

**NORTHEAST FRONTIER RAILWAY**



**WORK STUDY REPORT ON ENGINEERING**

**DEPARTMENT (WORKS)/RPAN UNDER Sr.DEN/C/RNY OF N.F.RAILWAY**

**GUIDED BY:**

**SHRI B. LAKRA , SDGM.**

**SHRI L. R. WARY, EO.**

**BRANCH OFFICER: SHRI J. P. SINGH, SR. DEN/C/RNY**

**ASSOCIATED OFFICER: SHRI SHITANSHU VERMA, Sr.ADEN/W/RPAN**

**DIVISIONAL INSPECTOR: SHRI NIRUPAM BARUAH, SSE/W/IC/RPAN**

**CONDUCTED BY:**

**SHRI J. MITRA, WSI.**

**SHRI S.N.GHOSH, WSI.**

**STUDY NO. WSNF/73/2019-20**

**CASE NO. Z/375/10/19-73**

**CENTRAL PLANNING ORGANISATION**

**N. F. RAILWAY/MALIGAON**

**GUWAHATI - 781011.**

## **EXECUTIVE SUMMARY**

**SUBJECT:** Work study for “Review of staff strength of Engineering deptt/Works/RPAN Under Sr DEN/C/RNY” (Work study No. WSNF/73/2019-20)

**STUDY NO:** WSNF/73/2017-18

**CASE NO :** Z/375/10/19-73

**AUTHORITY:** SDGM/MLG

**CONCERN DIV:** RNY                      **DEPARTMENT:** Engineering/W/RPAN

### **TERMS OF REFERENCE:**

To assess the requirements of staff strengths of Engineering branch at RPAN under Sr.DEN/C/RNY of division.

### **NO. OF RECOMMENDATION:** 1 (One)

After critical examination of the workload and activities a total **14 Nos.** of posts are surplus of various category viz. (a) **Tech Carpenter** Gr-I -03 Nos, Gr-II-02 No (b) **Painter** Gr-I- 01 No , (c) Fitter Gr-I -01 No. & Gr-II -01 No (d) Mason Gr-I-01 & GR-II-01 (e) FPO Gr-01 No (f) Chowkidar- 01 No. (g) **Khalasi** (M) - 02 Nos. Under Sr DEN/C/RNY, which may be surrendered and the BOS may be corrected accordingly.

**FINANCIAL ACHIEVEMENT:** Projected manpower surrenders= 14 Nos.

Projected financial saving = **60.53 Lakhs per anum.**

**MONTH AND YEAR OF CIRCULATION :** Sept /2019

## **I N D E X**

<b>Chapter</b>	<b>Contents</b>	<b>Page No.</b>
I	Introduction	4
II	Summary of work load	5-6
III	Critical analysis of staff requirements.	7-10
IV	Proposed staff & surplus posts (category & scale wise).	10
V	Recommendation.	11
VI	Financial Implication.	11
VII	Ready Reckoner	12

## **CHAPTER-I**

### **1.0 INTRODUCTION:**

The Railway administration has to make the best of its resources including manpower keeping them at the optimum level to attain the financial viability. Taking into consideration to these objectives, the Railway Board has emphasized to take up review on staff strength of various departments in the Railway. In pursuance with this policy of Railway Board, the Central Planning Organization has conducted this work study to assess the requirements of staff strengths in engineering branch at RPAN/WORKS under Sr DEN/C/RNY.

### **1.1 RATIONALE FOR CONDUCTING THIS STUDY:**

- Man power is the most costly and precious resource over Indian Railway and right sizing is the need of the hour.
- Focussing attention on core activities by reducing/elimination of non- core activities.
- Improving the efficiency (output/input) either by improving the output (numerator) or by decreasing the input (denominator).
- Up-gradation/introduction of automation/innovations
- Outsourcing of noncore activity.
- Availability of better process/technology.
- Reducing/removing redundancy in work.

### **1.2 AUTHORITY:**

SDGM of N.F.Railway.

### **1.3 TERMS OF REFERENCE :**

Engineering Department (Works) under Sr DEN/C/RNY

### **1.4 METHODOLOGY**

**Discussion with Sr DEN/C/RNY, ADEN/W/RPAN and nominated subordinate;**

- a) Before conducting this study a discussion was made with Sr DEN/C//RNY who has been nominated Shri S.Verma, ADEN/W/RPAN as Associated Officer and Shri Nirupam Baruah,SSE/W/IC/RPAN as associated inspector. The BOS as on 01.4.2016 is collected from the concern section of DPO/IC/RNYs office.
- b) Collection of data relating to workload.
- c) Discussion with Sr DEN/C, ADEN/RPAN & Subordinates for obtaining their views.
- d) Assess the workload for other activity.
- e) Assess the staff requirements for the above workload.

### **1.5 ACKNOWLEDGEMENT:**

Work study team is grateful to Sri J.P.Singh, Sr DEN/C/RNY, Shri S.Verma, Sr.ADEN/W/RPAN as Associated Officer and Shri Nirupam Baruah,SSE/W/IC/RPAN for their kind guidance and co-operation for conducting this study.

## **CHAPTER-II**

### **2.0 SUMMARY OF WORK LOAD:**

#### **2.1 Work load of Tech.Carpenter:**

This category is engaged for Carpentry work as well as repairing of doors, windows and other wooden structures of buildings of Railway and Railway colonies. Presently these works are accomplished by engaging the contractor/agency.

#### **2.2 Work load of Painter:**

This category are employed for painting various Engg office buildings, Raiway colonies, doors, windows & lettering works in railway premises. On scrutinizing detailed work load and discussion with the concerned SSE & officers brought to notice that presently these works are accomplished by engaging the contractor/agency. Hence, this category is of no viable importance & also to mention that this post is lying vacant since long.

#### **2.3 Work load of Fitter:**

This category is employed to look after the plumbing , water pipeline repairing jointing work etc. of Railway premises and colonies and maintain the water line network trouble free in day to day working. Presently these works are accomplished by engaging the contractor/agency and these fitter categories are employed to keep vigil and monitor the same as and when it is required.

#### **2.4 Work load of Mason:**

This category is engaged for masonry work of Drains, Boundary walls & all sorts of plastering/repairing works of Railway buildings and premises. Mostly these works are accomplished by the contractor/agency engaged.

#### **2.5 Work load of FPO:**

This category Known as Filter Plant Operator are employed for operating Filter Plants of Pump House for each station building for water supply which are presently accomplished by engaging the contractor/agency. Hence, these category has no viable importance for filter plants as these are outsourced. Only a skeleton staff of FPO are required to look aftr the contractors work.

#### **2.6 Work load of Chowkider:**

This category is employed to lock and unlock as well as guard the Engg. Departmental stores used for office day to day working. They are employed to keep vigil of these stores in proper manner & exhibit the opening & closing the same after proper sealing by the SSE/Works as and when it is required.

## 2.7 Work load of Khalasi (M):

This category is employed to assist the FPO in filter plant of pump house for replacing charcoal, sand etc. used in Filter plant and maintaining the plant. As maintenance of filter plants are outsourced, this category has no viable importance for filter plants.

### **Deptt. Engineering Branch Gr. 'C' & 'D' Staff :**

Sl No	Category	Pay Band	Grade Pay	Sanction	On Roll	Vacancy
1	SSE/Works	9300-34,800/-	4600/-	02	1	01
2	JE/Works	9300-34,800/-	4200/-	1	1	0
3	OS/G	9300-34,800/-	4200/-	2	2	0
4	Carpenter (MCM)	9300-34,800/-	4200/-	1	1	0
5	<b>Tech Carpenter (Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>4</b>	<b>1</b>	<b>3</b>
6	<b>Tech Carpenter (Gr.II)</b>	<b>5200-20,200/-</b>	<b>2400/-</b>	<b>2</b>	<b>0</b>	<b>2</b>
7	B/smith & S/smith Gr-II	5200-20,200/-	1900/-	1	1	0
8	Painter(MCM)	9300-34,800/-	4200/-	1	0	1
9	<b>Painter(Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>1</b>	<b>0</b>	<b>1</b>
10	<b>Fitter (Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>1</b>	<b>0</b>	<b>1</b>
11	<b>Fitter (Gr.II)</b>	<b>5200-20,200/-</b>	<b>2400/-</b>	<b>1</b>	<b>0</b>	<b>1</b>
12	<b>Mason (Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>1</b>	<b>0</b>	<b>1</b>
13	<b>Mason (Gr.II)</b>	<b>5200-20,200/-</b>	<b>2400/-</b>	<b>1</b>	<b>0</b>	<b>1</b>
14	<b>S/Mason</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>0</b>	<b>1</b>	<b>(-)1</b>
15	FPO (MCM)	9300-34,800/-	4200/-	1	1	0
16	<b>F.P.O.(Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>2</b>	<b>0</b>	<b>2</b>
17	F.P.O.(Gr.II)	5200-20,200/-	2800/-	1	0	1
18	F.P.O.(Gr.III)	5200-20,200/-	1900/-	1	1	0
19	<b>Chowkidar</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>2</b>	<b>0</b>	<b>2</b>
20	Chowkidar	5200-20,200/-	2400/-	0	1	<b>(-)1</b>
21	<b>Khalasi (M)</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>5</b>	<b>0</b>	<b>5</b>
22	Khalasi (M)	5200-20,200/-	2000/-	0	2	<b>(-)2</b>
23	Khalasi (M)	5200-20,200/-	2400/-	0	1	<b>(-)1</b>
			<b>TOTAL</b>	<b>31</b>	<b>14</b>	<b>17</b>

### CHAPTER-III

#### **3.0 CRITICAL ANALYSIS OF EXISTING WORKLOAD AND STAFF REQUIREMENTS:**

The activities and work load involved against various categories of staff under Sr DEN/C/RNY has already discussed in Chapter-II.

The Work Study Team critically examined the various activities & work load of SSE/Works/RPAN according to the activity-wise observation it is seen that work load is in decreasing trend. The reason is that numbers of activities are either off loaded or some activities are becoming obsolete. More over now-a-days maximum works are done by the Railway through contractual basis where mere supervision lies on the part of SSE/Works.

#### **EQUATED WORKLOAD OF SSE/WORKS/RPAN**

**The Equated Plinth areas under SSE/WORKS/RPAN are:**

i) Equated Plinth area of Residential Quarters = 62982.0 x 0.7	= 44087.4 Sq.m
ii) Equated Plinth area of Service/Office Building=19778 x 1	=19778 Sq.m
iii) Equated Plinth area of Road = 12589.00 x 1	=12589.00 Sq.m
iv) Equated Plinth area of Drain & pipe line =47147.00 x1	= 47147.00 Sq.m
v) Equated Plinth area of Bridge = 3220.00 x1.6	= 5152.00 Sq.m
-----	
Total	=1,28,753.8 Sq.m

#### **Requirement of Technical Supervisor:**

The workload of SSE/WORKS/ RPAN EPA in Sq.m. As recommended vide Diagnostic study Vol- II May'90 issued by RITES, the workload for an in charge may be 40,000 EPA in Sq.m.

Supervisor required	= 128753.8/40000=3.21 Nos.
L.R.	=1 No.
-----	
Total	=4.21 Nos. Say 4 Nos.

The Study Team is of the opinion that 3 Nos. of Supervisor may continue to manage the workload of SSE/Works/RPAN.

**3.1.** The job analysis of Engg Dept staff of RPAN station conducted by work study team and discussed the workload of RPAN with SSE/Works/RPAN, Sr.DEN/C/RNY & ADEN/RPAN and the vacant un-utilized posts are worked out.

#### **3.2 Work load of Carpenter:**

The doors of all the Quarters are altering either by PVC or Iron, therefore the workload of Carpenters are reducing drastically. The present sanctioned strength is 07 Nos and on roll strength is 02 of MCM & Gr-I category. Hence, the study team suggest keeping the present sanctioned strength to 02 and 05 vacant posts of this category recommended for surrender. (**Viz. Gr-I- 03 Nos. & Gr-II-02 Nos.**)

### 3.3 Work load of Painter:

The activities of **Painter** are not a routine work & reduced immensely for off loading of some activities. Mostly the work of painter is accomplished by contractually.

This category is engaged for painting work of doors, windows of Railway buildings and premises, offices, station buildings etc. Presently these works are accomplished by the contractor/agency engaged.

Against the sanctioned strength of 02Nos ( Viz.MCM & Gr.I each), presently the office is running with no painter keeping both posts vacant. On scrutinizing detailed work load and discussion with the concerned SSE & officers, the work study team proposed the BOS of Painter Gr.I as nil because using the multiskilling concept of Railway and utilizing contractual work by out agencies, the present strength of Painter MCM can able to cope up the work load of RPAN station.

On going through the workload of this category, the study team opined that **01 Post of Painter (Gr.I)** category may be recommended for surrender.

### 3.4 Work load of Fitter:

This category is employed to look after the plumbing, water pipeline repairing jointing work etc. of Railway premises and colonies and maintain the water line network trouble free in day to day working. Presently these works are accomplished by engaging the contractor/agency.

The present sanctioned strength of Fitter category is 02 Nos. and both the posts are vacant.

02 posts which are vacant is recommended for surrender and may be deleted from BOS (Viz. 01 Gr-I & 01-Gr-II post of this category)

### 3.5 Work load of Mason:

This category is engaged for masonry work of Drains, Boundary walls & all sorts of plastering/repairing works of Railway buildings and premises. Mostly these works are accomplished by the contractor/agency engaged.

The present sanctioned strength of Fitter category is 02 Nos. and both the posts are vacant.

02 posts which are vacant is recommended for surrender and may be deleted from BOS (Viz. 01 Gr-I & 01-Gr-II post of this category)

### 3.6 Work load of FPO:

This category Known as Filter Plant Operator are employed for operating Filter Plants of Pump House for each station building for water supply which are presently accomplished by engaging the contractor/agency. Hence, these category has no viable importance for filter plants as these are outsourced. Only a skeleton staff of FPO are required to look after the contractors work.

The present sanctioned strength of FPO category is 05 Nos. and presently manned by 01 MCM & 01 Gr-III. The 03 posts are vacant considering the promotional avenue of feeder category presently the work study recommends only **01 Post of Gr-I FPO** for surrender.



### 3.7 Work load of Chowkider:

This category is employed to lock and unlock as well as guard the Engg. Departmental stores used for office day to day working. They are employed to keep vigil of these stores in proper manner & exhibit the opening & closing the same after proper sealing by the SSE/Works as and when it is required.

The present sanctioned strength of Fitter category is 02 Nos. and **01 post is vacant and recommended for surrender.**

### 3.8 Work load of Khalasi (M):

This category is employed to assist the FPO in filter plant of pump house for replacing charcoal, sand etc. used in Filter plant and maintaining the plant. As maintenance of filter plants are outsourced, this category has no viable importance for filter plants.

The present sanctioned strength of Khalasi (M) category is 05 Nos. and **02 posts are vacant and recommended for surrender.**

### 3.9 Deptt. Engineering Branch Gr. 'C & D' Staff :

Sl No	Category	Pay Band	Grade Pay	San ction	On Roll	Vac ancy	Pro pose d BOS	Propos ed surplus
1	SSE/Works	9300-34,800/-	4600/-	02	1	01	02	0
2	JE/Works	9300-34,800/-	4200/-	1	1	0	01	0
3	OS/G	9300-34,800/-	4200/-	2	2	0	02	0
4	Carpenter (MCM)	9300-34,800/-	4200/-	1	1	0	01	0
5	Tech Carpenter (Gr.I)	5200-20,200/-	2800/-	4	1	3	01	03
6	Tech Carpenter (Gr.II)	5200-20,200/-	2400/-	2	0	2	0	02
7	B/smith & S/smith Gr-II	5200-20,200/-	1900/-	1	1	0	01	0
8	Painter(MCM)	9300-34,800/-	4200/-	1	0	1	01	0
9	Painter(Gr.I)	5200-20,200/-	2800/-	1	0	1	0	01
10	Fitter (Gr.I)	5200-20,200/-	2800/-	1	0	1	0	01
11	Fitter (Gr.II)	5200-20,200/-	2400/-	1	0	1	0	01
12	Mason (Gr.I)	5200-20,200/-	2800/-	1	0	1	0	01
13	Mason (Gr.II)	5200-20,200/-	2400/-	1	0	1	0	01

<b>14</b>	<b>S/Mason</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>0</b>	<b>1</b>	<b>(-)1</b>	<b>0</b>	<b>0</b>
15	FPO (MCM)	9300-34,800/-	4200/-	1	1	0	01	0
<b>16</b>	<b>F.P.O.(Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>01</b>	<b>01</b>
17	F.P.O.(Gr.II)	5200-20,200/-	2800/-	1	0	1	01	0
18	F.P.O.(Gr.III)	5200-20,200/-	1900/-	1	1	0	01	0
<b>19</b>	<b>Chowkidar</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>01</b>	<b>01</b>
20	Chowkidar	5200-20,200/-	2400/-	0	1	(-)1	0	0
<b>21</b>	<b>Khalasi (M)</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>03</b>	<b>02</b>
22	Khalasi (M)	5200-20,200/-	2000/-	0	2	(-)2	0	0
23	Khalasi (M)	5200-20,200/-	2400/-	0	1	(-)1	<b>0</b>	<b>0</b>
			<b>TOTAL</b>	<b>31</b>	<b>14</b>	<b>17</b>	<b>17</b>	<b>14</b>

#### CHAPTER-IV

#### 4.0

#### PROPOSED & SURPLUS STAFF

As discussed in critical analysis in para-3 of Chapter- III, the proposed strength and proposed surplus staff of Artisan staff under Sr DEN/C/RNY is tabulated below :

Sl No	Category	Pay Band	Grade Pay	Sanction	On Roll	Vacancy	Proposed BOS	Proposed Surpluss
<b>1</b>	<b>Tech Carpenter (Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>01</b>	<b>03</b>
<b>2</b>	<b>Tech Carpenter (Gr.II)</b>	<b>5200-20,200/-</b>	<b>2400/-</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>02</b>
<b>3</b>	<b>Painter(Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>01</b>
<b>4</b>	<b>Fitter (Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>01</b>
<b>5</b>	<b>Fitter (Gr.II)</b>	<b>5200-20,200/-</b>	<b>2400/-</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>01</b>
<b>6</b>	<b>Mason (Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>01</b>
<b>7</b>	<b>Mason (Gr.II)</b>	<b>5200-20,200/-</b>	<b>2400/-</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>01</b>
<b>8</b>	<b>F.P.O.(Gr.I)</b>	<b>5200-20,200/-</b>	<b>2800/-</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>01</b>	<b>01</b>
<b>9</b>	<b>Chowkidar</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>01</b>	<b>01</b>
<b>10</b>	<b>Khalasi (M)</b>	<b>5200-20,200/-</b>	<b>1800/-</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>03</b>	<b>02</b>
			<b>Total</b>	<b>20</b>	<b>1</b>	<b>19</b>	<b>6</b>	<b>14</b>

**Total Proposed surrender under Sr DEN/C/RNY identified as 14 Nos.**

## CHAPTER-V

### 5.0

### RECOMMENDATION

After critical examination of the workload and activities a total **14 Nos.** of posts are surplus of various category viz. (a) **Tech Carpenter** Gr-I -03 Nos, Gr-II-02 No (b) **Painter** Gr-I- 01 No , (c) Fitter Gr-I -01 No. & Gr-II -01 No (d) Mason Gr-I-01 & GR-II-01 (e) FPO Gr-01 No (f) Chowkidar- 01 No. (g) **Khalasi** (M) - 02 Nos. Under Sr DEN/C/RNY, which may be surrendered and the BOS may be corrected accordingly.

## CHAPTER-VI

### 5.0

### EXPENDITURE / FINANCIAL SAVINGS PER ANNUM

#### AS PER VII CPC

The expenditure involved in surplus posts per annum is as follows-

SN	Category	Scale (In Rs)	Grade Pay	No. of Posts surplus	Expenditure per month as Salary in Rs as per VII CPC	Total Expenditure incurred per annum due to staff salary in Rs
1	Tech Carpenter Gr -I	5200- 20,200/-	2800/-	03	36,812/- X 3 = 110436/-	13,25,232/-
2	Tech Carpenter Gr -II	5200- 20,200/-	2400/-	02	35,862/- X 2 = 71724/-	8,60,688/-
3	Tech Painter -I	5200- 20,200/-	2800/-	01	36812/-	4,41,744/-
4	Fitter Gr-I	5200- 20,200/-	2800/-	01	36,812/-	4,41,744/-
5	Fitter Gr-II	5200- 20,200/-	2400/-	01	35,862/-	4,30,344/-
6	Mason Gr-I	5200- 20,200/-	2800/-	01	36,812/-	4,41,744/-
7	Mason Gr-II	5200- 20,200/-	2400/-	01	35,862/-	4,30,344/-
8	FPO Gr-I	5200- 20,200/-	2800/-	01	36,812/-	4,41,744/-
9	Chowkidar	5200- 20,200/-	1800/-	01	34437/-	4,13,244/-
5	FP Khalasi	5200- 20,200/-	1800/-	02	34437/- X 2 = 68874/-	8,26,488/-
<b>Total</b>				<b>14</b>		<b>60,53,316/-</b>

Total surplus = **14** posts    Projected Recurring Saving / annum = **Rs.60.53 lakhs,**

**CHAPTER – VII**

**7.0**

**READY RECKONER**

**READY RECKONER as per VII CPC**

SCALE (In Rs)	G/Pay	Pay As per VII CPC	DA (12 %)	SDA (10 %)	Total Salary PM
5200-20200	2800	29200	3504	2920	35624/-
5200-20200	2400	25500	3060	2550	31110/-
5200-20200	1800	18000	2160	1800	21960/-

-----  
-----