Staff required =2195

**Excess Staff** =2213-2195=18 Staff

After going through the requirement of staff, the work study team observed that the 18 vacant posts of Trackman -IV may be recommended for surrender and financial saving will be Rs 90.59 Lakh per annum. The work is going on without any hindrance.

# **CHAPTER - V**

# **FINANCIAL SAVINGS:-**

If the recommendation of the study report is implemented, the annual recurring financial savings will be as under:

S.No	Category	Scale of	Grade	Mean	DA @12%	Total pay	No. of	Annual
		pay	pay	pay per		per	post	financial
		(Rs.)		month		month		savings (Rs.)
				per staff		per staff		
						(Rs.)		
1	- 1 0.4	5000	4000	07450	4404	44044	40	0050004
1	Trackman-IV	5200-	1800	37450	4494	41944	18	9059904
		20200						
Total	1	1					18	90.59 lakh.
Total								

#### **CHAPTER VI**

#### Summary:-

After critically examining the work load of category of Trackman-IV working in Engineering department of Danapur Division . work study team proposes as below:-

S.No.	Designation	BOS	Man on	Requirement	Proposed	Remark
			Roll	as per WS	surrender	
1	Trackman-IV	2213	1800	2195	18 vacant posts .	18 vacant posts may be surrendered
Total		2213	1886	2195	18	

Total proposed for surrender = 18

# Annexure -I

Staff position of Trackman-IV of Engineering Department of Danapur Division as on 23.05.2019 and 24.07.2019.

SI NO	Category	Scale	Grade pay	Sanctioned Strength	Men on Roll	Vacancy
1.	Trackman-IV	5200-20200	1800	2213	1800	413
	Total	1	1	2213	1800	413

#### EAST CENTRAL RAILWAY

Office of the General Manager(Vig.) Hajipur Dated: 08.08.2019

No.: - ECR/Eff./WSR/DNR /19-20/11

Sr. DEN(Co-ord)
East Central Railway,
Danapur

**Sub.:-** Work study report on adequacy of staff strength Trackman -iv of Engineering Department of Sonpur Division

In connection to above, it is intimated that work study has been conducted on adequacy of staff strength of Trackman IV of Engineering Department of Danapur Division. The work study team has recommended to surrender of 18 vacant posts of Trackman-IV .

Hence, It is requested to scrutinize the work study report and send the reply within 10 days so that, the report may be finalized and intimated to Railway Board .

Hence, it is requested to scrutinize the work study report and send the reply within 10 days, so that the report may be finalized and intimated to Railway Board.

Efficiency Officer For SDGM

Copy to: (i) PCE/HJP for kind information please.

- (ii) PCPO/ HJP for kind information please.
- (iii) ADRM/DNR for kind information please.
- (iv) Sr. DPO /DNR for kind information please.

For SDGM



## **EAST CENTRAL RAILWAY**

## **WORK STUDY REPORT**

To assess the utility of Trackman IV of Engg. Department of Danapur Division

# EFFICIENCY CELL EAST CENTRAL RAILWAY HAJIPUR

Study No. ECR/Eff./WSR/DNR/19-20/11