

भारत सरकार GOVERNMENT OF INDIA
रेलमंत्रालय MINISTRY OF RAILWAYS
(रेलवे बोर्ड RAILWAY BOARD)

No. 2021/SD-II/22/07/11

New Delhi, Dated: 19.08.2022

The General Managers,
All Zonal Railways

Vice Chairman,
Rail Land Development Authority

Sub: Format of Detailed Project Reports for Station development/
redevelopment/ major upgradation projects.

Format for Detailed Project Reports (DPRs) for station development/
redevelopment/ major upgradation projects is attached herewith as
Annexure-1. The annexed format is indicative. For identified stations, the
DPRs may be sent to Railway Board for sanction of works.

The above referred format is only for the submissions being made to
the Railway Board for sanction of itemized works under the umbrella
works. The DPR's being uploaded as part of tenders shall be customized as
per needs by the authority inviting the tenders.

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19.8.22
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DPR format for Station Development/Redevelopment/Major Upgradation Projects

The Detailed Project Report (DPR) for Station Development Projects shall contain the following information:

1. Executive Summary

- a. Purpose and objective of the report
- b. Structure of the report
- c. Overview of the project
- d. Heritage context, Status and any other importance of station/ structures and surrounding areas
- e. Architectural Theme: Brief on the evolution of the design inspiration and connection with the local context, art and culture, etc.

2. Introduction and site context

- a. Existing site features – existing structures, utilities, trees, religious structures, and important structures.
- b. Existing site photographs and photographs of site visits/ Consultations held.
- c. Surveys reports and Assessments: Engineering surveys, Existing utility mapping, building condition survey, Inventory of Structures of Importance, Study of sensitive structures, Traffic Survey Report, Passenger Survey Report, Geotechnical Investigation report, Land Due Diligence Report, Infrastructure Development Report, Railway Data and Requirements report, Byelaws and Master Plan report, Site analysis map and report, Passenger Forecast Report. (Executive Summary shall be included in main report and actual reports may be kept in Annexures on need basis for tendering purpose).

3. Three-Dimensional Views of the station

- a. 3-D Architectural View
- b. Bird's Eye View (It is preferable to have the existing aerial view and the new development from same angle(s) to understand the scope and scale of new developments)

4. Traffic Survey Analysis

- a. Review of Existing Traffic Plan: Summary of a traffic study conducted- Data collection and analysis
- b. Inferences from all Investigation Reports regarding bottlenecks and problem areas
- c. Demand forecast - Future modal share and requirements as per PHT Calculations
- d. Planning of movements within the station – segregation of departing and arriving passengers.
- e. Drop-off and Drop-pick-up Planning
- f. Parking- demand and other related facilities.
- g. Multi-modal integration and walkability strategies

- h. Level of services analysis in roads leading to station - suggestions for improvement outside the railway area.

5. Yard Plan and Future requirements

- a. Yard Plan received from railways
- b. Study of Yard plan and modifications proposed by Railways on Yard as per horizon year for planning
- c. Assessment of Future Requirements of Station w.r.t. ongoing Railway Infrastructure Projects of DFCCIL, RVNL, NHSRCL etc.

6. Master Planning

- a. Objective
- b. General Consideration and Planning Principles
- c. Urban Context and connect of station with the city; How the planning aims to assist and enhance the same.
- d. Station Master Plan (Brief and components of the final design)
- e. Architectural expression and Façade Aesthetics
- f. Public spaces and place making strategies including integration of commercial spaces with station uses.
- g. Heritage and historical Conservation
- h. Rainwater harvesting, wastewater treatment, water recycling and solid waste management.
- i. Sustainability strategies - renewable energy generation, passive strategies for energy conservation.
- j. Area Program for railway facilities, station facilities, and commercial/retail
- k. Strategies for Divyangjan compliance in the station
- l. Fire compliance at master plan level.

7. Details of Station Planning

- a. Introduction and Existing Station Summary and challenges
- b. Station Planning objective
- c. Sizing and planning of Station elements - Station Building Design Principles
- d. Passenger Amenities
- e. Accessibility and special amenities/ services for old, infirm, and Divyangjan passengers
- f. Station Maintenance plan including Cleanliness and Hygiene management
- g. Fire evacuation strategy
- h. Area program
- i. Typical times for entry/ egress/ evacuation, etc as per MSSRS.
- j. Important floor plans (not more than 10 nos.)
- k. Parcel Area Design

8. Services & Infrastructure

- a. Review of the existing services and utilities including connections from local bodies.
- b. Infrastructure demand - assessment of Water supply, Sewerage, Drainage, Power, signages and communication facilities.
- c. Power supply

- h. Level of services analysis in roads leading to station - suggestions for improvement outside the railway area.

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- a. Review of the existing services and utilities including connections from local bodies.
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- c. Power supply

- d. HVAC services
- e. Plan for mitigating increase in infrastructure demand including green strategies and new connections required.
- f. Fire Fighting arrangements including emergency power backup
- g. Details of way finding, lighting, signages, PA system, façade lighting and similar systems.
- h. Relocation Strategy for the existing utilities

9. Relocation planning of structures

- a. Requirements of relocation of structures
- b. Technical feasibility of relocation of structures
- c. Project Implementation Strategy (phasing) including details for handing over right of way

10. Structural and Geotechnical Concepts

- a. Structural feasibility and design
- b. Design codes and standards
- c. Loading standards and combination
- d. Geotechnical characteristics and recommendations
- e. Noise and vibration mitigation measures.

11. Construction Methodology and Plan

- a. Space for casting/ stacking/ working yard
- b. Construction Methodology
- c. Construction phasing plan
- d. Planning of Demolition and Relocation of structure
- e. Sequence of work over existing tracks including block requirements
- f. Passenger Safety during construction
- g. Temporary structure
- h. Clearance and restoration of spaces. Permits required for working
- i. Traffic Diversion/ Phasing/ Re-routing during construction
- j. Testing and Commissioning (Quality management planning)

12. Social & Environmental Impact Assessment

- a. Environmental Management plan
- b. Area-specific Social Assessment planning (must include gender and local ethnic aspects)
- c. Safety, health, and environmental measures
- d. Resettlement and Land Acquisition Plan
- e. Strategies for Green Building- at Master planning level (passive strategies)
- f. Strategies for Green Building at construction/ materials/ design, etc (active as well as passive strategies)
- g. Strategies for Green building certification

13. Brief overview and Salient features of the project*

14. Detailed Estimate (CAPEX)

- a. Station structural and Architectural building works and finishes and MEP costing
- b. Summary of major components of cost

15. Risk Analysis & Mitigation

- a. Identification and Analysis of Risk factor

- b. Social, engineering and construction aspects
- c. Proposal for the Mitigation of the above risk

16. Techno-Economic Viability Study

- a. Technical Feasibility
- b. Economic Viability/Financial Analysis of Project
 - (i) Investment Cost(CAPEX) etc
 - (ii) Revenues like Fare box revenue and other sources of revenues
 - (iii) Financial Internal Rate of Return (FIRR) Calculation for complete Master Plan
 - (iv) FIRR calculation excluding the plots identified for future commercial development
 - (v) Net Present Value (NPV) or Net Present Worth (NPW) Calculation
 - (vi) Economic Value of the project capturing the impact on the commercial activities in surrounding areas, including impact of Transit Oriented Development.

17. Statutory clearance / Licenses etc/Approvals/ NOC/Stakeholder Consultations

- a. Local authorities, other govt. departments, Traffic police, Railways, Airports authorities, Environment, Heritage, etc.
- b. List of stakeholder consultation and records (Important letters, MOM etc.)

*Salient features of the project shall contain project-specific information as per the format placed in Annexure-2 to this letter.

Salient features of the projects:

1. Name of the Project:
2. Zonal Railway:
3. Division:
4. Category of Station:
5. Cost of the Project in Cr :
6. State of Project:
7. Construction Period:
8. Name of Technical/Architectural Consultant:
9. Other items:

S.No	Item	Existing Value	Proposed value for Horizon Year _____.	Remark
1	Total plot/site area for development(in acres)			
2	Total Built up area (sqm)			
3	No. of Platforms (High Level/Medium/Rail Level)			
4	No of Subways and their width and length			
5	Daily Passenger Footfall in Station			
6	Average daily Passenger Trains in Station (Nos)			
7	Annual Passengers-Departure (Nos)			
8	Annual Passengers-Arrival (Nos)			
9	Annual Unreserved Passengers (Non-suburban)-Departure (Nos)			
10	Annual Unreserved Passengers (Non-suburban)-Arrival (Nos)			

S.No	Item	Existing Value	Proposed value for Horizon Year	Remarks
11	Annual Reserved Non-AC passengers(Non-suburban)-Departure (Nos)			
12	Annual Reserved Non-AC passengers (Non-suburban)-Arrival (Nos)			
13	Annual Reserved AC passengers-Departure (Nos)			
14	Annual Reserved AC passengers-Arrival (Nos)			
15	Annual Number of Visitors to the Station (Nos)			
16	Peak Hour Traffic (PHT)			
17	Type of Modes of Transportation at Station like Bus-Stop, Metro-Station, Local Taxi etc			
18	No. of Lifts			
19	Access Controls			
20	No. of Escalators			
21	No. of Travellators			
22	No. of FOB's and their width/length			
23	Length &Width of Concourse and its area (sqm)			
24	Total seating capacity in Platform Area (Nos)			
25	Total seating capacity in Waiting/ Concourse Area (Nos)			
26	Area of AC Lounge (sqm) & Seating Capacity (Nos)			
27	Area of Non-AC Lounge (sqm) & Seating Capacity (Nos)			
28	Total Commercial area in Concourse (sqm)			
29	Total Commercial area			

S.No	Item	Existing Value	Proposed value for Horizon Year _____.	Remarks
	in Station Building (sqm)			
30	No. of Toilets			
31	No. of Water Coolers			
32	Total Parking area (sqm & ECS) (a) Surface Parking (Sqm & ECS) (b) Basement Parking (Sqm & ECS) (c) Elevated Parking (Sqm & ECS) (d) Divyang Parking			
33	Platform Surface Area (Sqm)			
34	Area of Through roof common across platforms (sqm)			
35	Area of PF shelter (sqm)			
36	Landscaping Area in Circulating Area (sqm)			
37	Materials envisaged for façade			
38	Materials envisaged for concourse Through roof			
39	No. of display screens for information with sizes			
40	Total water requirement per day			
41	Source of water existing and augmentation required			
42	Rain water harvesting (RWH) unit capacity			
43	Solar Panel Installed Area (sqm) & Capacity			
44	Water Recycling Plant/Treatment Plant with Capacity			
45	Total power requirement per day and augmentation required			
46	No & Capacity of transformer			
47	No & Capacity of DG set			
48	No & Capacity of Battery backup			
49	Area marked for			

S.No	Item	Existing Value	Proposed value for Horizon Year _____.	Remarks
	retail/commercial use			
50	Facilities planned for parcel movement			
51	Parcel area (sqm)			
52	No. of coach indication boards			
53	No. of Trains at a Glance Boards			
54	No. of Multiline Boards			
55	No. of True Color LED Boards			
56	No. of Baggage Scanners			
57	No. of DFMD's			
58	Battery Operated Cars planned			
59	Covered pathway available for connection with other modes of transport			
60	No. of Booking windows other than PRS			
61	No. of PRS Counters			
62	Station O& M Expenses (in INR per Annum) in year			
(i)	Cleaning & House Keeping Such as cleaning, garbage removal, Pest control, Departmental Staff cost for station up keep.			
(ii)	Building, Platform maintenance/ repair cost, staff cost for station up keep.			
(iii)	Water Charges			
(iv)	Maintenance/repair of electrical equipment's such as Lifts, escalators, AC, lights & fans etc., supply, electrical staff cost for station up keep.			
(v)	Electricity charges			
(vi)	D& G Expenses			
(vii)	Maintenance/repair charges of telecom equipments such as PA system, CGS, CCTV, trains display board, staff cost for station up keep			

S.No	Item	Existing Value	Proposed value for Horizon Year _____.	Remarks
(viii)	Any Other regular expenditure in station O&M etc			
63.	Station Revenue(in INR per annum) in year (After redevelopment)			
(i)	Commercial Publicity/Station Advertisement from PF, FOB, circulating area etc,			
(ii)	Parking contracts			
(iii)	Catering Contracts including miscellaneous stalls			
(iv)	Pay & use Toilets			
(v)	ATM's			
(vi)	Retiring Rooms/cloak rooms			
(vii)	Platform tickets			
(viii)	Parcel handling charges			
(ix)	Station Development Fees(User Charges)			
(x)	Other Revenues etc			

CPM/CE
(Signature)