

SOUTH WESTERN RAILWAY



Work Study Report

On

**“Review of Staff Strength of SSE/WORKS units in Engineering
Department of SBC Division”**

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The Work-Study team is also thankful to all the supervisory staff for their co-operation in carrying out the Work-Study effectively.

SYNOPSIS

A Work-Study on "Review of staff strength of SSE/JE's Works of SBC division was conducted based on the Railway Board's Bench Marking report of Jan -2020.

SSE/JE's Works units under take maintenance works of Railway quarters, Service buildings and sports ground through departmental staff and repairs works through Zonal contracts. Details of Sanctioned Staff strength were collected from Sr.DPO/O/SBC, actual men on roll and ITKM details were collected from the respective units of SSE/JE's works of SBC division. The present sanctioned staff strength available in SSE/JE's Works/SBC division is **239** as per vacancy statement of 30/08/2020, against **115** men on Rolls with **124** vacant posts. The existing ITKMs of SSE/JE's Works units of SBC division are **496.90** ITKMs of plinth area of residential and service building. The work study team analysed existing work load, employees employed, critical examination of existing practices and methodology.

The data collected was evaluated as per Indian Railway Benchmarking, current IR average and general principles of Work-Study. After critical examination with the existing ITKMs **496.90**, of SE/JE Works of SBC division, Work Study team opines that the requirement of staff under SSE/JE's Works in SBC division is **184** duly applying Railway Board Benchmarking report of Jan - 2020 i.e. **0.37** men per ITKM of plinth area if less than 750 ITKM of a division).

Hence $239 - 184 = 55$ posts are found surplus to the requirement in the units of SSE/JE's Works over SBC division. These 20 vacant posts can be surrendered immediately. The money value thus obtained can be utilised for creation of safety posts.

1. Railway Board letter dated; 02.15.07.2020 of Para 6 stating that more non-core activities, which are not directly related with train operations and safety can be outsourced.
2. Railway Board letter dated; 02. 07.2020 of Para 1.(c) stating that 50% of posts of existing vacancies to be surrendered in Non safety.

The balance non safety posts can be surrender duly outsourcing the activities of staff of SSE/JE works in SBC division as per Railway Board guideline.

Optimization of manpower results in improvement of work culture, and increase productivity.

TERMS OF REFERENCE

As per the instructions of AGM/SWR, a study for "Review of staff strength of SSE/JE's Works Engineering department of SBC division has been carried out.

METHODOLOGY

- Collection of data from site.
- Discussions with field officials and staff.
- Benchmarking / Critical Analysis.

SUMMARY OF RECOMMENDATIONS

The work-study team collected the details of sanctioned staff strength from office of Sr.DPO/SBC, men on Roll and ITKMs from the respective units of SSE/JE's works of SBC division. The Work-Study team critically analyzed the requirement of staff based on the data collected duly applying Indian Railway Benchmark report & current IR average of JAN -2020 and general principal of Work-Study.

Present Sanctioned staff strength details as per vacancy position of Sr.DPO/SBC of 01/04/2020 and actual staff strength from the data submitted by the respective units of SSE/JE's works of SBC division. (**Annexure-I**).

Actual men on Roll collected from the respective units of SSE/JE's works of SBC division are as below: (**Annexure-II**).

(Pinpointing of staff has not been done in SSE/JE/Works units of SBC division)

Sl. No.	CATEGORY	S	A	V
01.	MASON	29	7	22
02.	CARPENTER	19	9	10
03.	PAINTER	13	4	9
04.	FITTER/PLUMBER	11	7	4
05.	BLACK SMITH	41	2	39
06.	CARETAKER	01	1	0
07.	CHOWKIDAR	09	6	3
08.	LASCAR	02	1	1
09.	REST HOUSE WATCHMAN	01	1	0
10.	SANITARY KHALASI	02	1	1
11.	VALVE MEN	10	5	5
12.	GARDEN KHALASI	03	0	3
13.	KHALASI	98	71	27
	TOTAL	239	115	124

Section wise ITKMs details submitted by the respective units of SSE/JE's works of SBC division are enclosed as **Annexure -III**.

Benchmarking is the continuous process of comparing different units and identifying the employees with maximum output. The requirement of staff strength is achieved duly applying IR average of Benchmarking report vide Railway Board letter No.2006/E&R/2800/Rly/Imp/Vol.V(Corr) dated; 22/5/2020, man power planning is to be adopted based on current IR average.

Current IR average (0.37 men per ITKM of plinth area if less than 750 ITKM as per SEP -2019 report) in each division. Hence the requirement of staff in SSE/JE's Works is worked

out based on the current IR average and benchmarking report of JAN -2020 issued by per Railway Board letter dated-22/5/2020 enclosed as **Annexure –IV**

Railway Board letter dated; 15.03.2017 of Para 6 stating that more non-core activities, which are not directly related with train operations and safety can be outsourced. enclosed as **Annexure –V.**

Railway Board letter dated; 02. 07.2020 of Para 1.(c) stating that 50% of posts of existing vacancies to be surrendered in Non safety **Annexure –VI.**

The Work Study Team has analyzed the Manpower requirement based on the above guide lines and general principal of work study.

The total number of staff required as per IR average Norms is 0.37 Men per ITKM (Divisions less than 750 ITKM) is worked out as below:

Sanctioned staff strength as per Vacancy position of Sr.DPO/SBC of 31/10/2019	Total ITKM of SSE/JE/W Of SBC division	Total staff requirement as per present IR average of SEP-2019 = 0.44 men per ITKM	No. of posts recommended for surrender which are found surplus to the requirement
239	496.90	$496.90 \times 0.37 = 184 \text{ men}$	$239 - 184 = 55 \text{ posts}$

Sl. No	SSE units	S	A	V	Post found surplus and recommended for surrender
01.	MASON	29	7	22	05
02.	CARPENTER	19	9	10	Nil
03.	PAINTER	13	4	9	Nil
04.	FITTER/PLUMBER	11	7	4	Nil
05.	BLACK SMITH	41	2	39	30
06.	CARETAKER	01	1	0	Nil
07.	CHOWKIDAR	09	6	3	Nil
08.	LASCAR	02	1	1	Nil
09.	REST HOUSE WATCHMAN	01	1	0	Nil
10.	SANITARY KHALASI	02	1	1	Nil
11.	VALVE MEN	10	5	5	Nil
12.	GARDEN KHALASI	03	0	3	Nil
13.	KHALASI	98	71	27	20
	TOTAL	239	115	124	55

CHAPTER – I

INTRODUCTION:-

Capital and labour are the basic factors of production for any organization. The role of these two factors is complimentary and not supplementary. While the capital provides for basic infrastructure, labour makes use of the same and contributes for production. The requisite production cannot be achieved in the absence of any of these two factors.

Human resources are the most indispensable asset of any organization. Effective utilization of this asset is the prime responsibility of the Management, especially for an organization like Indian Railways, The Engineering Department is one of the important department in Indian Railways and first largest department in terms of manpower employed.

The work force cost constitutes around 40% (excluding pension) of gross ordinary working expenses of Indian Railways. Human resource development and manpower planning are thus crucial for Indian Railways financial viability. Continuous updating and designing of job descriptions, reduction of number of categories for job enrichment through multi skilling, qualifications and responsibilities are need of the day.

Review of work methods and sequences regularly, so as to create groups for execution of job whenever new technologies are introduced. The controlling of the manpower and its best utility is the need of the hour in the organization. It is realized that output of every individual railway employee has to be substantially optimized to enable the railway system to work with requisite economy and achieve more productivity.

Keeping the reforms in view, there should be sweeping changes in the content and composition of manpower.

In view of the fore said objectives, AGM/SWR has advised the Work-Study cell to take up study on "Review of Staff Strength of SSE/JE's Works units of Engineering department of SBC division.

CHAPTER - II

Existing Manpower:

Sanctioned Staff strength of SSE/JE's works of SBC division as per Vacancy position of Sr.DPO/SBC of 31/10/2019 and actual as per data collected from the respective units of SSE/JE's of SBC Division is shown below:-

Sl. No.	CATEGORY	S	A	V
01.	MASON	29	7	22
02.	CARPENTER	19	9	10
03.	PAINTER	13	4	9
04.	FITTER/PLUMBER	11	7	4
05.	BLACK SMITH	41	2	39
06.	CARETAKER	01	1	0
07.	CHOWKIDAR	09	6	3
08.	LASCAR	02	1	1
09.	REST HOUSE WATCHMAN	01	1	0
10.	SANITARY KHALASI	02	1	1
11.	VALVE MEN	10	5	5
12.	GARDEN KHALASI	03	0	3
13.	KHALASI	98	71	27
	TOTAL	239	115	124

Nature of duties of staff of SSE/ JE's Works over SBC division:-

Sl. No	Category/designation	Nature of duties
1	Mason	Attending masonry repair works at colony, staff quarter and service building.
2	Carpenter	Attending Carpentry repair works in Railway Colony, staff quarter and service building.
3	Fitter	Maintenance of railway colony pipe line and repair works of pipe line in staff quarter and service building.
4	Plumber	
5	Painter	Attending Painting works in colony, staff quarter, service building name boards and tank painting.
6	Care take	Working as caretaker in ORH/SRH
7	Chowkidar	Working as office watch man
8	Khalasi/Helper	Assisting all technicians for repair works and loading and unloading of materials.
9	Sanitary/Khalasi	Attending Sanitary works in colony, staff quarter, service building.
10.	Valve man	Watering arrangement

ITKM (Integrated track kilometre) of SSE/JE's Works over SBC division:-

Sl. No	SSE units	1 ITKM = 1500 Sqm plinth area
1	SSE/W/SBC	197.32
2	SSE/W/SBNC	20.43
3	SSE /W/KIGL	13.33
4	SE/W/YPR	118
5	SSE/W/HUP	58.49
6	SSE/W/MYA	9.46
7	SSE/W/DPJ	9.06
8	SSE/W/BWT	70.81
	TOTAL	496.90

Details of actual Staff strength as per the data collected from the field units of SSE/JE's of SBC division:

1) SSE/W/SBC:-

Sl. No.	CATEGORY	Actual
01.	MASON	05
02.	CARPENTER	03
03.	PAINTER	03
04.	FITTER/PLUMBER	04
05.	BLACK SMITH	01
06.	CARETAKER	01
07.	CHOWKIDAR	03
08.	REST HOUSE WATCHMAN	01
09.	VALVE MEN	04
10.	KHALASI	22
	TOTAL	47

2) SSE/W/SBC/C:-

Sl. No.	CATEGORY	Actual
01.	MASON	01
02.	CARPENTER	02
03.	CHOWKIDAR	02
04.	LASCAR	01
05.	VALVE MEN	01
06.	KHALASI	10
	TOTAL	17

3) SSE/W/BWT:-

Sl. No.	CATEGORY	Actual
01	KHALASI	10
	TOTAL	10

4) SSE/W/YPR:-

Sl. No.	CATEGORY	Actual
01.	PAINTER	01
02.	FITTER/PLUMBER	01
03.	SANITARY KHALASI	01
04	KHALASI	08
	TOTAL	11

5) SSE/WS/HUP:-

Sl. No.	CATEGORY	Actual
01.	MASON	01
02.	CARPENTER	02
03	BLACK SMITH	01
04.	FITTER/PLUMBERS	01
05	KHALASI	08
	TOTAL	13

6) SSE/W/DPJ:-

Sl. No.	CATEGORY	Actual
01.	CARPENTER	2
02.	PAINTER	1
03	FITTER/PLUMBER	1
04	CHOWKIDAR	1
05.	KHALASI	9
	TOTAL	14

7) SSE/W/KIGL:-

Sl. No.	CATEGORY	Actual
01.	KHALASI	5
	TOTAL	5

CHAPTER – III

SUGGESTIONS:

1. All Engineering works staff are required to be trained in multi-skilling works using modern technology.
2. Maintenance of Residential Buildings and Service Buildings can be done through maintenance contract as per Railway Board instruction vide letter dated: 15.03.2017.
3. Maintenance of work may strictly be done by implementing direct buildings maintenance scheme (DBM).
4. It is suggested for timely dismantling of identified condemned quarters to avoid Unauthorized occupation and theft of Railway materials.

CHAPTER – IV .

CONCLUSION:

The work study is concluded with the recommendation for surrender of **20** posts in the units of SSE/JE's Works of SBC division which are found surplus to the requirement based on the Railway Board Benchmarking report of SEP - 2019. The money value thus obtained from these surrenders may be utilised for the creation of safety posts.

Sl. No.	CATEGORY	S	A	V	No. of Posts recommended to surrender
01.	MASON	29	7	22	05
02.	CARPENTER	19	9	10	Nil
03.	PAINTER	13	4	9	Nil
04.	FITTER/PLUMBER	11	7	4	Nil
05.	BLACK SMITH	41	2	39	30
06.	CARETAKER	01	1	0	Nil
07.	CHOWKIDAR	09	6	3	Nil
08.	LASCAR	02	1	1	Nil
09.	REST HOUSE WATCHMAN	01	1	0	Nil
10.	SANITARY KHALASI	02	1	1	Nil
11.	VALVE MEN	10	5	5	Nil
12.	GARDEN KHALASI	03	0	3	Nil
13.	KHALASI	98	71	27	20
	TOTAL	239	115	124	55

The money value thus achieved by surrendering these posts, safety posts can be created.

Work study team along with ADGM had discussed with Sr. DEN/Co-ord/SBC and brought to his notice the above conclusion, with surrender of 55 vacant posts of Khalasi immediately and to outsource the activities of staff in SSE/JE/works in Sr. DEN/Co-ord/SBC jurisdiction duly surrendering the balance posts.

CHAPTER – V

FINANCIAL IMPLICATIONS:

Implementation of work study recommendations will increase productivity in the units of SSE/JE's works Engineering Department of SBC Division and SWR can save **Rs.1,05,15,960.00** annually as shown below:-

The money value thus obtained can be utilised for creation of safety posts in Engineering department of SBC division.

Sl. No.	CATEGORY	S	A	V	Posts recommended to surrender	Emoluments per month in Rs	Annual Emoluments in Rs
1.	KHALASI (GP-1800)	98	71	27	55	43817	105,15,960.00
	TOTAL	98	71	27	55		1,05,15,960.00

ANNEXURES

Sl. No.	Description	Annexure
1.	Vacancy statement of 1/4/2020 as issued by Sr.DPO/O/SBC	I
2.	Actual staff On Roll statement of respective SSE/Works units	II
3.	ITKM details of respective of SSE/JE's Works of SBC division.	III
4.	Railway Board Benching marking report of SEP – 2020	IV