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PLANNING AND SCHEDULING FOR MODERNIZATION OF TAMBARAM RAILWAY JUNCTION AS A CITY TERMINAL

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ABSTRACT

Tambaram Railway Station is one of the railway terminal of the Chennai Beach–Tambaram section of the Chennai Suburban Railway Network It is situated at a distance of 6 km from the centre of Tambaram, a suburb of Chennai located 27 km south of the city centre. It is one of the fastest growing railway hubs outside Chennai Central in the southern direction. Everyday, on an average, around 150,000 commuters use the station. About 280 suburban electric trains operate from Tambaram, including those between Chennai Beach and Chengalpattu and Kancheepuram. Further, more than 25 expresses, including those bound for Howrah and other places in the north pass through the town. It is also third busiest station in the city (after Chennai Central and Chennai Egmore.. The daily ticket sales at Tambaram fetch 1 million, half of which comes from suburban travellers. It is the second most revenue-generating station in Chennai after Moore Market complex .A total of 52 trains pass through the station.

1.INTRODUCTION

Indian Railways is an Indian state owned enterprise, owned and operated by the government of India through the ministry of railways. It is one of the world's largest railway networks comprising 115,000 km (71,000 mi) of track over a route of 65,808 km (40,891 mi) and 7,112 stations. In 2014-15, IR carried 8.397 billion passengers annually or more than 23 million passengers a day (roughly half of whom were suburban passengers) and 1058.81 million tons of freight in the year.

The increase in the use of railways and the development of Tambaram, with respect to the connecting roads(highways) aspects has made this place a landmark in Chennai .With the future plan of Vandalur being rebuild as bus terminal it is very likely that there will be a increased use of transport. It will be better if both bus terminal and train junction are close to each other. Also it is notable that the bus stations for all town buses has its main stop at Tambaram .So

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considering this factors planning and scheduling process for the modernization of Tambaram station as a city train terminal is to be done .

2.METHODOLOGY

The methodology part includes the collection of data required for a railway terminal and comparing the present railway terminal (CHENNAI CENTRAL RAILWAY STATION).To make a study about all the existing features in the Tambaram railway station. Also to make a sketch of the modernized Tambaram railway station and central station. To prepare a model of the tambaram junction after incorporating the facilities. To prepare a schedule for the work progress using PRIMAVERA(software)

FACILITIES FOR A MODERNISED STATION

Some of the facilities that are required in the modernized railways station

CAR PARKING	BIKE PARKING	AUTO STAND	TAXI STAND
RETIRING ROOMS	DORMITORY	TICKET COUNTER	SANITATION
CLOAK ROOM	BATTERY CAR	EXCLATORS	CHARGER POINTS
FOOD COURT	T.V	TROLLEYS	SECURITY OFFICE
CHIEF ENG.ROOM	INSPECTOR ROOM	DUSTBINS	CARFO BAY
GOODS AREA	A.T.M	LOUNGE	DISPLAY BOARDS

FACILTIES TO BE INCLUDED

Facilities that is to be included in the tambaram railway station that is facilities that are not available in tambaram station.

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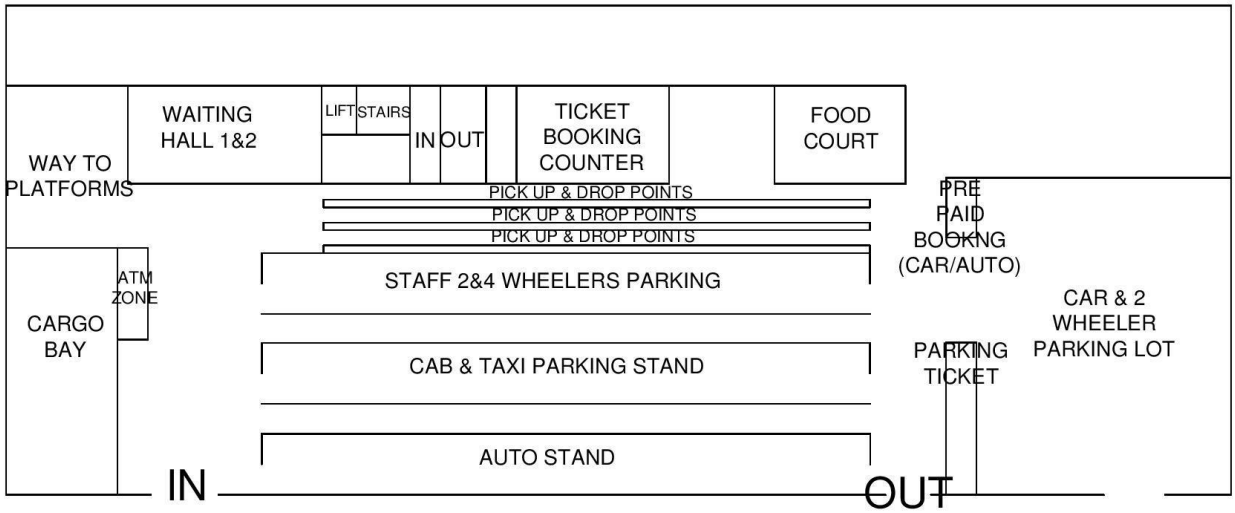
CLOAK ROOM	CARGO BAY	BATTERY CAR	T.V
CHARGING POINTS	FIRE EXIT	TROLLEY	SECURITY OFFICE
DUST BINS	CAR&BIKE PARK	AUTO STAND	FOOD COURT

3.DRAWINGS AND PLANS

The drawing of modernized railway station is shown in the following figure



4.SCHEDULED ACTIVITIES

The list of activities to be scheduled are the following

- Allocating the space for bike parking and covering the top with GI metal sheets
- Extension of front face of the building for 10 feet forward
- Shifting of A.T.M near staff bike parking area
- Provision of lane for pick up/drop points
- Provision of taxi stand and auto stand
- Extension of car parking for staff vehicles
- Provision of platform ticket counter

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- Provision of cloak room
- Moving of engineer room to the first platform
- Extension of waiting room next to each other
- Building a toilet for the public usage
- Enlargement of dormitories
- Food court provision
- Provision of cargo bay

5.REQUIREMENTS FOR RENOVATION

Railway stations are the gate ways where the first taste of city pride can be asserted. World over Railway stations are undergoing a major .The single transportation function has given way to multifunctional use which in turn has led complex and diverse forms. It is being seen as expression of modern technology in innovative ,structures and use of new materials. It has been decieded develop metro and mini metro stations in to world class stations. In the first phase 16 stations have been identified as per the enclosed list. Railways may immediately initiate action on this. These guidelines are being given to start the action which will be unique for each location.

Inception Report

An internal report may be prepared by-commercial engineering and electrical department which enter also may bring out ,The present of traffic and the existing facilitiesThe analysis of present position to identify the difficulties and constraints that are being felt in handling the traffic future projection of traffic and corresponding requirement of the facilities identifying the control points of development such as existence of heritage structure requiring its preservation and adaptation in the new scheme. The level and nature of commercial exploitation in the proposed scheme.

Main entrance/exit

It may be decided based on the traffic level, mode of transport being used by the passengers, local site conditions etc. as to whether entrance/exit level for arrival and departure be segregated. There should be unambiguous presentation of routes to pedestrian ways, access roads, car parks, taxi' stand, bus stops, metro station etc. Adequate signage and maps be provided.

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Departure Hall

In case there is a segregated approach, the departure hall will be at first floor level The main activities here are, checking train schedule, ticketing and waiting.Passengers must be able to circulate freely when moving between different circulation points such as entrance, ticketing, vending machine etc. Activities should not conflict.Travel Information System should be provided to give up to date and accurate travel information.The information should be provided in appropriate form and it needs to give decision points which allow a sufficient 'space for passengers to find out their desired directions.Waiting areas should be so designed as to provide comfort, amenity and travel information.

Access and Interchange

This would involve passage ways liking arrival/departure hall to platforms and platforms to one another. Likely traffic flow be assessed and flows should be allocated to physical routes for working out space requirements. Passage ways and width of Foot over bridges should be of adequate width.Lifts and escalators may be provided for efficient convenient vertical circulation.

Parcel Handling

Parcel handling, linen handling and pantry car loading! unloading may be planned in the rake servicing area, where ever feasible.

For dealing with parcels of through trains mechanized parcel handling facilities atboth ends of the platforms be suitably provided. .Parcel sheds should have easy access for vehicles with adequate parking. Shed should have mechanized handling facilities and should have adequate storage space.

Parking

Adequate parking should be planned to accommodate peak demand in the circulating area/vicinity of stations separately for buses, private cars, two wheelers.The separate space should be planned for Taxis at a convenient location.Where space constraints are there Multistory Car parking can be provided.The parking facilities should be developed in such a manner as to facilitate smooth dispersal of incoming and outgoing passengers, pedestrian and vehicular traffic taking in to account inter-modal transfer

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Access for Disabled people

The design of the station should meet barrier free requirements throughout the station area. The design should help them to find their way around. Separate facilities with suitable design be provided such as low high ticketing window, disabled friendly toilet, reserved car parking slots etc. for disabled. It may be kept in mind that disabled people using railway station are not only in wheel chairs but include blind and partially sight people with learning disabilities, elderly people etc.

6. RESULTS AND CONCLUSION

By this project it is concluded that the tambaram station can be modernized with the use of some existing facilities and by the inclusion of new facilties. The major activities like demolition, reconstruction, extension work for tambaram station to be modernized are mentioned above in the methodology. As the result of this project the list of facilities to be provided and the facilities that are to be reconstructed or renovated is made clear. The space for the provison of new facilities is shown in the drawings and the parking bays details are mentioned. Also with the upcoming project "ASIA'S LARGEST FOOD COURT" at tambaram station, tambaram will be gaining its additional support in making itself as a modernized city terminal. The list of facilities and their importance are also mentioned above.