1.0 सामान्य/ General

Duties of Senior Section Engineer (SSE)/ Works

1. Inspection and maintenance of service building, staff quarter and other structures, approach roads, water supply, drainage and sewerage system and bridges.
2. Maintenance of land boundary and removal of encroachment in his jurisdiction.
3. Account and periodical verification of stores and tools.

Duties & Inspection Schedule for the SSE (Works) is given in the various chapters of Indian Railway Works Manual (IRWM) and Indian Railway Bridge Manual (IRBM).

Every Zonal Railway augment and supplement these schedules to suit the local and contemporary requirement.

2.0 सन्दर्भ/ References

- Indian Railway Manual – IRBM, IRWM, IRPWM
- Railway Board's Instructions
- RDSO Guidelines
- IRICEN Books
- PCE/CBE Circulars

3.0 एस.एस.ई.(कार्य) हेतु निरीक्षण अनुसूची
Inspection Schedule for SSE (Works)

SN.	Item & Authority	Checklist, if any
1.0	Building : Particulars or repairs should be submitted to AEN once a year (IRWM Para 224)	1. Whether Condition of building is sound ? If not whether any remedial measure is taken. 2. Are there any cracks in walls, floor, skirting and dado? 3. Is there any leakage in roof ? 4. Is the slope of roof is proper? 5. Are the traps and rainwater pipes proper to drain water without pounding? 6. Are the fittings viz. locking arrangement, tower bolts, pull bolts, door stopper, hooks, stays and hinges etc. are provided & functioning properly? 7. Is there any leakage in the sewer lines, drainage pipes etc.? 8. Are the covers of manholes, gully traps and floor traps etc. provided? 9. Any other deficiency noticed in the building.
1.1	All structures including those carrying advertisement situated along side of running line particularly in sub urban area. Once in six month. (Para 224(f) of IRWM)	Advertisement hoardings situated along side the running lines particularly in the Suburban sections should be thoroughly inspected by S.E. (Wks)/ J.E. (Wks) once in 6 months by rotation in order to ensure the integrity of their components with special reference to fitments like corrugated iron sheets which are likely to get loose and be impelled towards the adjacent track by gusts of wind or by the aerodynamic force generated by the passage of fast train in their proximity.
2.0	Structure-Structural steel & Timber works	
2.1	i) Structures such as workshop running sheds, PF shades, roof trusses and foot over bridge. ii) CI, WI, or pressed steel plate water tanks and staging whether of steel section or rails and flood light towers. iii) Other structures in which timber, rail or steel work is used for support any part of structure. iv) Tie rods of arch roofs excluding jack arches. (Once a year during prescribed months (IRWM Para 228)	1. Whether truss/column is in sound condition? 2. Whether the timber is decaying? 3. Whether bed blocks or pedestral are in sound condition? 4. Whether all fixtures are intact in bed blocks or pedestrals? 5. Whether the condition of paint is in good condition? 6. Whether corrosion of steel is taking place? 7. In the case of steel work built into masonry, such as tie rods of arched buildings, whether any corrosion is apparent near the masonry. 8. Whether the condition of rivets, bolts, and ties rods particularly of water storage tanks are in sound condition? 9. Whether any crack have developed in cast iron tank plates? 10 .Whether any deformation of the structure has occurred? 11. Whether anchor- bolts are tightly fastened to foundations & bearings? 12. If not, whether any remedial action is being taken? 13. Whether any cracks has developed in CI/WI/Pressed up steel tanks plates? 14. Whether corrosion in steel is taking place?. 15. Any other deficiency noticed.
3.0	Water supply installations, Sewerage installations and Drainage arrangements.(Once a year. (IRWM Para 224 e)	1. Whether storage tank underground and elevated is clean and date of cleaning is mentioned? 2. Whether tube well is protected against contamination from surface water? 3. Whether water sample tested from filtration plant every month? 4. Whether water sample tested for chemical examination six monthly? 5. Whether sample s collected as per specified manner? 6. Whether collected samples sent to medical department or lab duly leveled, sealed without delay? 7. Whether leakage detection test conducted?
3.1	Testing of yield of Tube well and other source of water. (Once a year in coordination with electrical department at time when the sub soil water is at lowest.(Para 119 c of IRWM). and Joint inspection of pumping machinery along with staff of Mechanical/Electrical department. (Once a year Para 554 c(i) IRWM)	
3.2	Cleaning of over head tank/ underground storage tank for disinfection of water. As and when needed.	
3.3	Storage tanks for drinking water and flushing purpose over offices, bungalows, quarters. Frequently.	
3.4	All water supply installations and pipe-lines. (Para 552 a of IRWM) Frequently for efficient maintenance.	
4.0	Sewerage and drainage system (Frequently for efficient maintenance)	1. Whether cleaning of manhole /gully chambers/inspection chambers and flushing of building sewers done once in a year before monsoon? 2. Whether cleaning of storm water drains done once in a year before mansoon? 3. Whether cleaning of wet drains meant to serve as quarter drain done at least once in fortnight?

		4. Whether clearing of rank vegetation done at least once in a month during monsoon? 5. Whether clearing of rank vegetation done as per requirement in period other than monsoon?
5.0	Petty Repairs /Complaint book (225 of IRWM)	Checking petty repair book and arranging repairs Frequently
6.0	Bridges and Tunnels	
6.1	Inspection of minor, major and important bridges including ROBs / RUBs/ (except track and approaches) (Once a year prior to monsoon i.e. April to June. (Para 117 &1101 IRBM). Inspection and submit in Performa as per annexure 11/11 Para 1101-2 &3-4 of IRBM .	
6.2	Detailed inspection of steel girders less than 12.2 meter clear span. Once in five year i.e. 20 % per year. (Para 1101a IRBM) .	
6.3	General condition of Super structures, Foundation, sub structures, river training & protection work, obstruction in water way, bed blocks of all bridges including ROB/RUB of all type. Once a year during pre monsoon period. (ESO -74 (SCRly)) Para 1101 (a) IRBM	
6.4	Tunels (Structural part only) (Once a year after monsoon. (Para 1001 of IRBM)	
7.0	Ash pit /Inspection pit/ Washable appron (Once a year jointly with SSE/ P.Way.)	
8.0	Land boundary verification in stations. Once a year (Para 813 IRWM .)	1. Whether land boundary post is being provided at 50 m on either side? 2. Whether within the boundary, the demarcation of offsets is done at change point? 3. Whether land boundary post is visible? 4. Whether periodical verification of land boundary is being done? 5. Whether land boundary verification register are available?
9.0	Encroachment (Certified once in three months.)	1. Whether there is any encroachment of jhuggies / permanent structures? 2. Is the encroachment register maintained? 3. Whether any encroachment has been dealt under public premises(Eviction of unauthorized occupants) act (PPE act)?. 4. Whether any action is being taken for removal of encroachment?

		5. Whether there is any case registered in the court regarding encroachment? 6. Whether there is any unauthorized religious structure in the premises? 7. Whether religious structure register is maintained? 8. Whether track crossing register is maintained? 9. Whether there is any unauthorized track crossing? 10. Whether validity period of any track crossing expired? 11. Is there any private siding? 12. Are there any commercial plots? 13. Are there any shops/Tehbazari?
10.0	Colony care committee inspection. (Once in two months) (Para 225 IRWM).	1. Whether CIG formulated as per latest instructions and meetings& Inspection are held regularly once in three months? 2. Artisan training: Initial and refresher arranged regularly? 3. Whether modern tools& equipments are available with artisan? 4. Whether standard tool kit is available with artisans? 5. Whether old quarters, planed for replacement has been inspected thoroughly and it has been ensured that repair is not economical?
11.0	SIG inspection As prescribed by authorities. (Para 225 IRWM)	
12.0	Review of inspection done by JE (works), complaint book, mate and other artisan.(As and when needed.)	
13.0	Any other inspection/ observation (As decided by the authorities.)	
14.0	Imprest of tools and materials. (Once a month)	
15.0	Service books (As prescribed time limit.)	
16.0	Plateform Shelters, all water tanks including staging RCC & steel concrete slab and stair case of FOBs. (Once a year ESO -74 (SCRly)	
17.0	Survey of surviving trees. (Every year Para 720 IRWM)	
18.0	Inspection of leaky roofs. (Preferably be done in rainy season) Annexure 2.7 & Para 5 of IRWM)	

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भारत सरकार – GOVERNMENT OF INDIA

रेल मंत्रालय – MINISTRY OF RAILWAYS

सीनियर सेक्शन इंजीनियर (कार्य) हेतु निरीक्षण अनुसूची

Inspection Schedule For Senior Section Engineer (Works)

कैमटेक/सि/2020/INS-SCH-SSE/W/1.0

CAMTECH/C/2020/INS-SCH/SSE/W/1.0

फ़रवरी - 2020/ Feburary – 2020

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